

MULTIVALENCE IN LITERARY UTOPIAS, 1880-1980

**UNITY IN DIVERSITY:
MULTIVALENCE IN BRITISH AND AMERICAN LITERARY UTOPIAS, 1880-1980**

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ABSTRACT

This study of modern utopian fiction articulates a new theory of what constitutes utopia in the context of literature and science. Traditionally, utopia has been seen either as a vision of the ideal society crystallized into a static and oppressive order, or as a self-contradictory form of wishful thinking. However, utopia is neither uniform nor unchanging but heterogeneous and evolving. Diversity and dynamism are the two defining characteristics of utopia.

These two principles imply the convergence of seeming opposites into a unified whole, through a process which can accommodate both stability and growth. The thesis illustrates the meaning of dynamism and diversity in utopia by using two theories from modern physics as heuristic guides to reading ten utopian novels written between 1880 and 1980. Nonlinearity, a concept from chaos theory, is used to explore dynamic change; complementarity, a concept from field theory, is used to investigate the significance of diversity. Nonlinearity is an essential feature of modern utopianism because it allows for a complex understanding of history by showing that both personal choices and impersonal forces play a part in historical change. Complementarity describes the relationships between various sites in contemporary culture by reconciling seemingly incompatible ideas and placing them in a unified field where difference implies interaction.

Utopia's abiding fascination, as well as its transformative power, lies in the fact that it is truly nowhere and therefore potentially everywhere. This openness to potentiality provides the ground for hope, the force which sustains the desire for change and drives the movement toward utopia. In bringing together literary and scientific discourses and illustrating the desirability of unity in diversity, utopian fiction indicates the directions that society ought to take in order to advance.

DEDICATION

*To Mehri, Muhammad, and Omid Afnan
in gratitude and love*

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INTRODUCTION
ENTERTAINING CONTRARIES

For a long time, literature and science have been regarded as separate, unrelated, even hostile, fields. C. P. Snow's famous (or perhaps by now infamous) description of these "two cultures" has certainly been questioned but it has also been widely influential. One of the things that have widened the gulf between the two disciplines is that science has laid exclusive claim to objectivity. As George Levine points out, "The great authority science has achieved derives largely...from the way it persuades us that its practitioners are disinterested....Once achieve disinterest, and objectivity would follow. Reality would come rushing in, unimpeded by the distortions of politics, economics, or any ideology" (12). If "truth" is the domain of science, then it cannot be that of literature, the argument has gone.

But increasingly in this century, people have challenged this privileging of science by questioning its disinterestedness. Steven Shapin, for instance, points out "the tendency to associate 'science' simply with its Cartesian version" as an activity that aims to secure certainty "through the precise framing of either/or questions, excluding alternatives and restricting the range of permissible responses" (120). However, Shapin argues, despite pretences to the contrary, most of scientific knowledge is based, not on direct experience, but on the communication of others since "no scientist, however expert, encompasses the knowledge of his or her science *as an individual*" but "by courtesy" (25). Shapin's *A Social History of Truth* argues against dominant philosophies that "celebrate science solely as a nexus of skepticism," by demonstrating "the ineradicable role of trust in the constitution even of empirical forms of scientific knowledge" (417).

Thomas Kuhn's theory of scientific revolutions provides an even more widely influential reevaluation of the way science works. What Kuhn calls "normal science" proceeds according to the rules of the prevailing paradigm as scientists adopt currently accepted theories and follow existing model experiments. Hypothesis and proof, deduction, induction, verification, and so on constitute scientific method in this phase. But significant discoveries are made during periods of "revolutionary science," when one paradigm is replaced by another. In this transitional phase, it is "the scientist's intuitive and nonverbal knowledge that gives direction to scientific inquiry" (Hayles, *Cosmic Web* 39). Objectivity and disinterestedness give way to intuition and leaps of faith. Kuhn's explanation of how scientific revolutions occur makes scientists "seem less than perfect rationalists" (Gleick 36). At the same time, it contributes to closing the gap between science and literature by suggesting that as modes of discourse, the two disciplines are governed by similar processes. They cannot be distinguished by "application of the classic dichotomies between, for example, the world of value and the world of fact, the subjective and the objective, or the intuitive and the inductive" (Kuhn, "Science and Art" 340). Rather, they both belong to and interact with culture at large, and they "work out in different languages the same project" within that culture (Levine 7).

Of course, science, literature, and, above all, culture are broad and complex terms which must be defined more precisely for such assertions to be meaningful. The most important thing to keep in mind, however, is that none of these concepts is monolithic. It is perhaps obvious that, in addition to scientific and literary dimensions, culture also includes intellectual, moral, aesthetic, social, economic, religious, and political dimensions, all of which are interrelated. But we must also realize that increasingly in the modern world, each of these categories itself encompasses different philosophies among which one must choose. No discussion along any of these lines can

claim to be comprehensive or exhaustive. The most useful discussion is one that does not widen the gulf between literature and science but rather seeks to bridge it. Such a discussion is not only possible but eminently productive in the context of utopian literature which is, as a genre, deeply concerned with the place of science in society.

Although my primary interest in utopias is from the literary point of view, I believe that the study of literature divorced from that of the broader culture risks becoming solipsistic and futile. The field of science and literature is particularly fruitful because it locates in both discourses the need for multivalence. Much work has recently been done on the interaction between science and various types of literature, but little of it has dealt with utopian literature in particular. I propose to show in this thesis that literary utopias have important characteristics in common with theories which mark significant paradigm shifts in science, such as field theory and chaos theory. The convergence of utopian literature and contemporary science suggests that their study may teach us something about the culture out of which both arise.

The existence of utopia is based on a pun: it is at once "eutopia" (good place) and "outopia" (no place). In choosing the title for his account of the imaginary island that enjoyed perfection in politics and economy, Thomas More exploited the contradiction inherent in the term and started a tradition based on paradoxes. "Literary utopias," writes Peter Ruppert, "are both subversive and constructive, both critical and affirmative" (22). Although recent scholarship on utopian literature has considerably expanded the frontiers of the field, no single approach has yet adequately accounted for the paradoxical quality of the genre. And yet it is precisely the paradoxes within utopian texts that give them relevance for students of literature, and of culture as a whole. At the same time, the existence of contradictions, not only in primary texts but also in works of literary criticism, makes even the preliminary task of definition problematic. There is no consensus about

what “utopia” is: its locus, its boundaries, its shape, its structure, its relationship to others, all are -- as is befitting for “nowhere”-- subject to opposing interpretations. My purpose in writing this thesis is neither to reconcile nor to arbitrate between these various interpretations. Rather, it is to develop a new theory of utopian literature that focuses on the *process* of creating utopia rather than its final *product*. The literary utopias of the last hundred years are not so much about the shape of a particular utopia, as they are about the contradictions that characterize utopia in general. A theory that does justice to these works must similarly acknowledge diversity and dynamism as the distinguishing characteristics of utopia and recognize them, moreover, as positive and fruitful characteristics. The greatest value of utopian thinking lies in its power to show that the acceptance of difference and change is a prerequisite of progress.

“Progress,” a term that inevitably and repeatedly surfaces in discussions of utopia, is clearly a key word in this context. Like utopia itself, progress has been subject to a variety of definitions and (mis)interpretations. It has been linked with religious teleology, economic growth, technological advancement, and the expansion of Western civilization (Nisbet 317). As these doctrines have been discredited to varying degrees, the idea of progress has been correspondingly undermined. However, it is possible to define progress quite simply, given a simple definition of utopia. If utopia is the ideal state for which one hopes and strives, then progress is the movement toward utopia. We can discover what progress means by understanding what utopia is. These definitions of utopia and progress may be *too* simple, however. My task in the next few pages, and ultimately in the thesis as a whole, is to arrive at fuller and more useful ones.

Before articulating a new definition of utopia, however, it is necessary to obtain an overview of some of the important existing definitions. Perhaps the most common tendency among commentators on the literary utopia is that of dividing the genre into different categories. The most

eminent critics, for instance Darko Suvin and Raymond Williams, set the example which many others follow. Williams, in a characteristically systematic and clear-sighted article, divides fictions that have been grouped together as utopian into four types: the paradise, the externally altered world, the willed transformation, and the technological transformation (203). Each of these categories also has its dystopian “negative.” Williams argues that among these, “*the willed transformation* is the characteristic utopian or dystopian mode, in the strict sense” (205). Suvin’s method of defining the literary genre of utopia is different as he offers “Some Historical Semantics, Some Genology [*sic*], a Proposal, and a Plea,” the upshot of which is a proposed definition of utopia as “the verbal construction of a particular quasi-human community... organized according to a more perfect principle than in the author’s community, this construction being based on estrangement arising out of an alternative historical hypothesis” (49). Despite its tendency towards opacity of expression, Suvin’s definition is, to a large degree, useful. But he too concludes by saying that “strictly and precisely speaking, utopia is not a genre but the *sociopolitical subgenre of science fiction*....conversely, SF is at the same time wider than and at least collaterally descended from utopia; it is, if not a daughter, yet a niece of utopia” (Suvin, “Defining” 61).

Both Williams and Suvin express the desire to delimit the genre “in a strict sense,” “strictly and precisely,” by placing it in a category. The same inclination is evident in other critics who catalogue the distinctions between utopia, anti-utopia, eutopia, dystopia, utopian satire and a host of other classifications. This practice is no doubt valuable as a first step in coming to grips with an admittedly large and heterogeneous field of literature. In his influential and much-quoted bibliography, Lyman Tower Sargent sets forth a clear, concise, and helpful definition of a number of terms:

Utopia may be used as a general term covering all the various classes of utopian literature. Eutopia – although the word has unfortunately fallen out of favour –

or the positive utopia refers to presentations of good places. Dystopia or the negative utopia refers to presentations of bad places. The satirical utopia refers to works where the satire is the focus of the work. (xi)

A number of critics have adopted Sargent's definitions. Nan Bowman Albinski, for example, finds the "distinction between utopia (genre) and eutopia (a vision of the good place) most useful" and uses it throughout her discussion of women's utopias. She also follows Sargent's lead in "using anti-utopia to describe utopian satires" and distinguishing it from dystopia (Albinski 10).

Unfortunately, however, critics are far from unanimous in their definition or usage of these terms. Critical studies of utopian writing -- and this work is no exception -- often devote a large section to redefining or fine-tuning the terms. For instance, Alexandra Aldridge makes a distinction not only between dystopia and anti-utopia, but also between anti-utopia and satirical utopia, thereby going a step further than Sargent and Albinski. But at the same time she laments, on the one hand, "the blurring of generic distinctions [which] characterizes utopian scholarship" (2) and, on the other, the proliferation of terms used to describe the genre. One example of each of these opposing tendencies suffices to show their limitations. At one extreme are the multiple designations used to describe different variations of the anti-utopia: "reverse utopias, negative utopias, inverted utopias, regressive utopias, cacoutopias, dystopias, non-utopias, satiric utopias, and...nasty utopias" (Lewis 27) as well as "sour utopias in the apocalyptic mode" and "negative quasi-Utopias" (Aldridge 5). At the other extreme is an approach that minimizes or even discounts the importance of utopia as a primarily *literary* text. Krishan Kumar, in an otherwise valuable study of the historical and philosophical context of modern utopia, makes the following contradictory statements: "All utopias are of course fictions, by definition....the utopia is closer to the novel than to any other literary genre....But the literary form of utopia is not an important concern of this study; nor perhaps should it be in any serious treatment of utopia" (24-5). He

claims that “the attempt to define the boundaries of utopia by purely literary means...is best abandoned for a recognition of the diversity of literary forms that make up utopia” (26).

The alternation between the two extremes, as critics react to either a paucity or a profusion of categories, points to the limits of classification as a mode of definition. Creating yet another set of categories or redefining the existing categories one more time is unlikely to yield new insights into the utopian genre. At this stage, a simple and inclusive working definition would serve to mark the general boundaries of the genre and allow us to proceed to consider other modes of defining it more precisely. In my use of the term “utopia” I mean literary works that are concerned with the quest for a better society, whether or not they believe such a society to be attainable. It is helpful to use “eutopian” and “dystopian” as shorthand terms to indicate the overall vision of any given utopia as either positive and optimistic or negative and pessimistic. It should be borne in mind, however, that eutopia and dystopia are not conflicting categories but complementary parts of the same genre. As Ruppert writes:

Rather than an antithesis of utopia, the anti-utopia is typically an inversion of utopia that plays on the same essential dialectical structure: we know what utopia is by knowing what it is not. A closer reading of most anti-utopias...reveals that the text works to envision *indirectly* what utopia would be. (103)

Variety in definitions of utopia is evident at the thematic level just as much as it is at the generic level. “Utopian” has become part of the common vocabulary and has taken on significations that are often at variance with the original meaning of the word. A common usage of the term equates utopia with impractical idealism. This is probably the dominant view of utopia as something illusory, unrealistic, and ineffective. In a world struggling with overwhelming social, political, economic, environmental, and moral problems, “utopian” is more often than not a derogatory epithet suggesting naïveté and escapism.

Nor is this sense of the word confined only to popular usage. Karl Marx and Frederick Engels, for instance, frequently distinguished between “scientific” and “utopian” socialism, always to the latter’s detriment. In Marxist vocabulary, the difference between the two initially lay between their differing accounts of how socialism would come about. Marxists insisted on the necessity of class conflict and revolution for the establishment of the proletarian dictatorship which is the prelude to the eventual abolition of class distinctions. By contrast, they viewed non-Marxist socialists as utopians because “they reject all political, and especially all revolutionary, action....They endeavour...to deaden the class struggle and to reconcile the class antagonisms. They still dream of experimental realization of their social Utopias” (Marx and Engels 70-1). Martin Buber points out the change that the term “utopian” underwent in Marxist usage. Originally, it was used to refer to those “whose thinking had preceded the critical development of industry, the proletariat and the class war and who therefore could not take this development into account.” Later, it was used indiscriminately of anyone who did not agree with the Marxist account of this process. “The epithet ‘utopian’ thereafter became the most potent missile in the fight of Marxism against non-Marxist socialism” (Buber 5). Ultimately, however, the Marxist claim to being scientific is more of a rhetorical strategy than a demonstrable fact. Marxism’s “account of how, historically and sociologically, the proletariat will in fact realize its allotted task” (Kumar 54) is no more well-grounded or scientific than that of its socialist rivals. Moreover, Marx shows himself to be a visionary when it comes to imagining a future state of society. He writes:

Communism...is the definitive resolution of the antagonism between man and nature, and between man and man. It is the true solution of the conflict between existence and essence, between objectification and self-affirmation, between freedom and necessity, between individual and species. It is the solution of the riddle of history and knows itself to be this solution. (Marx, “Manuscripts” 155)

His vision of the future communist society is, as Kumar notes, “more dazzling in its utopianism than that of even the most utopian of utopian socialists” (53).

In fact, distanced through time and unencumbered by Marxist rhetoric, many would claim that “socialism was the nineteenth-century utopia, the truly modern utopia, *par excellence*.” It combined in itself a number of strands extending from classics of utopian thought – the “egalitarian communism” of More’s *Utopia*, and the “belief in the beneficence of science” expressed in Bacon’s *The New Atlantis* -- together with the legacy of “the Enlightenment faith in reason and progress” (Kumar 49). Fredric Jameson goes so far as to say that “Utopia is a transparent synonym for socialism itself, and the enemies of Utopia sooner or later turn out to be the enemies of socialism” (“Of Islands” 3). Not everyone views the link between the two in a positive light, however. With socialism coming to be seen as “the most sophisticated expression of the modern worship of science, technology and organization” (Kumar 49), utopia is frequently identified, to its detriment, with mechanization and oppressive social order.

The “enemies” Jameson talks about fall into two main categories: those who scorn utopia because it is an unattainable dream, and those who fear that it can be attained and will turn out to be a nightmare. The polemical attacks of Marx and Engels on utopian socialists are, as we have already seen, an example of the first response. Their main objection to utopian thought is that it diverts “revolutionary energies into fantasies and imaginary satisfactions, a form of escapism that denies the reality of history” (Ruppert 99). Much of the satire directed against utopianism also arises out of this same impulse. *Gulliver’s Travels* and Samuel Butler’s *Erewhon*, to name only two of the better known utopian satires, concern themselves with the futility of utopian aspirations in the face of human inconsistency and absurdity.

The second response, fear of utopia realized, can be discerned in the widespread identification of utopia with such twentieth-century extensions of socialism as social engineering and totalitarian government. Utopia has to a large extent “become synonymous with totalitarianism...[it] has become anathema, a nightmare of political repression and total uniformity to be avoided at all costs” (Ruppert 99). Where at one time it was a vision of an alternative far removed in time or space, an ideal to strive for, “utopia” in the modern world has become a real possibility looming ahead of us and around us. The dystopian nightmare takes different shapes, of course, depending on the version of utopia against which it is reacting. Some writers, for instance George Orwell, warn against the dehumanization and enslavement that result from rigid centralization and “bureaucratic...control of behaviour and desire” (Moylan 9). Others, like Aldous Huxley, fear the deadening effects of “satisfaction and surfeit, along hedonistic and utilitarian lines”(Kumar 102), on human creativity and endeavour.

Variations on this kind of pessimism characterize many of the attitudes towards utopia in this century to the extent that it has become a commonplace to proclaim the death of utopia. Peter Ruppert lucidly summarizes these views:

utopia has always implied a faith in progress....Today, such a faith is hard to sustain in view of historical developments. After two world wars, Hiroshima, Auschwitz, and Vietnam, any talk of utopian possibilities seems somewhat absurd. For many people today, any hope of utopia after Hitler and Stalin is pure folly. Others have argued that the failure of socialism in the Soviet Union, once thought to be a model utopian experiment...is sufficient evidence that utopianism is not only ineffective but untenable. Still others have traced the decline of utopian values to the emergence of consumer capitalism in the West and monopoly socialism in the East. These developments...have produced political situations in which inertia, complacency, and a general satisfaction with things as they are have repressed the desire to contemplate any kind of significant social change. (99-100)

With the perceived failure of utopia as concept, utopia as narrative has become “a residual literary form” (Moylan 9). More often than not, it is discussed as a mere adjunct of science fiction or as

the defunct predecessor of dystopian narrative. André Reszler, for instance, claims that “utopia as a literary genre came to an unannounced end in the last decades of the nineteenth century” (202), to give way to “postutopian,” or in other words dystopian, fiction. At the same time, dystopia has “all too easily been recruited into the ideological attack on authentic utopian expression: commentators cite the dystopia as a sign of the very failure of utopia” (Moylan 9). The unfortunate result has been to see dystopian fiction as a politically conservative, even reactionary, genre which “seem[s] to discredit not only the utopian hope for progress but also the desirability of any kind of social change” (Ruppert 102).

Perhaps all these various criticisms of the literary utopia have arisen because readers generally insist on approaching it from one of two diametrically opposed viewpoints. Those whose primary interest is in the “sociopolitical function of these texts...tend to read all utopias as proposals for social reform;” those whose interests are primarily literary “tend to read utopias first and foremost as fictions, as products of the imagination that may or may not be intended for realization” (Ruppert 10). However, as blueprints for social action, utopias are usually vague, reductive, and impractical. As fictive works of imagination, they can be static, stereotypical, and dull. There is little in either description to recommend the genre. The general view has been that the utopian impulse is at best naïve and at worst dangerous, and that utopian writing is irrelevant and of limited practical or literary value.

And yet the last two centuries have witnessed a burgeoning of utopian literature. The problem lies, not in the utopias themselves, but in the binary logic which many readers apply to them. By always defining utopias in opposition to something else, they suppress their true value as agents of transformation. This is an unproductive approach to works that, in fact, require a more creative response from the reader. This realization has led critics to explore new ways of

approaching utopia. Ruppert identifies three groups of critics who have developed innovative ways of analyzing the effects of literary utopias. There are those, like Suvin, who see utopias as heuristic devices for reconsidering aspects of present society. Their most important function is to provide a critique of existing social organization by defamiliarizing it through a process of “cognitive estrangement” (Suvin, “Defining” 58). Another group of theorists attributes to utopian literature a therapeutic effect similar to that of myth. Northrop Frye, for instance, suggests that utopias help readers cope in a complex and contradictory world by “mediat[ing] all oppositions, disparities, inconsistencies” (Ruppert 16). A third group includes Ernst Bloch and Louis Marin who suggest that “utopian discourse...has an anticipatory value of a theoretical kind” (Marin 75), that is utopia can envision or even predict future developments, though generally only on a preconscious level.

These approaches suggest that utopian literature can indeed be relevant to the human effort to understand the world and change it for the better. There would be little point in adding yet another study of the genre to an already large field were it not with the intention of finding a new and more fruitful method of reading utopias. Interestingly, it is H. G. Wells, one of the most prolific of utopian writers, who suggests a new approach to the topic. In *A Modern Utopia*, Wells writes, “Utopia must be not static but kinetic, must shape not as a permanent state but as a hopeful stage, leading to a long ascent of stages” (5). The problem with seeing utopia as a blueprint for the implementation of an ideology is that it hypostatizes something that is essentially dynamic and evolving.

Darko Suvin provides a useful starting point for exploring the dynamic qualities inherent in utopia:

Neither prophecy nor escapism, utopia is, as many critics have remarked, an “as if,” an imaginative experiment or “a methodical organ for the New.” Literary

utopia – and every description of utopia is literary – is a heuristic device for perfectibility, an epistemological and not an ontological entity....If utopia is, then, philosophically, a method rather than a state, it cannot be realized or not realized – it can only be applied....But to apply a literary text means...to read it as a dramatic dialogue with the reader. (“Defining” 52)

There are two ideas here which are important to my approach to the topic. First is the recognition that the most important question to ask about utopia is, not what shape it will take when realized or even whether or not it can be realized, but rather what processes of change it entails. In Suvin’s terms, what is significant is utopia as method, not utopia as state. Secondly, as a heuristic device, the literary utopia can be achieved – or “applied” – only through the reader’s participation.

The second point is at the centre of Peter Ruppert’s illuminating exploration of the activity of reading literary utopias. Noting that most utopias are structured and organized as dialogues, Ruppert argues that they “set out to engage their readers in a dialogue on social alternatives and social variations. What initiates this dialogue is the experience of noncoincidence between social reality and utopian dream....[Utopias] invite us to entertain social alternatives, to open ourselves to other possibilities” (xi). My purpose, however, is not to duplicate Ruppert’s analysis of reader response but to explore a feature of utopias that he hints at in the quoted passage and identifies explicitly later in his book: their preoccupation with paradoxes.

Ruppert claims that the most famous of all utopias, that of Thomas More, appeals to the reader to “entertain oppositions, paradoxes and contraries” (Ruppert 96). Other utopias have a similar effect as well: as we read them, “we become more aware of the contradictions and discrepancies that distinguish social fact...from utopian dream;...[We are] suspended between two alternatives, neither of which is satisfactory or tenable” (Ruppert 23). Ruppert’s emphasis is on the reader’s active participation in resolving this inconclusive situation. My focus is on how the texts themselves work to define utopia in terms of paradoxes and contradictions.

Gary Saul Morson provides a useful theoretical model for understanding this aspect of literary utopias. According to him, utopias belong to a category of "boundary works" in which "it is uncertain which of two mutually exclusive sets of conventions governs a work" (48). Such works can be identified by the heterogeneous materials that make up their contents: narrative, essay, travelogue, fantasy, satire, and so on. Far from being a shortcoming, this feature of utopias is highly productive, as such boundary works "resonate between opposing genres and interpretations" (Morson 182). What appears to be inconsistency or generic instability in these texts is in fact a necessary and defining characteristic of utopias as processes of discovery, what Ruppert calls "works in progress" (25).

I suggested earlier a broad working definition of utopia as a quest for a better society, whether the outcome of the quest is viewed optimistically or pessimistically. I would propose two other characteristics of utopia to augment this definition: dynamism and diversity. I have already referred to descriptions of utopia as kinetic rather than static, as a method rather than a state. I would argue that, contrary to the common perception of utopias as inert and rigid structures, they all have within them the potential for change and movement, and even for turbulence and revolution. In addition, utopias, even in their most ordered form, are rarely monolithic and solid. They consist of many parts, at least some of which are incompatible or antithetical although they continue to form a whole together.

"Method," "process," and "movement" are of course used metaphorically when describing a literary text. It is evident that metaphor is an integral part of literary language. It may be less obvious, though no less significant, that science also speaks through metaphors. In the words of physicist Robert Shaw, "You don't see something until you have the right metaphor to let you perceive it" (quoted in Gleick 262). In other words, a scientific observation, no less than a work of

literature, finds expression only within a given paradigm, and only through language. Indeed their dependence on language is among the things that bind literature and science together. The recognition of the role of language in the development of scientific knowledge – as manifested in such areas of physics as relativity, quantum mechanics, and chaos theory – has contributed to crucial paradigm shifts in modern science. One important change has been in the relationship between the observer and the observed system. In various ways, all these theories acknowledge that their objects are “infused with the consciousness of the perceiver” (Levine 17), who is no longer separate and dispassionate but is herself part of the system. N. Katherine Hayles, a brilliant theorist of the relationship between literature and science, notes that the observational data in scientific experiments are “not sensory data per se, but sensory data as interpreted...through an experimental apparatus that already [has] certain assumptions built into it, as well as through the unconscious perceptual sets of the observer.” Because observation is “inherently theory-laden,” what we see depends on our cultural and linguistic contexts (Hayles, *Cosmic Web* 39).

Traditionally, the languages of science and literature have been viewed as being distinct and apart. Gillian Beer identifies in scientific discourse a tendency towards what she calls linguistic positivism, an “insistence on the univocal and unireferential” (42). In this view, language has autonomy within a level of discourse (for example each of various scientific fields such as physics, chemistry, and biology), but this autonomy breaks down when one moves from one level to another. Literary language, on the other hand, moves flexibly between different levels, for instance in its use of metaphor and symbol. This is in fact its “characteristic resource for discovery” (Beer 49). Beer sees this difference in attitude towards simultaneity of reading levels as the thing that distinguishes scientific from literary discourse. She locates in both discourses a “need for multivalence if either is to break from the constraints of language itself into something new”

(Levine 26). But, as physicist Niels Bohr observed, “we are suspended in language” (quoted. in Petersen 10) and it may be impossible to break from its constraints.

It is fruitful, however, to recognize that language allows a diversity of meanings because it is multivocal. As a result, it can, paradoxically, both limit and liberate knowledge (Beer 41). On the one hand, the existence of different voices and, by implication, different viewpoints frees knowledge from the constraints of dogmatism and exclusivity. On the other hand, this diversity of viewpoints also means that any single viewpoint is limited and incomplete. Students of the relationship between literature and science reach the same conclusion time and again: any adequate understanding of a complex reality requires many kinds of description, in many different languages.

Deconstruction has made it fashionable to speak of the groundlessness of language. In a characteristically concise yet vivid passage, Katherine Hayles calls this the “denaturing” of language: “Denatured language is language regarded as ground painted under our feet while we hang suspended in a void” (*Chaos Bound* 269). She argues that this process, together with the denaturing of context, time, and the human, characterizes “cultural postmodernism,” which she defines as “the realization that what has always been thought of as essential, unvarying components of human experience are not natural facts of life but social constructions” (*Chaos Bound* 265). Although Hayles seems to view the whole development in a positive light as potentially liberating, she acknowledges the possibility that new constructs may also be oppressive, although in different ways. One reason a world-view predicated on a void would be oppressive is that it removes the basis for hope. If all the elements of human life are only shams, there is nothing to stimulate or sustain the desire for change, let alone for progress. Given that the desire for

change for the better is the motivating force behind the creation of utopias, the removal of the ground for hope is tantamount to destroying utopia altogether.

It is tempting to see the ground of language, that which language seeks to describe, as a void because it cannot be captured in words. Because it seems inadequate to the task of understanding the real world, language is increasingly seen as being self-reflexive. However, it is more productive to acknowledge that reality is not merely a function of language, but rather something too complex to be fully comprehended by any one language. Human knowledge consists of the finite trying to know the infinite and is therefore inherently partial and fragmentary. Necessarily, the articulation of this knowledge in human languages must be partial and fragmentary as well. Thus many of the paradoxes we perceive in our experience are not real but only apparent; they are simply functions of finite languages trying to describe an infinite truth. But whereas insisting on using only one language can lead to frustration and despair, using different languages simultaneously lets us acknowledge that there is a truth to be discovered and allows us to approach nearer and nearer to it.

Of particular relevance to a reevaluation of the role of language is a change that has taken place in one of Western culture's dominant metaphors. According to Hayles, where eighteenth-century rationalists saw the world as a clock, a mechanism with interlocking, detachable parts, and nineteenth-century Romantics saw it as a living organism, twentieth-century thinkers tend to see the world as a "cosmic dance." Reality, according to this metaphor, is dynamic and fluid, it is more than the sum of its parts, and it includes the observer as an integral participant (Hayles, *Cosmic Web* 15-17).

The view of the universe as a dance or dynamic web is closely linked to the field theory in science. New developments in physics in the early years of the twentieth century, particularly

relativity and quantum mechanics, completely changed the understanding of physical reality. They gave rise to a field concept of reality which eventually “transformed the isolated entities of Newtonian mechanics into unified, mutually interacting systems” (Hayles, *Cosmic Web* 47). One example of the transformation that has taken place is the changing understanding of space and time. Whereas previously the two entities were considered separate and independent absolutes, the Special Theory of Relativity showed them to be interdependent and combined them into a new absolute, the four-dimensional matrix of “spacetime.” In the words of E.F. Taylor and J.A. Wheeler, “Space is different for different observers. Time is different for different observers. Spacetime is the same for everyone” (*Spacetime Physics*, quoted in Hayles, *Cosmic Web* 47). If we think of space and time as two languages for describing spacetime, we can see that each one is inadequate for giving an accurate picture of the reality. It is only when they are combined that we get a complete description.

The need for different points of view can be observed whenever we use language to describe a complex field. The recognition of this need is at the basis of complementarity, a concept with its roots in quantum physics. Briefly stated, complementarity means that various ways of talking about experience may each be valid and necessary for the adequate description of the world, and may yet be mutually exclusive. It implies that we cannot fully understand a phenomenon unless we understand its seemingly contradictory manifestations. Niels Bohr, the first scientist to articulate this concept, observed that the behaviour of light is sometimes wavelike and sometimes particle-like. It is impossible to observe both aspects simultaneously but together they present a fuller description of the behaviour of light than either taken alone. It is important, however, to note a point that Umberto Eco makes, albeit in a somewhat different context: “indeterminacy, complementarity, noncausality are not *modes of being* in the physical world, but *systems for*

describing it in a convenient way" (66). The claim of complementarity is epistemological, not ontological.

Bohr's approach to complementarity is consistent with Eco's because it emphasizes that complementarity is not merely a characteristic of certain quantum phenomena but inherent to the nature of language itself. According to Bohr, the essential distinction between subject and object is necessary for the very process of observation to begin. From this division between subject and object "follows...the meaning of every concept, or rather every word, the meaning depending upon our arbitrary choice of viewpoint" (Bohr, quoted in Hooker 141). Language thus implies a viewpoint, "a specific place at which the subject-object split is made." But this viewpoint necessarily results in a partial and incomplete description. To complete the description, "another viewpoint is necessary which makes the subject-object split in a different place. But these viewpoints will be mutually exclusive, because the subject-object split can only be made in one place at a time" (Hayles, *Cosmic Web* 53). As Bohr himself put it, "a complete elucidation of one and the same object may require diverse points of view which defy a unique description" (quoted in Hooker 141). It is significant that, for Bohr, our suspension in language does not mean that we cannot make progress. We can make progress "not by ignoring or underplaying limitations of viewpoint, but by systematically examining and exploiting them" (Hayles, *Cosmic Web* 53). We can progressively refine our understanding not by attempting to observe without a viewpoint, which is impossible, but by recognizing and using the multiplicity of viewpoints to our advantage. Here then we have an expanded definition of complementarity.

The paradigm shift marked by the emergence of the concept of complementarity, and of the broader field theory, is a complex one because it takes place at many different levels. For example, within science, complementarity describes, at one level, the behaviour of physical phenomena. At

another level, however, it can also be used to describe the relationship between different scientific theories. Hayles, for instance, summarizes the differences between quantum mechanics and relativity theory by saying that “the thrust of quantum mechanics...is to render indeterminacy inherent, while the thrust of relativity theory is to extend the determinacy of Newtonian physics into...progressively larger unifications.” She goes on to say that because both theories have been so successful in their respective spheres, it is unlikely that either will be abandoned: “*both* are clearly necessary when dealing with atomic phenomena” (Hayles, *Cosmic Web* 55-6). In other words, the two theories are complementary to each other; they are parts of the same field (although, surprisingly, Hayles does not seem to recognize this or at least does not make it explicit in her comments).

At yet another level, complementarity also becomes relevant to the study of language when we recognize that languages of description are part of the field being described. Because of the inherent limits placed on each of them by their participation in the field, different languages, for example of science and literature, function in ways that are complementary to one another. Finally, at a more comprehensive level, culture itself can be regarded as a field, “a societal matrix which consists of ...a ‘climate of opinion’ that makes some questions interesting to pursue and renders others uninteresting or irrelevant” (Hayles, *Cosmic Web* 22). Within this field, science and literature can be seen as complementary methods of understanding and shaping culture. I believe that the concept of complementarity in general, as well as its particular applications to language and culture, can shed new light on literary utopias by placing the heterogeneous, and seemingly contradictory, elements found in them within a unified field.

Complementarity can thus bring to the study of utopian literature the paradigm shift from atomism and isolationism to interconnectedness and unity. But a new understanding of utopia also

requires a move from the static to the dynamic. The new science of chaos is particularly useful in providing this paradigm shift because of its concern with process and method. Chaos theory is “a science of process rather than state, of becoming rather than being” (Gleick 5). Of fundamental importance to its study is the concept of nonlinearity. In mathematics, nonlinear equations are those which express relationships that are not strictly proportional; nonlinear systems generally cannot be solved. But nonlinearity may be more broadly defined: in James Gleick’s words, “[it] means that the act of playing the game has a way of changing the rules” (24). In physical systems, nonlinearity translates into a high degree of unpredictability. There is often great incongruity between cause and effect such that a small cause can give rise to a large effect. Sensitive dependence on initial conditions is thus another characteristic of nonlinear or chaotic systems. In such systems, small uncertainties, even at the subatomic level, are quickly brought up to macroscopic expression. A theory that combines causal determinism with unpredictability is of great value in studying utopias because the development of a utopian society – or any society for that matter – is a “chaotic” process in which causes and effects are closely linked but not always readily discernible or predictable.

The images often used to represent chaotic systems include the vortex, the wave, the cloud, the waterfall, all of them emblems of turbulence and disorder. But this is a special kind of disorder. The traditional opposition between chaos and order is being re-evaluated by chaos theory. Hayles attributes the negative valuation of chaos in the Western tradition to “the predominance of binary logic in the West” and invokes instead the four-valued logic of Taoist thought where “not-order is...distinct from and valued differently than anti-order” (Hayles, *Chaos and Order* 3). Chaos then is no longer synonymous with disorder in the traditional sense. It is rather, to quote Gleick, “order *masquerading* as randomness” (22).

There are two main approaches in the scientific community to the relationship between chaos and order. One approach, which is the focus of Gleick's book, sees order hidden in chaos. Doyne Farmer, a physicist working on chaos describes it in this way: "Here was one coin with two sides. Here was order, with randomness emerging, and then one step further away was randomness with its own underlying order." On a philosophic level, Farmer sees this as an operational way of defining free will in a way that reconciles it to determinism: a chaotic system is "deterministic, but you can't say what it is going to do next" (quoted in Gleick 251-2). Nonlinearity is what combines determinism with unpredictability. It also accounts for the spontaneous emergence of self-organization in the world.

Self-organization, order arising out of chaotic systems, is at the centre of the second approach to chaos, an approach whose best-known proponents are Ilya Prigogine and Isabelle Stengers. The second law of thermodynamics states that in a closed system, entropy, defined as a function of absolute temperature, is always increasing. In practical terms, this means that in any process, some heat is always lost. Nineteenth-century thermodynamicist Lord Kelvin called this process of heat loss a "universal tendency towards dissipation" (quoted in Hayles, *Chaos and Order* 13) moving the universe toward a so-called "heat death." However, in their influential book, *Order Out of Chaos*, Prigogine and Stengers calculate that in systems far from equilibrium, overall entropy production is so high that local decreases in entropy, which lead to greater organization, do not violate the second law. In other words, they argue that it is possible to have an increase in organized structures together with an overall increase in entropy. They thus reconceptualize entropy as "an engine driving the world toward increasing complexity rather than toward death" (Hayles, *Chaos and Order* 13). Chaos is redefined as a space of creation where being and becoming are reconciled.

Clearly concepts of order, particularly order concealed within or arising out of disorder, are central to the creation of utopian societies. Chaos theory offers an understanding of the dynamics of emergent order which is applicable not only to physical systems but also, analogically, to cultural situations. Moreover chaos is, *par excellence*, a multidisciplinary science. It has found universal patterns in systems as diverse as dripping faucets, measles epidemics, and fluctuations in cotton prices. Having something to say about meteorology, economics, epidemiology, thermodynamics, and metallurgy (to name just a few arbitrary examples), chaos “breaks across the lines that separate scientific disciplines” and “turns back the trend in science toward reductionism” (Gleick 5). These are qualities that would also benefit the study of utopian literature and perhaps of literature in general. In this regard, chaos theory also has obvious affinities with the concept of complementarity since both attempt to go beyond binary logic by reconciling ideas that have traditionally been regarded as opposite and incompatible.

To summarize the various ideas in the foregoing pages, field theory and chaos theory provide theoretical frameworks for discerning the elements of diversity and dynamism within literary utopias. Using the concept of complementarity, field theory points out ways in which diverse and even mutually exclusive points of view may be reconciled within a larger field while at the same time preserving their individuality. Similarly, through the notion of nonlinearity, chaos theory shows how processes of dynamic change can be intertwined with structures of order. Both theories challenge conventional views that find in differences only the possibility of conflict. They suggest that we can instead find in them the possibility of greater unity.

This chapter has given an introduction to field and chaos theories, which will be further developed in the course of discussing the literature. There are potentially many ways of applying scientific theories to literature. One is to use scientific terms metaphorically or analogically in order

to shed light on literary texts. The other is “to posit connections that go beyond metaphor” (Hayles, *Chaos and Order* 20) by recognizing certain literary works or genres as, for instance, complementary or chaotic systems. I believe that both approaches are useful and valuable and I intend to use both in the discussions that follow.

A few words on the choice of texts is in order here. I have chosen literary utopias written in the last hundred years partly because there has been a resurgence of interest in the genre during this period, and partly because these are the works that are closest to the modern scientific developments which play such an important role in my approach. Even so, the list of utopian novels written since the late nineteenth century is so long that no selection out of it can claim to be either exhaustive or representative. The texts I have selected are those which provide the best opportunities for exploring the specific issues I have in mind. It must be clear by now that both the literary texts and the scientific theories that I find interesting are the ones that try to come to terms with two or more seemingly contrary states. I have therefore chosen utopian novels that fall into one of two groups. The first group comprises works that depict two (or sometimes three) parallel worlds, of which one is usually eutopian and the other dystopian. The following novels belong to this group: Alice Ilgenfritz Jones’s and Ella Merchant’s *Unveiling a Parallel* (1893); Leigh Brackett’s *The Long Tomorrow* (1955); Ursula K. Le Guin’s *The Dispossessed* (1974); Marge Piercy’s *Woman on the Edge of Time* (1976); and Doris Lessing’s *The Marriages Between Zones Three, Four and Five* (1980). The second group includes works that can most usefully be studied as pairs because they depict complementary worlds. This group includes Edward Bellamy’s *Looking Backward* (1888) and William Morris’s *News from Nowhere* (1890); and Aldous Huxley’s *Brave New World* (1932) and *Island* (1962). H. G. Wells’s *A Modern Utopia* (1904), while, strictly speaking, it does not belong to either category, is important because it makes explicit

many of the concerns that underlie the other novels. I have chosen, for the most part, novels that were well known and influential at the time they were written. The novels by Bellamy, Morris, and Huxley are obviously in this group as are, to a somewhat lesser extent, those by Wells, Le Guin, Piercy, and Lessing. The two exceptions, the novels by Jones and Merchant and by Brackett, are important in that they provide significant counterpoints to the views of their more famous contemporaries. I have also wished to maintain a balance between the works of men and women writers since the worlds they create often complement each other in their concerns and solutions.

My approach to the texts is primarily thematic. No matter how much we focus on extra-textual aspects of the work, the content of a utopian novel -- the particular shape of the utopia being described -- is of central importance. This is why I spend much of the following chapters describing and analyzing the thematic features of each utopian vision. My critical method is to combine insights from scientific concepts and from the utopian texts themselves in order simultaneously to develop and to apply a theory of reading utopias that validates their diversity while at the same time incorporating them into a unified whole.

Beyond this, the structure of the thesis reflects my theoretical interest in complementarity. The chapters fall into two categories that complement each other in approach: the first linear, the second contextual. Chapters 2 to 4 are linear in their organization. They analyze selected utopian texts chronologically, in order to convey a sense of their existence within a continuum. Explicitly or implicitly, nearly all literary utopias build on their predecessors within the genre. A chronological study helps clarify the overall direction of the genre's development. The divisions between these chapters occur more or less naturally. Chapter 2 deals with novels written at the end of the nineteenth and the turn of the twentieth century, Chapter 3 with those written around the middle of this century, and Chapter 4 with those that have appeared nearer its end. Of course, in

some cases, the divisions have as much to do with approach and world-view as they do with strict chronology. For example, *Island* is separated from *Brave New World* by thirty years and from *The Dispossessed* by only twelve years, and yet its concerns place it more appropriately with the former rather than the latter.

Chapters 5 and 6 are organized on a more nonlinear and contextual principle. They concentrate on broad concepts that bind together works written in very different cultural and historical settings. The focus here is less on individual texts and more on the links and relationships between texts. Chapter 5 examines how insights from the various novels can be used to shed light on the meaning of scientific concepts, such as field theory and chaos, in a literary context. Chapter 6 also brings together different groupings of novels to examine what they say about the relationship between science and cultural issues such as gender and religion. The two groups of chapters are complementary in that the first (Chapters 2, 3, and 4) uses scientific theories as a way of reading literary texts, while the second (Chapters 5 and 6) uses the literature as a means of understanding the implications of science. The concluding chapter briefly summarizes the findings in the thesis and explores their possible implications beyond literary studies.

2
THE KINETIC UTOPIA
NOWHERE BUT IN THE IMAGINATION

No discussion of nineteenth century utopias can reasonably leave out Edward Bellamy's *Looking Backward* (1888) and William Morris's *News from Nowhere* (1890). The two novels are not only classics of the genre, they are also important works to examine side by side because they address many of the same issues from divergent -- and yet, at times, curiously similar -- standpoints. It is generally accepted that Morris wrote *News from Nowhere* at least partly as a "counterblast" to *Looking Backward*. Considering that they disagree on almost all features of the ideal society, it is ironic that both books were regarded as Socialist utopias. Critics generally have a tendency to pit the two novels against each other and praise one at the other's expense. A contemporary reviewer claimed that "he that is for Bellamy's idea [of the Socialist Movement] is against Morris's" (quoted in MacDonald 79). However, it is also possible to read the novels as providing complementary, rather than opposing, visions of the same historical situation. Peter Ruppert notes that "what remains incomplete in Bellamy's vision has been spelled out in great detail in William Morris's dialectical reading of Bellamy's text" (76). Bellamy's main target is the excessive individualism, competition, and selfish greed which mark social relations in the late nineteenth century. His solution is the idea of the nation as a highly ordered and cooperative "industrial army" that guarantees the nurture, education and comfortable maintenance of every citizen. Morris, on the other hand, criticizes a different aspect of nineteenth-century society, what he calls "the use of hypocrisy and cant to evade the responsibility of vicarious ferocity" (*News from Nowhere* 80), particularly in the interaction between classes. His solution is to create a

community that emphasizes personal responsibility and therefore complete freedom for everyone.

The problems these writers identify are complementary, as are the solutions they propose.

Looking Backward

Edward Bellamy's best known work begins with a Preface ostensibly written in the year 2000, in which the novel's protagonist, Julian West, tells us that "nowhere can we find more solid ground for daring anticipations of human development during the next one thousand years, than by 'Looking Backward' upon the progress of the last one hundred" (*Looking Backward* xxii). This observation is interesting for a number of reasons, not the least of which is that it was of course made not in the year 2000 but in 1886. Thus, what follows is at once West looking backward and Bellamy looking forward at the twentieth century. In one sense, this kind of double vision is inherent in any work of utopian speculation that is set in the future. Bellamy reminds us that he is writing a utopian novel when he locates the ground for human progress "nowhere," that is, in utopia. Beyond this, however, *Looking Backward* is notable in that it foregrounds the paradoxical nature of looking backward and forward at the same time. Moreover, Bellamy is concerned, throughout his novel, with vision, perspective, focus, and various aspects of "looking." Ultimately, even Julian West's attainment of utopia finds its significance in terms of a new way of seeing as he expresses thankfulness for "the greatness of the world's salvation and [his] privilege in *beholding* it" (218, emphasis added).

A common critical view of Bellamy's Boston in the year 2000 is that it is both excessively materialistic and overly rigid and restrictive, even totalitarian. William Morris's description of Bellamy's utopia as "a cockney paradise" is often cited as the definitive criticism of a society based on utilitarian and mechanistic values (MacDonald 78). Nonetheless, Bellamy's utopian

vision gained “an immense readership and influence...sold millions of copies and was translated into more than twenty languages after its publication” (Ruppert 100). Achieving far more political impact than Morris’s utopia, it quickly became the ideological foundation of the Nationalist movement. In addition to over one hundred and fifty Nationalist and Bellamy clubs in the United States, it also sparked the creation of other reform movements, including the Nationalization of Labour Society, the Nationalist Movement’s counterpart in England (MacDonald 77). Nonetheless, many modern critics have criticized Bellamy for taking an authoritarian viewpoint. Arthur Lipow, an avowed democratic socialist and vehement critic of the bureaucratic and class-exploitative tendencies of much of modern socialism, considers Bellamy’s novel and the Nationalist movement as symptoms of “the new authoritarian middle-class reaction against capitalism” (Lipow 8), which would find its expression not in democracy but in a “bureaucratic, statist socialism” (3). He regards *Looking Backward* as “a literary blueprint for...authoritarian socialism” and its “technocratic hostility toward politics, the envisioned industrial army,...and the obsession with submerging individuality into a mystic whole as antecedents of twentieth-century communism and fascism alike” (Segal 97-8).

Within this general context, criticism of Bellamy’s utopia assumes a variety of forms. W. Warren Wagar, for instance, identifies Bellamy as a scientocrat who mistakenly places his faith in “the power of positive knowledge to shape a good society from which politics can be excluded and happiness can be engineered by trained elites” (Wagar 108). The best he can say of Bellamy, and of later scientocrats such as H.G. Wells and B. F. Skinner, is that they were not cynical apologists for tyranny or elitism, but sincere in their “belief in the veracity of modern science, its methods, and its applications in industry and government” (122).

Sylvia Strauss is even less forgiving of Bellamy as she attributes to him a self-serving conformity to changes in the mainstream politics of his time. She claims:

Bellamy was acutely conscious of the critics who faulted him for the authoritarianism that was pervasive in his utopia and for failing to provide a convincing plan for the peaceful evolution he had promised. He answered his critics in *Equality*. Bellamy characteristically responded to events instead of staking out and rationalizing a philosophical position.... *Looking Backward* gained its enormous success because Bellamy was an expert at the sort of self-promotion that today is called media hype. (88)

Strauss claims that Bellamy was incapable of transcending the patriarchal values of his middle-class upbringing and that "his utopia is, in fact, disconcertingly similar to such dystopias as Zamyatin's *We*, George Orwell's *Nineteen Eighty-Four*, and Aldous Huxley's *Brave New World*" (85). My purpose here is not to endorse or refute such criticisms, but it is worthwhile to point out that Strauss's attack on *Looking Backward* loses much of its force when we realize that the utopia she is describing is not simply the society described in the novel but a composite based on "factors gleaned from Bellamy's [other] writings" (85) as well as Strauss's own, occasionally idiosyncratic, extrapolations of Bellamy's ideas.

Other critics, however, have started to look at the complexity latent within *Looking Backward* and to identify various areas of textual and thematic interest in this novel as well as Bellamy's work as a whole. One of the topics that comes up repeatedly in these discussions is Bellamy's interest in vision. As a number of critics suggest, "The Blindman's World," a short story Bellamy wrote in 1886, provides a valuable point of comparison on this subject. The story is about an astronomer who falls asleep at his telescope and wakes to find himself on Mars. He discovers that the one thing that distinguishes the Martians from earthlings is that they have the power of foresight, enabling them to see into the future and to plan for it. In contrast, they dub earth the "blindman's world." Upon waking, the astronomer can remember his experience only in the dream

state: he gains conscious knowledge of his travel to the Martian utopia only by reading an account of it he has written while sleepwalking. He asks himself, “when will man learn to interrogate the dream soul of the marvels it sees in its wanderings? Then he will no longer need to improve his telescopes to find out the secrets of the universe” (“Blindman’s World” 11, quoted in Khanna 42).

Lee Cullen Khanna finds in the story a belief that “interrogating the dream soul or exercising the imagination may lead to altered states – to utopia” (42). The story clearly anticipates the utopian impulse of *Looking Backward*. Bellamy is concerned, in both works, with the shifts in perspective that make new visions possible. In the short story, “looking at another world provides a vantage point from which one can better see one’s own” (Patai 10). In the novel, the shift is through time rather than space but the same change in perspective takes place. The difference between the two tales lies in their view of what is ultimately real. The astronomer wakes up from his dream of utopia and remains in the blindman’s world. In contrast, Julian West travels back to nineteenth-century Boston in a dream, but wakes up to find himself in utopia once again. Whereas in “The Blindman’s World” the real world remains real, in *Looking Backward* vision conquers reality.

If for Bellamy utopia means the triumph of vision over reality, then Julian West’s experience of a changed vision is the key to understanding the process by which utopia can be achieved. At the beginning of the novel, West is an insomniac who, under the influence of mesmerism, becomes a profound sleeper. This split identity is symbolic of the double role he plays in the novel. At one level, he is, as a representative of the nineteenth century, morally and socially somnolent in comparison to the enlightened society in which he finds himself in the year 2000. At the same time, his insomnia seems to signify a lack of visionary capacity as he is unable to move from the literal world to the world of dreams. The rest of the novel depicts West’s integration into the new utopian

society as a process of healing whereby he no longer has to fluctuate between the extreme states of sleeplessness and trance, but can instead sleep and wake naturally and appropriately. This means waking up from the moral sleep that had paralyzed his nineteenth-century contemporaries and at the same time gaining access to the visionary world opened up through dreams.

West's gradual spiritual awakening to the virtues of the new society can be traced through a series of literal and metaphoric awakenings during his stay in twentieth-century Boston. His initial reaction to the news that he has slept for 113 years is remarkably calm and matter-of-fact. He questions his host, Dr. Leete, about the circumstances of his discovery, but is convinced that he is not the victim of a practical joke only when Dr. Leete shows him the new Boston:

At my feet lay a great city. Miles of broad streets, shaded by trees and lined with fine buildings...stretched in every direction. Every quarter contained large open squares filled with trees, along which statues glistened and fountains flashed in the late-afternoon sun. Public buildings of a colossal size and architectural grandeur unparalleled in my day raised their stately piles on every side. Surely I had never seen this city or one comparable to it before....

I knew then that I had been told the truth concerning the prodigious thing which had befallen me. (*Looking Backward* 43)

It is not until waking up the next day, however, that West begins to grasp the significance of what has happened. The result is a sense of utter disorientation. He says, "I sat up thus in bed staring about, without being able to regain the clew to my personal identity. I was no more able to distinguish myself from pure being during those moments" (65). This complete loss of a sense of self, which he describes as a "helpless, eyeless groping for myself in a boundless void," in turn gives way to a different crisis of identity as "the full realization of my actual position, and all that it implied" comes upon him. The result is his sensation "that I was two persons, that my identity was double" (66).

West experiences this sense of duality not only in relation to his own psyche, but also in his interaction with his environment. As he wanders around Boston, he remembers it as it was in his own time:

The mental image of the old city was so fresh and strong that it did not yield to the impression of the actual city, but contended with it, so that it was first one and then the other which seemed the more unreal. There was nothing I saw which was not blurred in this way, like the faces of a composite photograph. (67)

Disturbing as this double vision is, it represents a step forward as he tries to redefine and distinguish between the “real” and the “unreal.” This process of reevaluation is necessary for eventually replacing the undesirable reality of the nineteenth century with the desirable vision of the twentieth.

The next stage in West’s awakening occurs when he sits down in the Leetes’ library to read Dickens. Dickens’s descriptions of “the misery of the poor, the wrongs of power, the pitiless cruelty of the system of society” intensify, by the force of contrast, West’s appreciation of the transformation that society has undergone. The result is that “with a clearness which I had not been able before to attain, I saw now the past and present, like contrasting pictures, side by side” (108). The double photograph of the earlier passage is back but whereas before, the two views were blurred and indistinguishable, now they are distinct and available for comparison. The change marks an advancement in West’s capacity for seeing clearly.

The culmination of this process of acquiring a new vision occurs at the end of the book when Julian West awakes to the nineteenth century and is convinced that “all that about the twentieth century had been a dream” (204). As he reads newspaper headlines, walks about the streets, and talks to his former friends, he is finally truly awakened:

as I observed the wretched beings about me more closely, I perceived that they were all quite dead....As I looked, horrorstruck, from one death’s head to another, I was affected by a singular hallucination. Like a wavering translucent spirit face

superimposed upon each of these brutish masks, I saw the ideal, the possible face that would have been the actual if the mind and soul had lived. (214)

West returns to his earlier experience of seeing double; however, this time, the result is not confusion but greater clear-sightedness as he sees within each person the potential for progress and elevation. Having gained this insight into the possibility of attaining utopian perfection, West wakes up one last time to realize that “my return to the nineteenth century had been the dream, and my presence in the twentieth was the reality” (218). His awakening to the truth of utopia coincides with his taking up residence in it permanently.

Realizing utopia, then, is primarily a process of personal transformation. Darko Suvin suggests that utopia is “a method rather than a state, it cannot be realized or not realized -- it can only be applied.” For Suvin, to apply a literary text is “to read it as a dramatic dialogue with the reader” (“Defining” 52). *Looking Backward* enacts this dialogue within the plot of the novel itself, with Julian West as the “reader” who applies utopia by allowing it to change the way he sees the world. The novel has been criticized for providing no account of how the transition to utopia came about. In comparing *Looking Backward*, unfavourably, to *News from Nowhere*, Alexander MacDonald observes that “the transformation of many monopolies into one great monopoly, as described by Dr. Leete, is a rapid, inevitable, nonviolent evolution of social and political structures....nobody really has to do anything except cooperate with the inevitable. The notion of revolutionary action is explicitly rejected” (80-1). Bellamy’s point, however, is that a change in the way one sees the world can lead to change in the world itself. “To wonder at the rapidity with which the change was completed after its possibility was first entertained,” he writes, “is to forget the intoxicating effect of hope upon minds long accustomed to despair. From the moment men allowed themselves to believe that humanity after all had not been meant for a dwarf..the reaction

must needs have been overwhelming” (*Looking Backward* 189). The result is a bloodless revolution, a complete change in human institutions in the space of one generation. Bellamy does provide an account of the transition to the new society, even though his critics refuse to see it as such because it is not an account of revolutionary change.

Interestingly, although process of change is shown to work at the level of the individual, the ideology on which the new society is built is one of collectivism. For Bellamy, the anxious question of “What shall I eat and drink, and wherewithal shall I be clothed?” ceases to be difficult once it is “conceived, not from the individual, but the fraternal standpoint, ‘What shall we eat and drink, and wherewithal shall we be clothed?’” (190). Moreover, this process of change is dynamic. Once the organization of society and the conditions of life no longer put a premium on selfishness and brutality, it is soon fully revealed that human nature in its essential qualities is good. This realization in turn leads to adopting “the betterment of mankind from generation to generation, physically, mentally, morally, ... as the one great object supremely worthy of effort and sacrifice” (194).

Of course there are many who see in the socioeconomic structures of *Looking Backward* the tendency towards stasis and even totalitarian oppression. Even someone like Kenneth M. Roemer, who argues for the dynamism latent within Bellamy’s work, admits the existence within it of “the dynamic promise/ static delivery syndrome” (128). He acknowledges that, while “stasis is the perpetual whipping boy of critics of utopia,” a constructive outcome of focusing on it is that it “sensitizes us to inconsistencies” in literary utopias (126-7). Roemer’s own focus on stasis and dynamism leads him to conclude that as far as the content of the book is concerned, Bellamy’s utopia may seem static on the socioeconomic level, but on the level of personal development, it allows room for dynamic development both within and outside the industrial army (134).

In addition to content analysis, Roemer also uses reader-response theory to show “how the text can invite readers to perceive dynamic elements in supposedly static or closed texts and vice versa” (134). He sees the text as a network of invitations to implied readers capable of interpreting the invitations to “question conventional, static notions about their cultures” (135). One such network in *Looking Backward* centres around Julian West’s role as historian. Dr. Leete tells West, “You are easily the master of all our historians on questions relating to the social condition of the latter part of the nineteenth century....you will find an historical lectureship in one of our colleges awaiting you” (*Looking Backward* 126). The Preface, written at the “Historical Section, Shawmut College, Boston, December 26, 2000,” introduces *Looking Backward* as a lesson in history for “persons who, while desiring to gain a more definite idea of the social contrasts between the nineteenth and twentieth centuries, are daunted by the formal aspect of the histories which treat the subject” (xxi). The book deals partly with new inventions such as “telephones” (radios), alarm clocks, pneumatic tubes, and other technological gadgets characteristic of utopian and science fiction. But it is also an explanation of new social institutions in comparison to previous modes of social interaction. Looking both backward and forward, the work becomes at once a history and a utopian story.

One approach to the study of history is to look for causes and effects, to discover in past events the roots of subsequent developments. Such an approach implicitly recognizes Ernst Bloch’s assertion that “the future is always concealed in that which exists” (quoted in Pfaelzer, “Immanence” 51). Thus, as a history of the past, Bellamy’s novel also becomes a guide to the possibilities of the future and therefore an agent of moral and political change. Similarly, utopian writing can be viewed as an attempt to extrapolate from existing conditions in order to arrive at an alternative which is nonetheless based on present actuality. As Jean Pfaelzer observes, “the

narrative of Julian's conversion from one era to the next ratifies the utopian axiom that the seeds of the future are immanent in the present" ("Immanence" 58). As a literary utopia, the novel asks the reader to "integrate different planes of experience" -- an undesirable present and an ideal future -- and seeks thereby both to create a private response and to prompt political action (Khanna 39). Thus the seemingly contrary activities of historiography and utopian writing are shown to be complementary approaches to achieving the same outcome: bringing about social transformation.

The concept of complementarity, as I defined it in Chapter 1, helps explain Bellamy's method in *Looking Backward*. Complementarity implies that we cannot fully understand a phenomenon unless we understand its seemingly contradictory, or even mutually exclusive, manifestations. In doing so, we are likely to come upon paradoxes which are not real but only apparent. Their paradoxical quality is a function of the fact that they represent different ways of looking at the same object, but in order to understand that object we must somehow bring together the contrary viewpoints. Bellamy's method is to superimpose two different perspectives and make us see both at once. At the formal level, he does so by looking both backward and forward, writing both a history and a utopian story. At the thematic level, he represents Julian West's conversion from nineteenth- to twentieth-century values as a process of gaining the capacity for double vision. West's experience gives us the model for "the mental exercise of sustaining images of the 'real' and imaginary, the pragmatic and the possible, that allows us to travel beyond binary intellectual habits to utopia" (Khanna 39). As readers, we too must acquire the double vision that sensitizes us to the discrepancy between existing reality and utopian possibility and thereby motivates us to take action in order to transform the one into the other.

The criticism remains, however, that Bellamy's vision of utopia remains unconvincing as a practical possibility because even in the novel itself, "Julian is powerless to use his vision of a just

and attractive future to effectuate a significant change in the consciousness of the dominant class of his own time” (Pfaelzer, “Immanence” 65). When he returns to old Boston in his dream, he is motivated by his new perception of the inequality and injustice around him to try to inspire his friends to change their ways by painting a picture of the new world he has seen. Rather than enlisting in his cause, however, they get angry and disgusted with him and call him a “madman” and an “enemy of society.” He discovers that “what was to me so plain and so all-important was to them meaningless, and that I was powerless to make it other” (*Looking Backward* 217). We are forced to extend the double vision we have acquired in reading the novel to its ending as well. On the one hand, the ending is a happy one because West returns to utopia where he proceeds to write his history: the vision has triumphed over reality. On the other hand, the novel ends in failure because West is denied the ability to impart to his contemporaries the vision required for moving towards utopia.

As I mentioned in the beginning, William Morris’s approach to socialism, to society, and to utopia provides a counterpoint to that of Bellamy. At the same time, despite their differences, the two writers have much in common. Clearly, their visions of the ideal society are vastly at odds – Bellamy tending towards authoritarianism, Morris towards anarchy – but their underlying desire for harmony and prosperity brings them closer to each other than they or their critics are generally willing to admit. Nevertheless, it is instructive to begin looking at Morris by comparing some of the points on which he differs from Bellamy.

News from Nowhere

The relationship of the visitor from another time to the utopian society he visits provides an interesting point of departure for comparing the two Victorian classics. As we have seen, although

Julian West's story is meant to encourage Bellamy's contemporaries to transform their society into utopia, West himself does not return to the nineteenth century and thus is given no direct role to play in the transformation. In contrast, Morris's protagonist, William Guest, has a vision of the future but ultimately remains in his own time, where, it is implied, he will strive to build in reality the new society he has seen in his imagination.

The difference in the protagonists' function points to the difference in the authors' philosophy of history. Bellamy sees progress from his own time to the twentieth century "occurring along a straight, upward line" (MacDonald 81) as he envisions society as a whole carrying to its logical conclusion the principle of consolidating capital. Morris's view of progress is dialectical as he posits "a cyclic theory of historical change" (Talbot 59), whereby the new world of the late twentieth century is more akin to that of the Middle Ages than to either the ancient Greek or the Victorian world. Bellamy's view of history is evolutionary and requires little deliberate action on the part of the people for its realization. It is enough that individuals be awakened to the desirability of the process and cooperate in the "mighty Zeitgeist of industrial consolidation" (MacDonald 81). Morris's revolutionary perspective, on the other hand, necessitates actively working for change because unless people strive for a different future, it will not come to be.

I suggested earlier that the concept of complementarity sheds some light on the structure of *Looking Backward*. The field theory of which complementarity is a part is also relevant to the processes of change in *News from Nowhere*. One of the things which modern science has revolutionized is our understanding of the relationship between the observer and the observed system. It is generally acknowledged that physical phenomena cannot be separated from our consciousness as perceivers because we are part of the systems we study. Katherine Hayles argues that sensory data are always interpreted through instruments which have built into them the

“unconscious perceptual sets of the observer.” The process of observation is necessarily “theory-laden” so that our cultural and linguistic contexts determine what we see (Hayles, *Cosmic Web* 39).

William Guest’s status in *News from Nowhere* perfectly illustrates this relationship between observer and system. Of course, many readers have noted that as “William,” Guest is Morris’s own alter ego, or at least his representative in the novel. Norman Talbot goes so far as to see the whole book as an “autobiographical utopia” abounding in “Morrisian wish-fulfilments.” He claims, for instance, that part of our mind accepts the Guest House “as Morris’s Kelmscott House, so that Guest-Hall equals Morris-Hall” (42-3). While such a reading may hold a fascination for those interested in Morris’s biography, a more generally valuable approach is suggested by Laura Donaldson. She notes that in Greek, a language in which Morris was fluent, “the same word can mean ‘guest’ and ‘alien.’” By implying an “ambiguous state of a coeval existence both within and without utopian society” (Donaldson 31), the name suggests both exclusion from and inclusion in the social context.

At the thematic level, the visitor’s status as guest foregrounds the utopian philosophy of hospitality, sharing, and service. One of the first things Guest learns about Nowhere is that people no longer use money. When he offers Dick, the first of his guides through Nowhere, some money for ferrying him across a river, Dick replies, “You think I have done you service; so you feel yourself bound to give me something...[but] you see this ferrying and giving people casts about the water is my *business*, which I would do for anybody; so to take gifts in connection with it would look very queer...I shouldn’t know where to stow so many mementos of friendship” (*News from Nowhere* 7-8). In Dick’s world, “business” is the service one performs for friends and, as such, requires no compensation because everyone does business the same way. When Guest comments

on Dick's kindness to him, a perfect stranger, he is told, "if he were not 'kind,' as you call it, to a perfect stranger he would be thought a strange person" (46).

The idea of hospitality is enshrined in the first public place Guest visits: the Guest-hall, built on the site of the lecture room of the Hammersmith Socialists. The inscription bearing this information seems to equate the establishment of the guest house with the fruition of the ideals of nineteenth-century socialism. Appropriately, this is where the narrator acquires an identity. When one of his new acquaintances tells him, "Guest, we don't know what to call you," he answers, "I have some doubts about it myself; so suppose you call me Guest...and add William to it if you please" (12). His choice of name implies the narrator's acceptance of the social and ethical framework to which he has been introduced, what Hammond, another of his guides, later calls "the religion of humanity" (113).

However, the choice of name also suggests an awareness of Guest's peculiar position within the new society. Both he and other characters sense that he is at once included in and excluded from utopia. Dick remarks, upon returning at the end of a conversation between Guest and Hammond, that he is glad they have not talked themselves into another world. "I was half suspecting," he says, "that you would presently be vanishing from us, and began to picture my kinsman sitting in the hall staring at nothing and finding that he had been talking a while past to nobody" (115). And again, he tells Guest, "you have got the cap of darkness, and are seeing everything, yourself invisible" (133). Though Hammond assures him that their guest is indeed quite real, the comment foreshadows the scene of Guest's departure from the future, when he suddenly realizes that his companions could no longer see him and "all consciousness of [his] presence had faded" from their faces. Back in his own time, Guest muses about his experience and admits that he had been "really seeing that new life from the outside, still wrapped up in the

prejudices, the anxieties, the distrust of this time of doubt and struggle" (181-2). Visitors to utopia, from More's Raphael Hythloday to Bellamy's Julian West, are generally spectators rather than participants. Guest's status, however, is different from that of his predecessors in that he is a dreamer rather than an actual visitor to utopia. His role as observer is therefore emphasized.

However, like the observer of quantum phenomena, Guest too cannot be separated from what he observes because they are both part of the same field. Guest is not a passive onlooker but comes to exert an influence upon utopia, although his influence seems to be, for the most part, negative. The people of the new age care little for history; as one of them observes, "it is mostly in periods of turmoil and strife and confusion that people care much about history; and you know...we are not like that now" (25). The nineteenth century, particularly, "count[s] for nothing" (41) in the memory of most of them. Thus, they perceive the intrusion of the past into their lives, which is a consequence of Guest's very presence, as a disturbing influence. For instance, one of the characters tells Hammond:

something or another troubles me, and I feel as if something untoward were going to happen.. You have been talking of past miseries to the guest, and have been living in past unhappy times, and it is in the air all round us, and makes us feel as if we were longing for something that we cannot have. (116)

Similarly, near the end of the novel, Dick, who has been portrayed throughout as carefree and childlike, tells Guest: "One thing seems strange to me...that I must needs trouble myself about winter and its scantiness, in the midst of summer abundance. If it hadn't happened to me before, I should have thought it was your doing, guest; that you had thrown a kind of evil charm over me" (179).

While Guest's influence seems, more than anything else, to dampen the spirits of his hosts, it can also be read as a means of making utopia more real by giving it the sense of history that it

lacks: “time-consciousness gives resilience even to an epoch of rest.” In return for the large measure of hope and optimism he takes back to his own time, Guest leaves behind a balancing dose of realism to make “a better, tougher Nowhere” (Talbot 57). Moreover, among those he meets, there is at least one person who understands and welcomes his sobering influence. Ellen, yet another of his guides, recognizes the importance of preserving history and learning from it:

sometimes people are too careless of the history of the past – too apt to leave it in the hands of learned men... Who knows? Happy as we are, times may alter; we may be bitten with some impulse towards change, and many things may seem too wonderful for us to resist... if we do not know that they are but phases of what has been before; and withal ruinous, deceitful, and sordid. (*News from Nowhere* 167-8)

She wants to learn the lessons of the past, not only for herself, but for her children. Guest’s influence is thus to be perpetuated through the coming generations of utopians.

However, Guest does more than influence the novel’s plot. Indeed, his perceptual sets largely determine the shape that utopia takes. The first chapter begins by stating that the narrator had been involved in a discussion at the Socialist League on “what would happen on the Morrow of the Revolution.” He goes home, repeating to himself, “If I could but see it! If I could but see it” (1-2). Of course, he awakens the next morning to see precisely what he had hoped to see. He sees not only what the morrow of the revolution is like, but also learns, in detail, about how the revolution itself took place. Significantly, the first things he notices are the counterparts of those things which he had observed the previous night: the graceful stone bridge that has replaced the old, ugly suspension bridge, the clear waters that now flow where the muddy waters of the Thames used to be. Morris’s suggestion that what we see in utopia depends on what we know in our own time and place confirms Hayles’s notion that observation is always theory-laden.

If what we see in some way determines what exists, then the future is not inevitable but contingent and unpredictable. Chaos theory can contribute to our understanding of the process by which one can arrive at the future. Of fundamental importance to the study of chaos is the concept of nonlinearity. In mathematics, nonlinear equations are those which express relationships that are not strictly proportional. But nonlinearity may be more broadly defined: “[it] means that the act of playing the game has a way of changing the rules” (Gleick 24). This is an important idea in Morris’s novel in a way that it is not in Bellamy’s.

Hammond tells Guest about Nowhere’s customs and history in terms that are relevant to the visitor’s nineteenth-century background. After a lengthy description of “how the change came,” Hammond says:

I have not been talking to thin air; nor, indeed to this new friend of ours only. Who knows but I may not have been talking to many people? For perhaps our guest may some day go back to the people he has come from, and may take a message from us which may bear fruit for them, and consequently for us. (*News from Nowhere* 116)

Although Hammond adopts the convention of speaking to Guest “as to a being from another planet” (94), he seems to realize that he is from a different time rather than a different place. Norman Talbot observes that in this chapter Hammond recognizes that “his own record of the revolution is helping to create it; therefore he is in a sense begetting himself and his world, as in many of the paradoxes of time travel” (49). Guest confirms the link between them when he recognizes himself in Hammond: “his face...seemed strangely familiar to me; as if I had seen it before — in a looking-glass it might be” (44). For their connection to be actualized, however, Guest must return to his own time and help create the future he has witnessed or else neither Hammond nor the future he inhabits will exist.

Guest interprets Ellen's parting look to contain both a promise and an admonition. "There is yet a time of rest in store for the world, when mastery has changed into fellowship," she seems to assure him. And yet he must contribute towards the attainment of that time: "Go back and be happier for having seen us, for having added a little hope to your struggle. Go on living while you may...to build up little by little the new age of fellowship, and rest, and happiness" (182). Again the message is the same: even though "the time of rest" already exists in potentiality, he must play his part to ensure that it is achieved in reality.

Keeping in mind Morson's view of utopias as "boundary works," we can consider the boundaries not only within but also between the utopian visions of Morris and Bellamy. In addition to their critiques of existing conditions and their visions of change, the two writers also have divergent views about the function of utopian writing. Alexander MacDonald claims that Morris considered utopian visions to be "personal to their authors" while Bellamy believed in "utopia as [social] blueprint" (80). There is a good deal of truth to this assertion as MacDonald goes on demonstrate. His most telling point is the comparison of the narrative techniques in the two novels. In *Looking Backward*, the primary, indeed almost the sole, source of information is Dr. Leete, who acts as a propagandist for utopia. In *News from Nowhere*, by contrast, there are a number of different sources, including Hammond, Dick, Ellen, and others, who occasionally disagree with one another and even criticize aspects of the new society. The multivocality of Morris's novel suggests a willingness to let diverse personal views shape utopia, a possibility that Bellamy's univocal presentation seems not to allow.

And yet, as we have seen, this kind of opposition between the novels is too simplistic and reductive. Bellamy's notion of "history," for instance, allows a greater opportunity for individual participation than does Morris's. The lengthiest chapter in *News from Nowhere* is devoted to

describing “how the change came” through a combination of both “actual fighting with weapons” and “strikes and lock-outs and starvation” (*News from Nowhere* 89). The insistence on depicting the revolution in concrete detail precludes the possibility of the transition taking place in any other way. Bellamy’s (often criticized) willingness to leave the details of the transition unspecified invites the reader to imagine ways of bringing about the change that are not necessarily dictated by the author.

One of the areas of change which Bellamy and Morris address is the position of women in the new world. Both writers profess a commitment to the equality of women and men in their utopian societies. Bellamy says that women, as well as men, are members of the industrial army and perform work that is best adapted to their capacities. No longer economically dependent on men, women meet them “with the ease of perfect equals, suitors to each other for nothing but love” (*Looking Backward* 178). Similarly, Morris asserts that “the men have no longer any opportunity of tyrannizing over the women, or the women over the men” (*News from Nowhere* 50).

And yet, both writers’ language remains largely male-centred, and many of their ideas betray their obliviousness to issues of gender. In *News from Nowhere*, for instance, Hammond boasts, “we live amidst beauty without any fear of becoming effeminate” (*News from Nowhere* 61), thereby suggesting that the real utopians are the men in the society. Elsewhere, in promoting the value of housekeeping as honourable work worthy of respect, he lapses into repeating conventional masculinist justifications: “it is a great pleasure to a clever woman to manage a house skillfully.... And then, you know, everybody likes to be ordered about by a pretty woman: why, it is one of the pleasantest forms of flirtation” (51). One can imagine that Morris originally wanted to stress the importance of good housekeeping in order to counteract Bellamy’s utter dismissal of domestic

activity. However, the passage degenerates into a depiction of traditional gender roles and social relationships.

While in Morris's case, the lapses may be just that, in Bellamy's, they are too frequent and blatant to be explained away. In his world, men "permit [women] to work at all only because it is fully understood that a certain regular requirement of labour, of a sort adapted to their powers, is well for body and mind" (emphasis added). Even so, they "constitute rather an allied force than an integral part of the army of men" (*Looking Backward* 173). As Dr. Leete goes on to explain the role of women in utopia, he makes the following telling remarks: "We have given them a world of their own, with its emulations, ambitions, and careers, and I assure you they are very happy in ittheir power of giving happiness to men has been of course increased in proportion" (174-5). He not only reiterates that men have *given* women their place in society, and admits that the ultimate value of this arrangement lies in its benefit to men, he also presumes to speak on behalf of women in general and affirm that they are satisfied with their condition.

Unveiling a Parallel

An interesting contrast to the work of Bellamy and Morris is provided by *Unveiling a Parallel*, a romance (as its subtitle indicates) written by Alice Ilgenfritz Jones and Ella Merchant, who published it in 1893 under the pen name "Two Women of the West." Jones had written a number of short stories and sentimental romances previously, while for Merchant, this was to be her only book. *Unveiling a Parallel* was one of "over two hundred utopian novels published from 1888 through 1918" (Kolmerten xxiv) and one of some sixty utopias written by women during this period (Albinski 42-3, 72-4). Many of these works, and we could include Morris's among them, were "critical rejoinders" to Bellamy's immensely popular and successful novel (Ruppert 98).

Among these novels, what is of particular interest about the women's writings in general, and *Unveiling a Parallel* in particular, is their intense awareness of what gender means in utopia.

Jones and Merchant see "with far clearer eyes than the men, exactly what gender meant" in their time (Kolmerten xxvi), and they are free to explore it at greater length because their novel centres on the relationship between the sexes. Of course, this specialized focus somewhat narrows the overall scope of their work, so that when it comes to economics or politics, it may be difficult to give a balanced comparison of *Unveiling a Parallel* with *News from Nowhere* or *Looking Backward*. However, Jones's and Merchant's novel complements those of Morris and Bellamy by shedding light on an area that they illuminate at best dimly. At the same time, the consideration of gender inevitably raises the question of whether the characteristics and roles of women and men oppose or complement one another. Thus, a novel that focuses on this issue fits logically into my larger discussion of complementarity as a feature of utopia.

As its title suggests, *Unveiling a Parallel* seeks to expose the similarities between separate realities. The nameless narrator of the tale travels to Mars in an "aeroplane" and discovers there two societies, Thursia and Caskia, which are typically utopian in that their people have achieved a high degree of material comfort and social harmony. Through his growing friendship with his Thursian host, Severnius, and his sister, Elodia, the narrator gradually learns that the Martians believe in equality between women and men. Having learned the theory of human creation on earth ("God made Man, and from one of his ribs fashioned woman"), Severnius relates their own creation legend:

A pair of creatures, male and female, sprang simultaneously from an enchanted lake in the mountain region of a country called Caskia, in the northern part of the continent. They were only animals, but they were beautiful and innocent. God breathed a Soul into them and they were Man and Woman, equals in all things (*Unveiling a Parallel* 32)

The narrator's attempt to grasp the meaning of this equality takes up the rest of the tale as he is even more dense than the typical visitor to utopia when it comes to understanding that earth's double standards regarding women and men no longer apply.

The novel depicts the equality of the sexes initially in terms of women's involvement in running society. Elodia, the main female character in the book, is a banker, the president of the school board and a member of the city council. Having been informed of these facts, the narrator counters by saying, with no consciousness of irony, that on earth "the enormous system of public schools...is entirely in [women's] hands, -- except of course in the management and directorship" (26). His subsequent remarks on women's suffrage betray, just as infuriatingly, his complete unawareness of the illogic and injustice of taxing women's property but denying them the vote. When Severnius, in disbelief, asks, "Do you tell me that you tax property, to whatever amount, and for whatever purpose, you choose, without allowing the owner her fractional right to decide about either the one or the other?" the narrator's only reply is that "their interests are identical with ours" (28). A little later, he goes on, within the span of one page, first to exclaim that "our women are very superior; we treat them more as princesses than as inferiors, -- they are angels," and then to say that they are "inconsequent" and "we think it rather adds to their attractiveness" (29-30). In fact, the narrator's function, through much of the novel, is to unwittingly betray the folly and hypocrisy of men's attitudes towards women.

However, as the story proceeds, we see that women on Mars are equal to men, not only in their virtues but also in their vices. Much to his horror, the narrator discovers that these women drink to excess, "vaporize" (which is similar to smoking), take part in the "manly art" of boxing, frequent houses of prostitution, and often have illegitimate children. Severnius is careful to point out that those who practice such evils, whether men or women, constitute only a small proportion

of the population, but he is equally careful to remind the narrator that there is no distinction between women and men in these as in other matters. Contrary to the narrator's belief that "women are differently constituted from men," Severnius insists that "their nature is of a piece with our own" (77). In other words, according to Jones and Merchant, women and men are neither opposed nor complementary, but rather equal, in their essence.

Carol Kolmerten notes, however, that "though Thursia is an egalitarian state where both men and women are equally permitted by custom and by law to indulge their lusts, what we *see* is a role reversal" (xx). Elodia, for instance, initially seems like the ideal utopian woman, but is in fact more like a "successful" man in nineteenth-century America. Severnius on the other hand displays characteristics typically associated with women: meekness, gentleness and piety. The effect is to underscore the satire directed at the double standard that pervades relations between the sexes in Jones's and Merchant's own society. In comparing *Unveiling a Parallel* to other gender-role reversal utopias, Kolmerten observes that most of these others were "vehicles whereby authors could make fun of women's ambitions to be 'like men,' and they reinforced the 'naturalness' of women's and men's 'natures'" (xxviii). While Jones and Merchant use some of the conventions available to them from these utopian tales and from popular sentimental romances, they use them for their own purpose, which is to show that ideas of gender are not natural but culturally constructed. As Severnius points out to the narrator, "in your world...women were kept to a strict line of conduct...until their virtue, from being long and persistently enforced, grew into a habit and finally became a question of honour" (*Unveiling a Parallel* 77). Thus he argues that men are just as wrong to idealize women's "spiritual fibre and fine moral sense" (47) as being qualitatively different from their own, as they are to degrade women by restricting their political and social

rights and thereby forcing them to develop “gentle qualities at the expense of...others more essential to the foundation of character: ...strength, dignity, self-respect...responsibility” (48).

Jones’s and Merchant’s satire strongly condemns nineteenth-century America for the line it draws between women and men: one has to be “either a passive, chaste female or a greedy, lustful male” (Kolmerten xxiii). Thursia has progressed beyond America in that it does not make this distinction based on biology. There we see women who possess traditionally “male” characteristics and men who embody traditionally “female” qualities. Still, the dichotomy between passivity and renunciation, on the one hand, and greed and self-indulgence, on the other, remains. Thursia is a long way from being a true utopia. The novel goes beyond mere satire, however, by providing a picture of a third alternative.

Caskia, the other country that the narrator visits on Mars, is well balanced and proportioned in every respect. It is a society based on egalitarianism, cooperation and the principle of putting others before oneself. Having realized that “Mars was rich enough to maintain all his children in comfort,” the Caskians have succeeded in cultivating nature’s resources. But by internalizing moral principles, they are also able to cultivate corresponding inner resources “fit to meet the new era of material prosperity: namely generosity and brotherly love” (*Unveiling a Parallel* 121). They practice none of the vices prevalent in Thursia (or America) because they have “emancipated themselves from the thralldom of the law by absorbing its principles into themselves” (56). In particular, they have transcended purely animal instincts in their personal relationships. They believe that “marriage does not sanction lust” and that children should be “conceived in immaculate purity” as a result of an intelligent desire for their existence (58-9). Their most important guiding principle is their belief in each person’s “triple nature – the spiritual, the

intellectual, and the physical” (57). Their religion and their system of education are based on the need for developing all three aspects equally.

The description of Caskia may strike some modern readers as excessively idealized and perhaps even somewhat sanctimonious. However, the Caskian idea of the triple nature is central to the structure of the novel and to the authors’ conception of utopia. First of all Jones and Merchant use it to redefine “human nature.” The first step in the process of redefinition is to show that the idea of a dual human nature -- one male, the other female -- is spurious; men and women share one common nature. The second step is to show that a mature person is one who develops not only the physical and intellectual parts of his or her nature but also the spiritual part; no one can be truly developed without the other two. To put it in terms of the field theory discussed earlier, a human being constitutes a dynamic field within which these three aspects of her nature interact. Clearly, each has its own sphere of operation, which is not always necessarily compatible with the other two. However, they are complementary in that a complete understanding of one’s humanity is impossible without taking all three -- the physical, intellectual, and spiritual -- into account. The authors thus replace a binary definition of human nature with a three-part complementary definition.

The fact that *Unveiling a Parallel* deals with the customs of three countries -- America, Thursia, and Caskia -- suggests that the concept of a triple nature could be applied to society as well. Nineteenth-century America is a society preoccupied only with the physical aspects of life. Its subjection of women because of arguments based on biological difference is a case in point. In Thursia, materialism still holds sway over many people but the society as a whole has gone a step further by supplementing physical considerations with intellectual ones. The narrator’s first impression of Thursia is that “almost everything about the place appealed to the higher faculties as

well as the senses” (5). Caskia has advanced the furthest by recognizing the need for adding a spiritual dimension to the physical and intellectual. The ease of the narrator’s travel between Earth and Mars suggests that the three countries, though on two different planets, are really within one unified field. Utopia consists, not of any of the three countries alone, but of the interaction of all three, as each brings its own strengths to the whole. It is worthwhile to note that even America, lowest on the scale of progress, has the potential for advancement within it; to one Caskian’s surprise, it is, though young, “a country... far advanced toward Truth” (136). The novel suggests that for society, as for the individual, perfection is a matter of integrating the three natures and that this can be achieved through education.

However, the simultaneous existence of the three societies also suggests that achieving utopia is a never-ending process. All three countries, even America, are on their way towards becoming utopia, and none of them will ever achieve it completely. As one of the Caskians says about their way of life, “It is not perfection,...it only approximates perfection; we are yet in the beginning” (134). Although they coexist in time, the three societies are also spatial representations of successive stages in the development of society towards a utopian ideal. In a sense, the three versions of utopia in the novel are what Katherine Hayles calls “slice-of-time configuration[s]” (*Cosmic Web* 19-20) of the constantly moving kaleidoscope of history. In the parallel worlds unveiled by Jones and Merchant, utopia is indeed a process rather than a state. In this way, *Unveiling a Parallel* anticipates such later novels as Ursula Le Guin’s *The Dispossessed*, which similarly conflates change in place and change over time.

Undoubtedly, *Unveiling a Parallel* is not as wide-ranging as either *News from Nowhere* or *Looking Backward* in the social and political issues it addresses. Its narrator, certainly more amusing in his thickheadedness than Julian West or William Guest, is nonetheless rather

unsatisfactory in that he is neither transformed nor moved to action by his vision of new worlds. However, the novel is an important complement to the others in two important ways. Morris's and Bellamy's visions of utopia are each singular. Regardless of the dynamism and heterogeneity within them for which I have argued, each of them presents only one utopian possibility. Jones and Merchant, on the other hand, present two versions of utopia in one novel. They thus explicitly raise the possibility of a utopia that is defined, not in isolation, but by the interrelationships between different societies. In this, they point forward to the work of many women utopian writers in the twentieth century who depict parallel worlds, often one eutopia and one dystopia, within the same work.

Unveiling a Parallel also complements *News from Nowhere* and *Looking Backward* thematically by focusing on the issue of gender, which the others treat as a secondary matter at best. Again, Jones and Merchant anticipate many of the concerns that emerge in works by women in the following century: redefining gender roles, creating a society that embodies "feminine" qualities, developing an ideology based on mothering. Together, the three books provide a more complete – and perhaps qualitatively different – picture of the meaning of utopia in the late nineteenth century than any of them could alone. In this sense, they are indeed complementary parts of a larger whole.

I have not discussed in much detail the particular shape each of the utopian societies depicted in these novels would take. My interest, as must by now be clear, is less in the content than in the method of utopian fiction. H.G. Wells concludes his depiction of a utopian world state by saying that "There will be many Utopias. Each generation will have its new version of Utopia, a little more certain and complete and real" (*A Modern Utopia* 220). If this is so, then the specific

political or economic or architectural features of a utopian society are secondary to the principles that govern its evolution.

A Modern Utopia

The evolution of the good society is a crucial issue in H.G. Wells's *A Modern Utopia* (1904), but the novel is a central text of the modern utopian tradition in a number of other ways too. Published a few years after the turn of the century, it both looks back at several key utopias and looks forward to a number of important social concerns of the twentieth century. In some later works, Wells was to argue that comparative utopography, the creation and criticism of utopias, was the "proper and distinctive method of sociology" (Hillegas 33). Already in *A Modern Utopia* he is himself engaging in this activity. He is explicit in invoking Plato's *Republic* as the inspiration for many of his ideas, particularly that of the samurai, who the book's narrator says, "remind me of Plato's guardians" (164). He also cites, criticizes, and compares More, Bacon, Campanella, Cabet, Comte, Bellamy, and especially Morris.

Morris is used, in fact, to provide several occasions for Wells to compare the "modern" with the traditional utopia. He says, for instance, that if we were to create utopia by following Morris's example, "we should change the nature of man and the nature of things together; we should make the whole race wise, tolerant, noble, perfect...every man doing as it pleases him, and none pleased to do evil." But, he goes on, in real space and time, we must be practical and restrict our vision of utopia to the "limitations of human possibility." Among these limitations, according to Wells, is a "Will to Live [which] sustains for evermore a perpetuity of aggressions" (6). In the *Modern Utopia*, we must accept the world of conflict and then strive to change what is within human power to change. Wells thus uses Morris to introduce his Darwinian concern with the struggle for

survival, which surfaces periodically in the remainder of the work as he discusses the evolution of utopian order and government.

In fact, *A Modern Utopia* is quite controversial in some of its views on ordering and governing society. For example, Wells envisions that virtually all power would be concentrated in the hands of the samurai, a class of “voluntary noblemen” (71) who qualify for membership by following a difficult and demanding rule of conduct. Although Wells makes a point of emphasizing that the samurai are not an exclusive caste, modern readers seem to agree with Patrick Parrinder, who finds in them “an institution as archaic and hierarchical as it is possible to conceive.” According to him, the rejection of democracy is a “striking anomaly” in a book otherwise notable for its “marked modernity of outlook” (Parrinder 119). In another vein, although Wells’s ideas on race are enlightened and progressive, his views on gender leave much to be desired. He asserts that in the *Modern Utopia*, “women are to be as free as men” and that this freedom is to be achieved in practice as well as in theory by giving women economic independence. He proposes to do so by making motherhood a state-supported career in order to free woman from the economic disadvantages accruing from her points of difference from man: “her incapacity for great stresses of exertion, her frequent liability to slight illnesses, her weaker initiative, her inferior invention and resourcefulness, her relative incapacity for organization and combination” (*A Modern Utopia* 111). As David Hughes succinctly puts it, Wells, in his treatment of women, “combines economic equality with sexism” (73). Although it is undoubtedly something of a cliché that one person’s utopia is another’s dystopia, it would be difficult to deny that Wells’s view of the place of women in utopia fully deserves Hughes’s criticism.

Wells’s views on the place of machinery in the *Modern Utopia*, in which he once again criticizes Morris, demonstrate more clearly the divergence of opinions about what constitutes the

good society. “By sheer inadvertence,” he writes, “Plato commenced the tradition of Utopias without machinery, a tradition we find Morris still loyally following, except for certain mechanical barges and such-like toys, in his *News from Nowhere*” (59). He contrasts Morris with Cabet, who urged the use of machines to allow people to escape irksome tasks. As such, he is “the great primitive of modern Utopias, and Bellamy is his American equivalent” (59). Wells himself unequivocally approves of the increasing use of mechanical energy towards the “emancipation of men from the necessity of physical labour. There appears no limit to the invasion of life by the machine” (58). This is a particularly modern element of utopian progress because it is only in modern times that significant mechanical inventions have been made. This seems to be the reason why Wells excuses Plato’s exclusion of machinery as “inadvertence,” whereas his attitude towards Morris is condemnatory, or at least critical.

In addition to Darwinism and the place of machines in social organization, Wells also addresses other concerns of his time such as Malthusian population control, eugenics, world government, and the creation of a universal language. On a more fundamental level, Wells seems to embody an important trend of his time, a tendency towards “synthetic modernization” (Parrinder 118), which seeks to bring together diverse unique individuals, cultures, and ideas in order to construct a new whole. Parrinder points out that Wells was not alone in the impulse to modernize, as indicated by the titles of a number of more or less contemporary works: W.H. Mallock’s *New Republic* (1877), G. Lowes Dickinson’s *A Modern Symposium* (1905), Havelock Ellis’s *The New Spirit* (1890), and A.R. Orage’s journal, *The New Age*. Indeed, one may argue that the influential Modernist movement, with its emphasis on a radical break with the past as well as a resurgence of dormant powers and traditions, also owes something to the same synthetic impulse. As Wells

repeatedly claims, “in spite of all the pageant of modern war, synthesis is in the trend of the world” (*A Modern Utopia* 207).

In addition to providing a bridge between old and new utopias through comparative utopography, *A Modern Utopia* is also of theoretical importance because it both articulates and puts into practice a number of the principles on which many subsequent (and some earlier) fictional utopias are built. First, Wells acknowledges that utopian fiction is a hybrid genre when he addresses the reader in the initial section of the book entitled “The Owner of the Voice”: “The entertainment before you is neither the set drama of the work of fiction you are accustomed to read, nor the set lecturing of the essay you are accustomed to evade, but a hybrid of these two” (3). He goes on to suggest that we imagine the Owner of the Voice sitting on a stage recounting his experiences in utopia, with a screen behind him, on which images of what he is discussing occasionally appear. This is probably as good a description as any of the effect achieved, not only by *A Modern Utopia*, but also by *Looking Backward* and *News from Nowhere*. The difference lies in the fact that Wells specifically draws attention to the hybrid nature of utopian writing and indeed makes this the central feature of his work.

Wells’s aim is to achieve a “shot-silk texture” whereby philosophical discussion and imaginative narrative combine to give the reader a vision that goes beyond binary divisions and embraces the effects of “obliquity, of incommensurables,...of multiplex presentation.” It is not true, he says, “that the Spirit of Creation cannot count beyond two” (xlvi). The figure of the Botanist as the Voice’s fellow traveller provides one way in which alternative viewpoints and reactions to the Modern Utopia are woven into the texture of the narrative. In addition, much of the humour in the book arises out of the narrator’s recurring bouts of regret that he has saddled

himself with a companion who judges Utopia based only on personal feelings instead of on philosophical analysis.

The botanist is preoccupied with an unhappy love affair he has had, details of which he insists on telling to the narrator. The narrator's initial response is to wonder, "Have I come to Utopia to hear this sort of thing?" (17) This may at first seem like a rhetorical question whose answer is plainly "no." However, later in the book, the botanist's ongoing obsession with emotional concerns, and "the source of all his most copious feeling and emotions, women," forces the narrator to consider the question of women in utopia (103). The botanist's role is thus to leaven philosophical considerations with personal ones and thereby broaden the scope of utopian thinking.

In addition to the botanist's, the narrator also discovers dissenting voices within utopia itself. One of the first people he meets is a man who wants to replace the laws of the Modern Utopia with a return to "untroubled nature" (69), although he is willing to avail himself of the utopian benefits when they suit him. The narrator concludes from the meeting with this rebel that the Modern Utopia "is not to be a unanimous world any more" (72), although it cannot come into being except by "co-ordinated effort and a community of design" (75).

The particular shape that utopia will take can only be tentative and provisional as long as it is limited to one person's vision. Its presentation by the narrator himself is therefore deliberately equivocal too. Wells's most striking – and, at times, irritating – innovation in indicating the tentativeness of utopian imagining is the use of the subjunctive mood when describing the Modern Utopia. Because "no less than a planet will serve the purpose of a modern Utopia" (8), Wells envisions as the site of his ideal society a planet, in the far reaches of space, which would be the exact counterpart of our world in every detail. There, "every man, woman, and child alive [on earth] has a Utopian parallel...at this moment of reading" (16). An excerpt, describing the

translation of the narrator and his botanist companion to utopia, serves to convey the flavour of

Wells's writing:

[Utopia] is so like our planet that a terrestrial botanist might find his every species there, even to the meanest pondweed or the remotest Alpine blossom...

Only when he had gathered that last and turned about to find his inn again, perhaps he would not find his inn!

Suppose now that two of us were actually to turn about in just that fashion.... Suppose that we were indeed so translated even as we stood....

We should scarcely note the change. Not a cloud would have gone from the sky.... Yet I have an idea that in some obscure manner we should come to feel at once a difference in things....

Then, for the first time, perhaps, we should realize from this unfamiliar heaven that not the world had changed, but ourselves – that we had come into the uttermost deeps of space. (9-11)

One effect of the use of the subjunctive mood in this and similar passages is to emphasize the open-endedness of the utopian project. The development of utopia is conditional and inconclusive. David Hughes argues that Wells's book implicates the reader in the narrative by using the subjunctive, which "both invites the reader to an act of participatory imagination, wonder, reconstruction, and at the same time alerts his critical faculties because subjunctives question what they seem to state" (68). Wells uses the device with a certain playfulness. A good portion of the chapter "Concerning Freedoms" is a consideration of whether or not alcoholic drinks will be allowed in Utopia. The narrator condemns public drunkenness and recommends the regulation of the sale of alcohol, but cannot imagine "Utopians maintaining their fine order of life on ginger ale and lemonade." The teetotaling botanist wants no alcohol at all. The issue may seem too trivial to occupy as much room as it does. However, the narrator ends it by saying that even though the botanist would still argue, "thank Heaven this is my book, and that the ultimate decision rests with me. It is open to him to write his own Utopia" (*A Modern Utopia* 40). Paradoxically, by claiming

the right to advocate one possibility out of many, and drawing attention to its doing so, the text encourages alternative possibilities to be acknowledged and “written.”

Peter Ruppert addresses the same issue on a more general level by taking up Wells’s own suggestion that in imagining the Owner of the Voice on a stage, “the image of a cinematograph entertainment is the one to grasp” (4). Similar to the process of watching a film, where we have to connect and interpret a series of images, “the process of reading this utopia will involve our own activity in connecting fragmentary images, filling in gaps and omissions in the narrative, and determining the significance and meaning of the whole” (Ruppert 128). Both Ruppert and Hughes agree that *A Modern Utopia* invites the reader to take part in making utopia real.

Robert Elliott, on the other hand, criticizes the “clumsy entanglement with the subjunctive mood,” which he attributes to Wells’s unwillingness to “commit himself completely to the fictional reality of Utopia – as though Utopia were a hypothesis rather than a place” (Elliott 114-15). But this is precisely Wells’s point. Utopia is a potentiality which each person has to fulfill for himself or herself. Thus, for Wells, making utopia real means realizing it in the imagination: “Utopia is a thing of the imagination that becomes more fragile with every added circumstance,... like a soap-bubble, it is most brilliantly and variously coloured at the very instant of its dissolution” (*A Modern Utopia* 209). Individual utopias created in the mind may be inherently fragile and precarious, but allowing them to exist strengthens the concept of Utopia as a whole by making it diverse and dynamic.

Wells’s first statement about the Modern Utopia is that it must be “not static but kinetic” (5). What makes his utopia kinetic is partly its tentativeness: the narrative creates the impression that each new detail comes into being only as the Owner of the Voice thinks about it. Because it is tentative, utopia is also precarious. It can be destroyed by “human recalcitrance and resistance”

(Parrinder 123). This is exactly what happens as the botanist, unable to let go of his earthly love and jealousy, calls utopian visions “fanciful, useless dreams” and “waves an unteachable destructive arm” (*A Modern Utopia* 212): the bubble bursts and the Modern Utopia disappears. But utopia is not destroyed. Wells ends on a hopeful note, believing that utopia will develop, not according to his plan but according to “a great and comprehensive plan wrought out by many minds and in many tongues.” “My dream,” he says, “is just my own poor dream, the thing sufficient for me.” But utopia is not only the result of many minds coming together, it is also something that grows and evolves through time. “Each generation will have its new version of Utopia, a little more certain and complete and real” until a true world state comes into being that “will only not be a Utopia because it will be this world” (220).

Wells’s utopian vision differs in many of its details from those of his immediate predecessors, and even more so from those of his successors. But it has in common with many of the best of them a conviction that achieving utopia is a matter of fulfilling individual human potential, and that this can be done by admitting diversity and change into utopia. Later utopists such as Aldous Huxley and Ursula Le Guin, whom Mark Hillegas cites as examples, may “show little if any indebtedness to Wells” when it comes to specific features of utopia. However, it is emphatically not true that “Wells’s Utopianism has had no followers of great importance” (Hillegas 41), when it comes to the larger issues of utopia’s heterogeneity and dynamism.

3
BEYOND UTOPIA AND DYSTOPIA
A THIRD ALTERNATIVE

The period from 1880 to 1920 was a heyday of utopian writing in England and the United States. Some of the greatest classics of the genre since More's *Utopia* were written during this time, including not only *Looking Backward*, *News from Nowhere*, and *A Modern Utopia*, but also Samuel Butler's satiric *Erewhon*, Charlotte Perkins Gilman's feminist *Herland*, together with a host of lesser known works of utopian speculation. There is a great multiplicity of utopian visions in these four decades. The following three decades, in contrast, are best known for only three novels: Yevgeny Zamyatin's *We* (1924), Aldous Huxley's *Brave New World* (1932), and George Orwell's *1984* (1949). There is a general critical tendency to consider these works as "the three great anti-Utopias of the twentieth century" (Woodcock 174) and to dwell on their pessimistic and cautionary warnings. Such an approach is certainly warranted, and fruitful, in Orwell's case. In the case of Zamyatin and Huxley, however, it is crucial to note that their greatest fear is not the fear of dystopia, but the fear of utopia realized. As such they have an important place in the discussion of the development of the concept of utopia, even though they are certainly not eutopian, as the earlier novels I examined were.

We, brilliant a novel as it is, unfortunately falls outside the scope of this thesis because it belongs to a different cultural tradition than the one on which I have focused. But *Brave New World* is, for a variety of reasons, a central text for my purposes. The anti-utopians of the twentieth century may be divided into two categories: those who scorn utopia because it is an

unattainable dream, and those who fear that it can be attained and will turn out to be a nightmare.

Brave New World exemplifies the second attitude, implicitly throughout the novel and explicitly both in its epigraph and in the Foreword Huxley added to the book in 1946. The epigraph quotes Russian philosopher Nicolas Berdiaeff, who wrote:

Les utopies apparaissent comme bien plus réalisable qu'on ne le croyait autrefois. Et nous nous trouvons actuellement devant une question bien autrement angoissante: Comment éviter leur réalisation définitive?...les intellectuels et la classe cultivée reveront aux moyens d'éviter les utopies et de retourner à une société non utopique, moins "parfaite" et plus libre.
 [Utopias appear more realizable than we ever believed in the past. And we now find ourselves facing the worrisome question of how to avoid their definite realization.... intellectuals and the cultivated class will dream of ways to avoid utopias and return to a non-utopian society, less "perfect" and more free.]

In quoting this passage, Huxley sets up the basic premise of his objection to utopia: the idea that perfection and freedom are antithetical. As the novel itself goes on to show, a perfect (i.e. flawless and unchanging) society can be achieved only at the cost of curtailing individual freedom of choice.

The world which Huxley depicts is divided into two mutually exclusive opposites. On one side is the powerful World State, which has used its extensive technology to create and perpetuate a static and uniform society, where each person is programmed to do what the State requires of him or her. For the majority of people, the price of happiness (defined as comfort and pleasure) is not only the loss of freedom but also the lack of any awareness of that loss. The only alternative to this mechanistic society is the primitive life of a handful of squalid Savage Reservations. There, people possess a degree of freedom inasmuch as their lives and consciousness are not determined by technological manipulation. However, their existence, stunted by superstition and devoid of comfort, is no more satisfactory as a way of life than that of the citizens of *Brave New World*. The extreme position that each society occupies in relation to the other makes any bridging of the gap between them impossible. The lack of any kind of significant exchange between them means that

they are unable to go beyond dualism towards complementarity. To put it another way, the two societies remain mutually exclusive and hostile entities instead of recognizing that they are both parts of a larger field within which they can interact.

Concern about the dangers of technocracy is as crucial to Leigh Brackett's *The Long Tomorrow* (1955) as it is to *Brave New World*. Both Brackett and Huxley deal with the topic by showing the extremes to which society can go: worshipping technology for its own sake, on the one hand, or rejecting it entirely, on the other. However, *The Long Tomorrow* provides a mirror image – rather than a copy – of the situation in *Brave New World*. Whereas in Huxley's novel technology is dominant, and primitivism marginalized and contained, in Brackett's novel, the situation is reversed: the dominant culture is based on a return to simple, pre-industrial life while technology is, literally as well as metaphorically, driven underground. Following a nuclear holocaust, America has been divided into two hostile camps: the majority, who have rejected high technology; and a small, outlawed minority, who persist in the preservation of scientific discoveries and inventions – even the much-feared nuclear technology – in the name of free access to knowledge. Brackett shows that neither society is utopian although each has positive as well as negative qualities. Still, people in both camps are trapped by their inability to see their relationship in anything but adversarial terms.

Huxley is a remarkable figure in the period spanning the middle of the twentieth century because he not only depicted, like Brackett, a world where one can only choose between two evils, but also suggested the possibility of another alternative to this impossible choice. Looking back on *Brave New World* in 1946, he said: "If I were to rewrite the book, I would offer the Savage a third alternative. Between the utopian and primitive horns of his dilemma would lie the possibility of sanity" (Foreword 8). As a number of critics have observed, the society he went on to outline

“sounds like a blueprint for *Island*” (Ferns, *Huxley* 147). Whether *Island* (1962) actually fulfills the promise of a real alternative to the earlier anti-utopias is one of the questions I shall explore in this chapter. Regardless of the answer, the fact remains that Huxley’s best-known forays into utopian writing – one near the beginning, the other almost at the end, of his career – are most usefully read in conjunction with each other. “If any vision runs more persistently than others through Huxley’s works,” writes George Woodcock, “it is that of Utopia, the world where a kind of perfection has been attained.... As a young man he saw Utopia as Hell on earth; as an old man he saw it as the earthly paradise” (173). Given the obvious similarity between many of the social practices in *Brave New World* and *Island*, such as unrestricted sexual activity and the use of eugenics, conditioning, and drugs, it is important to examine the differences between them and to discover in what way – if any -- the latter novel provides a new alternative to the dilemma of the former.

Brave New World

The plot of *Brave New World* is too well known to require repeating but perhaps a few of its salient points bear summarizing here. The philosophy underlying society in 632 A.F. (After Ford) is that of “making people like their unescapable social destiny” (*Brave New World* 24). To this end, the rulers of society, the World Controllers, use eugenics (including test-tube babies and cloning), Pavlovian conditioning, and narcotic drugs as means of turning people into willing cogs in a vast social machine geared towards maximum consumption of resources. Having discovered that “the secret of happiness and virtue [is] liking what you’ve got to do” (24), they have created a society of “slaves who...love their servitude” (Foreword 12). The only alternative to this World State is a handful of Savage Reservations where “Indians and half-breeds...still preserve

their repulsive habits and customs... marriage... families... no conditioning... monstrous superstitions... infectious diseases... priests... venomous lizards” (88). Poverty and ignorance limit human progress on the Reservation just as much as hedonism and vacuity do in Brave New World. Huxley’s characters can thus choose only between “an insane life in Utopia, or the life of a primitive in an Indian village, a life more human in some respects, but in others hardly less queer and abnormal” (Foreword 7).

Brave New World starts with a view of the Central London Hatchery and Conditioning Centre above whose main entrance is inscribed the motto of the World State: “Community, Identity, Stability” (*Brave New World* 15). Huxley uses this motto to define what utopia means within the context of the novel, and at the same time to illustrate his objections to the implications of this definition. Stability is the central precept on which Brave New World is built. It is, according to World Controller Mustapha Mond, “the primal and ultimate need” (44) and the motivating factor behind Bokanovsky’s Process, “the principle of mass production at last applied to biology” (18). Conception, gestation, and early conditioning all take place in bottles placed on a conveyor belt moving at “the rate of thirty-three and a third centimetres an hour.” The process consists of the application of x-rays to the growing embryo in its bottle. As the normal growth of the egg is arrested, it responds by budding, the buds in turn budding again, and so on. At the appointed time, the children are born – or “decanted” – as “socialized human beings” belonging to one of a number of predetermined classes (21-2). The result is between eight and ninety-six identical twins out of every egg: “One egg, one embryo, one adult – normality.... Making ninety-six human beings grow where only one grew before. Progress” (17). There are still individuals in this new world because there are jobs that require a certain amount of independence and judgement. These people make up the Alpha and Beta classes. However, the majority are “standard Gammas,

unvarying Deltas, uniform Epsilons” (18), millions of identical twins bred and conditioned to perform -- and enjoy performing -- the variety of menial tasks that are necessary to the maintenance of society.

The greatest virtue of this system, according to its proponents in the novel, is that it eliminates the unpredictability that comes with change. In an episode towards the end of the novel, John Savage tries to liberate a group of Delta workers by throwing away their *soma*, the drug everyone uses to take a holiday from reality. Following the near-riot that ensues, Mustapha Mond explains why people are happy with the way things are: “Seven and a half hours of mild, unexhausting labour, and then the *soma* ration and games and unrestricted copulation and the feelies. What more can they ask for?...We don’t want to change. Every change is a menace to stability” (180). The rulers of Brave New World claim that the achievement of stability justifies the loss of freedom. However, Huxley makes it clear that stability is merely a euphemism for stasis.

The inhabitants of Brave New World live in an eternal present. The immediate past and future are unimportant because they are substantially no different from the present. The more distant past is deliberately ignored and suppressed because, as “Our Ford” put it, “History is bunk” (38). Following the chemical Nine Years’ War and the great Economic Collapse, people were faced with a choice between “World Control and destruction.” They chose the stability that came with control and started a systematic “campaign against the Past” through measures that included “the suppression of all books published before A.F. 150” (48-51). Together with this denial of history goes a rejection of anything that is old; in other words, planned obsolescence is taken to its logical extreme. According to one of the maxims taught to children from infancy, “ending is better than mending” (50). This idea is applied not only to objects, which are considered old after two or three months of use, but also to people. Death conditioning, beginning at the age

of eighteen months and accompanied by the best toys and “chocolate cream on death days” (134), ensures that people regard death as a matter of course. The dissociation of both birth and death from human bonds eliminates any sense of continuity between past and future and reinforces the idea that only the present is real. Thus, while everything is being constantly renewed in the interest of increasing consumption, there is no qualitative change in anything. The result of the quest for stability is thus a self-perpetuating stasis that Huxley identifies as one of the characteristics of “utopia.” Huxley’s novel has often been read as “a cautionary reply to H. G. Wells’s vision of infinite social progress,” especially since Huxley himself suggested that *Brave New World* had “originated as a parody of Wells’s *Men Like Gods*” (Lobb 94). But ironically, whereas Wells argues for a kinetic utopia, Huxley, at least at this stage of his career, sees utopia as undesirable because it is unchanging. By condemning a static utopia that insists on stability, Huxley indirectly endorses a different kind of utopia, one that would be dynamic and capable of accommodating unpredictability.

The kind of utopia to which he objects is not only static but also uniform. Community and identity, the two other elements of the World State’s motto, together create total uniformity within society. Identity, as we have seen, partly means creating multitudes of identical twins in the interests of efficiency and stability in the lower castes. It also involves instilling identical responses and views within each caste, the higher as well as the lower. Conditioning and sleep-teaching are the tools used by the State to achieve this end. Thus, for example, by means of a technique “reminiscent of ... Pavlov’s classical conditioning experiments with dogs” (Matter 95), Delta babies are conditioned to hate books and flowers. The objects are presented to them paired with frightening noises and electrical shock. After two hundred or so repetitions of the lesson, “books and loud noises, flowers and electric shocks...would be wedded indissolubly. What man has joined,

nature is powerless to put asunder" (*Brave New World* 29). At the same time, hypnopaedia, "the greatest moralizing and socializing force of all time" (33), is used to teach children to be happy with their social position. Beta children, for instance, hear over forty thousand repetitions of a lesson in Elementary Class Consciousness: "Alpha children wear grey. They work much harder than we do, because they're so frightfully clever. I'm really awfully glad I'm a Beta, because I don't work so hard. And then we are much better than the Gammas and Deltas" (33). Characters throughout the novel are heard constantly parroting the various hypnopaedic lessons they have learned.

One of the most frequently quoted of these maxims is that "everyone belongs to everyone else" (42). Free and unrestricted sex from a very early age is the social norm in a world that worships "Our Ford -- or Our Freud, as, for some inscrutable reason, he chose to call himself whenever he spoke of psychological matters" (41). Those who refrain from promiscuous behaviour are considered abnormal and are subject to disapproval and possible punishment. Completely divorced from both reproduction and love, sex is a game that is encouraged in order to keep people occupied and amused. The whole population spends its leisure time engaging, in addition to "erotic play" (36), in such games as Obstacle Golf and Centrifugal Bumble-puppy. The most important feature of these games is that they increase consumption by requiring elaborate equipment and special venues: "the Controllers won't approve of any new game unless it can be shown that it requires at least as much apparatus as the most complicated of existing games" (35). The point of these games, as well as the popular "feelies" (a multi-sensory equivalent of the movies), is not only to promote consumerism but also to prevent anyone from ever being alone. Lacking solitude, people also lack the opportunity for reflection and independent thought, which may lead to melancholy and discontent, which in turn may lead to social unrest and instability. As

a result, work and play are both performed in communal settings, and people are comfortable only when they are taking part in a communal activity with others who are precisely like them. Once again, Huxley shows what utopia should be like by painting a satirical portrait of what it should not. His target is the kind of utopia where community is misinterpreted as sameness rather than what it really is: harmony among heterogeneous individuals.

Stasis and uniformity are thus the defining characteristics of Huxley's satiric utopia. These are the exact opposites of the qualities which, I have argued, distinguish a true utopia, namely dynamism and diversity. It would seem, then, that the alternative provided in the form of the Savage Reservation might be a model for utopia, for it is changeful and eclectic almost to the point of turbulence. Its dynamism is most evident in the normal cycles of birth, coming of age, mating, aging, and death in the lives of the so-called savages, who have families and all the attendant emotions and problems. Its heterogeneity finds expression in the people's social customs. They speak a variety of languages "such as Zuni and Spanish and Athapascan," and have a syncretic religion which is a combination of "Christianity and totemism and ancestor worship" (*Brave New World* 88).

However, Huxley makes it clear that "the primitivist's utopia is obviously not [his] alternative to the brave new society" (Matter 105). The Reservation is situated in "a place which, owing to unfavourable climatic or geological conditions, or poverty of natural resources, has not been worth the expense of civilizing" (*Brave New World* 132). It is poor, and dirty, and disease-ridden, and filled with prejudice and superstition. The self-flagellation of the *Penitentes* on the Reservation is as "lunatic" as the *soma*-induced holidays from reality taken by the inhabitants of Brave New World. Clearly, Huxley's purpose in this novel is not to show a viable model of utopia. It is left to *Island*, which I will discuss later, to depict a utopia based on the principle of complementarity

between diverse but mutually interacting systems. In the meantime, Peter Ruppert's analysis of the anti-utopian genre provides a clue to what Huxley is doing in *Brave New World*. Ruppert writes: "Rather than an antithesis of utopia, the anti-utopia is typically an inversion of utopia that plays on the same essential dialectical structure: *we know what utopia is by knowing what it is not*" (103, emphasis added). Huxley not only portrays what utopia is not, he also shows that different versions of anti-utopia, though seemingly different, are in many ways similar beneath the surface.

Brave New World and the Reservation may seem to be diametrically opposed, but they are merely mirror images of each other. As Alexandra Aldridge points out, "both cultures promote group identity by relinquishing the self through mindless primal rituals" (59). The Solidarity Services at which the civilized characters pass around a "loving cup of strawberry ice-cream *soma*," sing rousing Solidarity Hymns, and finally lose themselves in a sexual "Orgy-porgy" (*Brave New World* 74-5), is not much different from the tribal rite at which the savages give themselves up to a wild ceremony of rhythmic dancing and singing and a series of "symbolic rather than copulative sexual expressions" (Aldridge 59). Huxley shows that the members of both cultures lack the capacity for individual choice because "both are conditioned to obey arbitrary laws – that is, laws which exist only to satisfy the unanimous demands of the tribe" (Aldridge 61).

Aldridge points out that neither *Brave New World* nor the Reservation "is a preferred alternative, each is meant simply to reinforce the reader's impression of the entrenched, deadened, unevolved state of the other" (49). By denying people the opportunity for individual choice, both societies encourage infantilism. The Reservation does so implicitly, by maintaining its dependence on primitive customs and beliefs; the new world explicitly, by centring life on games and escapist entertainment. The conventional code of behaviour includes "a proper standard of infantile decorum." Even the Alphas, who are "so conditioned that they do not *have* to be infantile in their

emotional behaviour....[should] make a special effort to conform” (*Brave New World* 85). As a result, both societies are trapped in a state of perpetual childishness which precludes the possibility of growth and change.

In terms of my larger theoretical framework, to say that a society is childish is to say that it has failed to progress beyond the stage at which variety and movement are feared as destructive qualities. Maturity, for society as well as individuals, means the acceptance of diversity and dynamism as necessary and beneficial characteristics of life. The inhabitants of both *Brave New World* and the Reservation cling to conformity and stasis instead of affirming the complementarity of individual differences or allowing room for the unpredictability of collective change.

Aldridge places Huxley’s work within a larger context in a different way by reading it as “a satirical dialectic...between what is actually a mechanist world view (London 632 A.F.) and an essentially vitalist ideal represented by the Reservation” (49). Her identification of mechanism and vitalism as concepts underlying the opposition within *Brave New World* is useful because it leads to one of the central issues in the novel: the attitude toward science and technology. Mechanism is used here as a synonym for Cartesian reductionism or scientific materialism, terms signifying “a one-dimensional, value-free conception of nature.” On the other side of “the cultural dialectic” is vitalism, principally associated with Henri Bergson, which assumes that nature is not exclusively mechanical, that “a ‘life force’ distinct from chemical and physical properties partly explains the evolutionary existence of living organisms” (Aldridge 45). The controversy between the two viewpoints involves a choice between science and philosophy, between matter and mind.

While not a vitalist by definition, Huxley restates the controversy between mechanism and vitalism in his novel, adapting it to his own purpose in the process. In the Foreword to *Brave New World* he argues for using “applied science, not as the end to which human beings are to be made

the means, but as the means to producing a race of free individuals” (14). The objection to *Brave New World* is not that it is scientific as such. At issue, rather, is the kind of science that is practised there. Mustapha Mond knows that “it isn’t only art that’s incompatible with happiness; it’s also science. Science is dangerous.” When his shocked hearers protest that they have been taught that science is everything, he responds: “Yes; but what kind of science?... all our science is just a cookery book, with an orthodox theory of cooking that nobody’s allowed to question, and a list of recipes that mustn’t be added to except by special permission from the head cook. I’m the head cook now” (*Brave New World* 181). This kind of mechanistic science has no aim beyond the realization of practical ends which will ensure the maintenance of the smoothly running machine that is society in A.F. 632.

The purpose of science-as-cookery is not to make new discoveries or expand the range of human knowledge but to maintain life at a constant level of functioning. Science is dedicated to manufacturing human beings according to predetermined specifications (using eugenics and conditioning) and placing them in environments that ensure their efficient operation (using drugs and diversions). Accordingly, scientific advance is measured in terms of the most complex game invented, the greatest amount of goods consumed, the highest number of children decanted from the same ovary. The result is a society perpetuating consumerism for its own sake, without reference to any external reason or purpose. Having achieved these ends, “mechanism effectively puts a halt to evolution... by stabilizing both the organism and its social environment” (Aldridge 57). The result, as I mentioned earlier, is the denial, indeed the suppression, of change as an integral element of personal and social life.

In summary, then, the choice at the individual level is between “insanity on the one hand and lunacy on the other” (Foreword 7). Political trends at the time when Huxley wrote certainly

suggested that humanity was choosing the path of increasing centralization and industrialization. Such a trend, Huxley warns, leads to a no less disturbing choice at the collective level: unless we decentralize and begin using technology in the service of freedom, we will have to choose between “either a number of national, militarized totalitarianisms...or else one supra-national totalitarianism” (14). Given “technological progress in general and the atom revolution in particular,” the choice here is between war and the destruction of civilization on the one hand, and the “welfare-tyranny of Utopia” on the other (14).

Huxley wrote his Foreword -- in fact, a kind of cautionary postscript to the novel -- in 1946, immediately after the second World War, at a time when the shadow of Hitler's and Stalin's totalitarian regimes loomed large over Europe. Huxley had a gift for predicting the trends of technological and political development and with the advent of the Cold War, his fears of nuclear war between superpowers seemed increasingly justified. The 1950s saw a proliferation of post-apocalyptic tales of chaos and decay following a destructive atomic war. One of the more interesting examples of this genre is Leigh Brackett's *The Long Tomorrow*. The novel provides an illuminating companion piece to *Brave New World* because its primary concern is also with the dangers of utopia realized. Like Huxley and also many contemporary women utopists, Brackett questions utopia's “viability as a goal” and even goes beyond this to see it as “a dangerously misleading idealization of conformity and a pattern for repression” (Albinski 6). However, Brackett's notion of “utopia” is diametrically opposed to Huxley's. Whereas Huxley depicts the world as it would be under a “supra-national totalitarianism,” Brackett shows what might happen if the other alternative, the clash of “national, militarized totalitarianisms,” takes place.

The Long Tomorrow

Brackett's novel is "not typical of her science fiction" (Carr 909) for which she is best known, but it is related to other women's utopias of the period in significant ways. Nan Bowman Albinski observes that in the middle of this century, the United States witnessed "a spate of anti-socialist and anti-technological dystopias," many of which reflected "immediate post-war concerns including the question of nuclear technology." In many cases, especially in the earlier works, these dystopias "convert to utopias as a consequence of religious belief: sometimes the destruction leads to Armageddon and the establishment of a new Earth" (Albinski 6). Brackett's novel is interesting because it takes just such a process as its premise and then goes another step beyond it. By the twenty-first century, the world has gone through a horrific nuclear war referred to as "the Destruction." America, and the other countries "on the winning side" have not only rejected but outlawed centralization and technology (*Long Tomorrow* 152). The old scientific knowledge is kept alive only in a number of small forbidden cities, whose secret is carefully protected by the few who still believe in the value of science. At the same time, the dominant majority have reinstated religious belief, particularly in its more austere forms, as the core of their social life. The result, however, is by no means portrayed as a true utopia. Brackett shows that the new society, although peaceful and prosperous, is inadequate and can even be pernicious because it has achieved its present state by suppressing the desire for knowledge and denying the freedom to change. She suggests that, as long as it insists on insularity and self-containment, utopia can be as dangerous to realize as is dystopia.

In the aftermath of the Destruction, the nations of Brackett's future world have banned high technology and made decentralization the law. Associating cities with the destructive powers of the bomb, they have decreed, for instance in the Thirtieth Amendment of the Constitution, that "No

city, no town, no community of more than one thousand people or two hundred buildings to the square mile shall be built or permitted to exist anywhere in the United States of America” (Epigraph, *Long Tomorrow*). The pattern of life has thus reverted to that of pre-industrial times. The most successful people are those like the “New Mennonites,” now numbering in the millions, who hold to “the old simple handcraft ways and would have no part of cities or machines” (*Long Tomorrow* 4). Life is largely peaceful and serene, there is plenty and prosperity, and most people are content with the changelessness of the new way of life. The price for this tranquil utopia, however, is the suppression of knowledge and individual thought.

As we saw earlier, in *Brave New World*, the principles of Ford’s assembly-line manufacture are applied to human beings. Programmed before birth “as Alphas or Epsilons, as future sewage workers or...future Directors of Hatcheries” (*Brave New World* 22), individuals are reduced to “a limited and specialized function in the great mechanism of the State” (Deery 260). In *The Long Tomorrow*, people have explicitly repudiated this kind of mechanization. One of the characters uses the very example of automobile production to illustrate the perniciousness of centralization:

Like the works of a clock, every little piece depending on every other little piece to make it go. One man didn’t make an automobile, the way a good wainwright makes a wagon. It took thousands of men, all working together, and depending on thousands of other men in other places to make the fuel and the rubber so the automobiles could run when they did build them. (*Long Tomorrow* 35)

But in rejecting modern technology, they have also rejected the possibility of change and growth, and forced those who seek personal development into the isolation of Bartorstown, a forbidden enclave where the old knowledge is surreptitiously preserved. Ironically, although the visions of utopia in Huxley’s and Brackett’s novels are diametrically opposed, the end result in both cases is the division of society into two equally undesirable camps: one where prosperity is purchased at the price of liberty, another where freedom of choice is obtained at the cost of hardship and danger.

Comparison of the two novels thus provides a comprehensive look at the manifestations of the fear of utopia which seems to be a central concern of the middle of the twentieth century.

One of the signs that all is not well with the world depicted in *The Long Tomorrow* is the discontent that the main character, Len Colter, feels. Len and his cousin, Esau, New Mennonite teenagers at the beginning of the story, encounter their society's prejudice when they attend a preaching by the charismatic leader of a fundamentalist sect. Following the preacher's denunciation of the evils of technology, the frenzied crowd stones to death a man accused of being from Bartorstown. Later, Len and Esau find among the dead man's belongings a radio -- also forbidden -- that arouses their curiosity. Eventually discovered and severely punished, they run away from home to look for Bartorstown. Over the years, Bartorstown becomes synonymous with a kind of Promised Land so that their search for it becomes in effect the search for utopia.

The boys' greatest desire is to acquire knowledge. Esau speaks for both of them when he protests against the limits placed around them: "Always something, always some reason why you can't know or learn or do! I'm sick of it" (53). In the many years before they finally get to Bartorstown, Len comes to equate technology, symbolized for him by the radio, with the freedom to learn. When his friend, Hostetter, a Bartorstown man who for many years has passed as a New Mennonite trader, finally agrees to take him there, Len asks him, "Can you learn in Bartorstown? Can you read books and talk about things, and use machines, and really *think*?" Assured that he can, he says, "Then I'll like it there" (139).

There is no question of comparing Brackett's novel to Huxley's, in terms of either literary and social influence, or thematic and stylistic sophistication. *The Long Tomorrow* is fairly limited in scope: its main message is that "knowledge gained cannot be suppressed" (Albinski 121). Paradoxically, however, the opposition it creates between technological and non-technological

societies is more complex than the one in *Brave New World*. The choice here is not between stupor on the one hand and savagery on the other. The survivors of the Destruction have rejected high technology but they “do not live a primitive tribal existence; they are settled and agricultural, and have not fallen back to barbarism, merely to an earlier, simpler America” (Albinski 123). Brackett tries to present both sides of the argument about technology. While the majority may be wrong in its resistance to changing social conditions, “its basic values – caution about technological excess, respect for the spiritual aspects of humankind – are self-evidently right” (Arbur 8). Brackett does not categorically condemn the New Mennonites’ lifestyle. In fact, according to John L. Carr, the original impetus for the book was her “interest in her Amish neighbours in Ohio, and the finished work contains a sympathetic, finely drawn portrait of their way of life” (909). If there is a dystopian element in their community’s lack of freedom, there is also something of utopia in the order and contentment it embodies.

Similarly, Brackett’s attitude towards Bartorstown is not one-sided either. Although the scientists in their “zeal and single-mindedness have imposed an inhumane regimentation upon the citizens of Bartorstown” (Arbur 8), their actions are motivated by their desire for knowledge and their thirst for freedom. These qualities evoke our sympathy in a way that the shallow, hedonistic science of *Brave New World* cannot and is not meant to do. It is also important that the people of Bartorstown are aware as a community of the choices they have made. Believing that “a thing once known always comes back” (*Long Tomorrow* 206), they have deliberately set out to develop a defense against another holocaust by building a research nuclear reactor. Their goal is to create “a field-type force that could control the interaction of nuclear particles...so that no process either of fission or fusion could take place wherever that protecting force-field was in operation.... Absolute mastery of the atom. No more bombs” (203). For them, unlike the residents of *Brave New World*,

technology is supposed to be used, at least in theory, to bring about change, not to maintain the status quo.

In practice, however, they have succumbed to the temptation to let their technology control them instead of them controlling it. Even though they know that the result of their research might be Solution Zero, “the mathematical proof that what they’re looking for doesn’t exist” (233), they persist in fanatically devoting their lives to its pursuit. Ultimately both the citizens of Bartorstown and the people of Piper’s Run, Len’s hometown, are alike in their fanaticism. Len discovers that in Bartorstown, “you can do what you want and say what you want and think what you want -- except one thing. You can’t say you don’t believe in what they believe in, and that way it isn’t much different from Piper’s Run” (237). And like the world outside, Bartorstown too has its discontented. Joan, a girl with whom Len falls in love, wants to leave the town as badly as Len had originally wanted to enter it. Her sarcasm is evident when she tells him: “Oh yes...we’re very lucky. We have so much more than the people outside. Not in our everyday lives, of course. We don’t even have as much, of things like food and freedom” (213). Both of the societies depicted in the novel have both positive and negative qualities but ultimately both fall short of a utopian ideal because they deny their citizens freedom.

Life in the land outside of Bartorstown, though free materially, is highly restrictive intellectually. A “comfortable and happy” life (135), together with “eighty years of the most rigid control” (189), has left most people afraid of change because they cannot imagine any change that would be for the better. By clinging to the letter of the law prohibiting the expansion of towns, they fight the will to change that a few individuals, such as Len, possess. And by clothing their fear in the language of religious orthodoxy, they stifle the desire for growth that surfaces from time to time in many more people. Len realizes near the end “what lies across the land, the slow and

heavy weight. They call it faith, but it is not faith. It is fear” (259). By denying the possibility of change, of dynamism, the peaceful and prosperous America of the twenty-first century forfeits any claim to being a truly ideal society. The dreaded cities have been replaced, not by dynamic communities, but by increasingly parochial villages. The attempt to avert dystopia by creating a static utopia has merely resulted in the development of a different kind of dystopia.

However, those who expect to find utopia in Bartorstown are likely to be equally disappointed. If outside, the absence of freedom means the impossibility of dynamic growth, inside, it means the loss of diversity. Some of the men of the town, like Hostetter, travel outside, working as traders in order to provide for the town’s needs. Others work in Fall Creek, the silver mining town that serves to disguise Bartorstown, which is underground and can be reached only through a seemingly abandoned mine shaft. Only a few of the inhabitants are actually scientists. All, however, are bound to work towards the same goal of maintaining the nuclear research program. Those who are born in Bartorstown can leave only to do the tasks necessary for the survival of the rest of the community. The few, like Len and Esau, who come there from outside can never leave for fear that they might betray it. The geographic location of both Bartorstown and Fall Creek serves to emphasize their isolation and confinement. Bartorstown is built into the side of a mountain and is completely shut off from natural light and air: in the underground tunnel leading to it “lights were set... in a trough sunk in the roof. The air had a funny taste to it, flat and metallic” (192). The inescapable throbbing of the nuclear reactor, which Len can feel “in his flesh and his bones and the tingling of his blood” (218), symbolizes the power that the machine has over the town’s inhabitants. Fall Creek too, although similar in its activities to thousands of other small communities across the United States, is shut off from the world by the high mountains which

surround it. It can be reached only through a narrow pass, which is completely blocked in winter time. The physical restriction is a token of the social confinement that life in Bartorstown entails.

William Matter's observation about Savage's experience in *Brave New World* applies just as well to Len's experience in *The Long Tomorrow*:

there is an enormous difference between the description of utopia and utopia in fact.... While the fiction of a perfect world is interesting, one should be mindful of reaching that utopia -- of the very concept of progress; for once in the "ideal" commonwealth, the individual may find a wide disparity between his dreams and reality. (101)

Len recognizes a sense of disappointment in himself almost as soon as he arrives at Bartorstown. He feels that "something had been taken from him and... its going made him unhappy. It was the picture of Bartorstown he had carried with him, the vision he had followed all the long way from home" (*Long Tomorrow* 157). In time, his disillusionment deepens until he finally decides to leave. He and Joan manage to escape and head back towards his childhood home. At first, the memory of Piper's Run takes on the quality of another utopia, a kind of lost Eden. He hopes to find his lost innocence there: "A contented mind and a thankful heart. Pa said those were the greatest blessings. He was right. Piper's Run is where I lost them. Piper's Run is where I will find them again" (252). Eventually, however, he realizes the truth of what Hostetter had once told him, that you cannot destroy knowledge. In leaving his home originally, he had to make a choice between two beliefs, "the one that says, Here you must stop knowing, and the other which says, Learn" (260). He chose the latter and now he cannot go back to Piper's Run and forget what he knows. When Hostetter finally catches up with him, he decides to return to Bartorstown.

Len's final choice is in favour of Bartorstown but it is in some ways an ambiguous one. One can argue that here too, as in *Brave New World*, the choice is between freedom and happiness. In his most often quoted speech, John Savage says: "I don't want comfort. I want God, I want

poetry, I want real danger, I want freedom, I want goodness. I want sin.... I'm claiming the right to be unhappy" (*Brave New World* 192). For the passive reader at least, Peter Ruppert points out:

the dilemma between freedom and happiness is portrayed in a somewhat one-sided way... individualistic values are given priority over social values.... *Brave New World* suggests that being unhappy is better than being happy,... and that almost anything is better than utopian harmony. (107)

The description would seem to apply to *The Long Tomorrow* as well. Len leaves the static harmony of an anti-scientific utopia for a society that gives him less happiness but more freedom to pursue knowledge.

However, in both cases, the real choice is not so much between freedom and happiness as between personal and social goals. In *Brave New World*, one must choose between individual freedom and collective happiness. In *Bartorstown*, the choice is between individual freedom and happiness on the one hand, and the collective pursuit of knowledge on the other. Len realizes in the end that both *Bartorstown* and the world outside are imperfect. But he has to make a choice "not out of the ways he would like there to be, or the ways there ought to be, but out of the ways there are" (*Long Tomorrow* 256). He still thinks that the Destruction was "the Devil let loose on the world a hundred years ago" (260) but he chooses *Bartorstown* because he feels it is better to confront rather than ignore the devil for then you can control it. Nevertheless, the very fact of having to make a choice indicates that neither alternative can be truly utopian in the long run. There is a sense that Len too would prefer a third alternative, an alternative that circumstances do not allow. However much they try to deny it, the two societies shown in the novel are interconnected parts of the same field, geographically, historically, and culturally. By refusing the possibility of interaction and compromise, they demonstrate their blindness to the complementary nature of their relationship and, therefore, the inadequacy of both of them as satisfactory utopias.

Both *The Long Tomorrow* and *Brave New World* are about dichotomies and are structured around dualism. At the most fundamental level, both novels are concerned with the opposition between technological and human values. Brackett is aware that there is a case for rejecting “the dominance of technology in favour of a more difficult but ‘natural’ society.” However, she is even more conscious of “the suppression of knowledge to which this attitude might lead” (Albinski 124). She advocates, somewhat reluctantly, the pursuit of science even if it means sacrificing individual freedom and happiness. Huxley is more critical of both technological society, which he considers mechanistic, and natural society, which he equates with savagery. More strongly than Brackett, he sees that both are equally distasteful sides of the same coin. Neither is an acceptable alternative and he refuses to valorize one over the other.

He drives home the idea that there is little to choose between the two alternatives by identifying with each other ideas that are usually considered antithetical. For instance, as Chris Ferns points out, in *Brave New World*, “any form of sexual behaviour *other* than promiscuity is socially unacceptable.” By identifying promiscuity with conventional morality, Huxley defamiliarizes both positions. He exposes not only the emptiness of promiscuity as a way of life but also the arbitrariness of convention as “a reflection of the unthinking assumptions of the day.” He achieves a similar effect by linking technology and religion and thereby both satirizing “the way in which technological and scientific progress is worshipped as an end in itself” and exposing religion as “mere escapist ritual” (Ferns, *Huxley* 141-2). The immediate objects of criticism may be religion and conventional behaviour in *Brave New World*, but, by extension, their counterparts on the Savage Reservation are also condemned.

André Reszler claims that “utopia as a literary genre came to an unannounced end in the last decades of the nineteenth century” (202). According to him, the utopian spirit survives only in

political theory and journalistic literature, while in the literary domain, it has given way to “postutopian fiction,” another name for dystopia. Whereas classical utopia advocates “timelessness, stability, and uniformity,” postutopian fiction emphasizes “history, change, and the reemergence of the individual” (202). But ultimately, Reszler sees both genres as inadequate: “both classical utopia and postutopian fiction fail in their attempts to reconcile the contrasting or dichotomous principles of man and society, stability and change. Their philosophy is necessarily one-sided, and unable to establish a higher synthesis of human and social dialectics” (211). As my earlier chapters have already made clear, I do not agree with Reszler’s description of classical utopia (in which category he places *Looking Backward* and *News from Nowhere*). And it will become clear in the next chapter that his belief that utopia and dystopia are necessarily one-sided is certainly invalid when it comes to the ambiguous utopias of the seventies. However, his assessment of the failure of “postutopian” fiction does apply to *The Long Tomorrow* and particularly to *Brave New World*.

The latter novel does not even attempt to reconcile the opposites. This failure is symbolized by John Savage’s suicide at the end of the novel. Unable to accept the new world and unwilling to return to the old one, he tries to create his own third alternative, first through exile and finally through death. The final image of the novel is that of Savage’s dangling feet:

Slowly, very slowly, like two unhurried compass needles, the feet turned towards the right; north, north-east, east, south-east, south, south-south-west; then paused, and, after a few seconds, turned as unhurriedly back towards the left. South-south-west, south, south-east, east... (206)

His “inability...to find true north” (Lobb 101) even in death indicates the impasse at which those who search for utopia must, in Huxley’s view, sooner or later arrive. Unlike Len in *The Long Tomorrow*, Savage refuses to compromise, to come to rest in either place.

Huxley later claimed that the impossible choice between “insanity on the one hand and lunacy on the other” was the source of a kind of perverse reassurance for “the amused, Pyrrhonic aesthete who was the author of the fable” (Foreword, *Brave New World* 7-8). Be that as it may, by the time he wrote the Foreword (fourteen years after the publication of *Brave New World*), he had completely changed his mind. He no longer felt any “wish to demonstrate that sanity is impossible.” On the contrary, he had come to believe that although it is “a rather rare phenomenon,” it can be achieved (8). *Island*, published another sixteen years after the Foreword, is Huxley’s vision of what a sane society might be like. It is his attempt to “establish a higher synthesis of human and social dialectics” (Reszler 211). It is therefore useful to read *Brave New World* and *Island* as complementary works that approach the same problems and concerns from opposite directions.

Island

According to Reszler, Huxley belongs to a European intellectual tradition that “takes as the essential values the individual, the principles of pluralism, multiplicity, and change, and uses them in its piecemeal approach to social engineering” (197). In *Brave New World*, Huxley defines utopia as being against individualism, against pluralism, against change. By the time he comes to his last novel, he has radically changed his definition. Utopia, as exemplified by the tropical island of Pala, now embodies these essential values. It is no longer a static, unitary mechanism but rather a composite which tries to reconcile contraries.

Many readers are rather hard on *Island*, criticizing it for its didacticism and self-conscious philosophizing. Most would agree with William Matter that it is “much more serious than *Brave New World* and considerably less vibrant.” There is some truth to this assessment and few would

deny that *Island* makes for “occasionally tedious reading” (Matter 107). However, there is also much of great interest in it. Chris Ferns, one of the critics who does like the novel, believes that “Pala is the realization of the ideal set out in Huxley’s preface to *Brave New World*, of ‘a society composed of freely co-operating individuals devoted to the pursuit of sanity’” (222). Huxley himself confirms this view by echoing in *Island* the plea in the earlier novel’s Foreword for a sane alternative: “But mightn’t there be a third possibility? Mightn’t there be a tale told by somebody who is neither an imbecile nor a paranoiac?... Somebody, for a change, completely sane” (119). The novel is devoted to demonstrating how sanity can be achieved by combining the best of a number of pairs of opposites: East and West, mysticism and science, mind and body.

Island is the story of Will Farnaby, a cynical journalist who is washed ashore on Pala’s coast when his boat is caught in a storm. He awakes to the sound of trained mynah birds repeating the words “Attention” and “Here and now, boys.” This is his first introduction to Pala’s philosophy of intensified awareness -- of oneself and of one’s environment. Isolated from the rest of the world through geography and their seeming insignificance, the Palanese have developed a balanced and harmonious way of life, based on a combination of the knowledge and insights provided a century earlier by their two founding fathers: the Old Raja, Pala’s enlightened ruler, and Andrew McPhail, a Scottish physician and adventurer. Dr. Andrew, Will’s main guide to Pala, is a descendant of McPhail, while Murugan, the island’s young ruler, is a great-grandson of the Old Raja. However, the Rani, Murugan’s mother, is a princess from the neighbouring country of Rendang and she is manipulating her son into forming an alliance with Colonel Dipa, Rendang’s new military leader, who, along with Western multi-national companies, wants access to Pala’s recently discovered oil reserves. The Palanese, of course, realize that the resulting industrialization of their island would destroy the community they have created. The conflict in the novel is between the two camps, and

also within Will Farnaby, whose allegiances change as he learns more about Pala. In one sense, the conflict is between the utopian and dystopian possibilities in the real world.

In another sense, however, Huxley is still trying to avoid both dystopia and utopia. Instead of the “Manichean opposition between utopian and anti-utopian extremes,” he advocates “a dialectical synthesis of the possibilities that exist between these extremes” (Ruppert 131). As one of Will’s guides to the island tells him, the Palanese are always “trying to make the best of the here and now, instead of living somewhere else, as you people mostly do, in some other time, some other homemade imaginary universe” (*Island* 96). In Will’s case, this means letting go of his childhood traumas, his sexual guilt, and his obsession with the “Essential Horror” of existence, the manifestations in his personal life of a dystopian world. But living in the here and now also means avoiding the kind of illusory utopia which the Rani proposes to create through her “Crusade of the Spirit,” an evangelical form of spiritualism with which she attracts wealthy sponsors. The Rani is, in Will’s eyes, “a female tycoon who had cornered the market, not in soya beans or copper, but in Pure Spirituality and the Ascended Masters” (50). Her vision of utopia is merely a self-serving camouflage for consumerism.

The Palanese, by contrast, are adamantly opposed to this kind of materialism. They reject modernization, which Murugan equates with militarization and large-scale exploitation of natural resources. Instead, they favour appropriate technology, harmony with nature, and a holistic approach to problem-solving. Whether in education, psychotherapy, medicine, or any other area, they believe in dealing with the mind and the body together. As Will’s Palanese nurse tells him, “whether it’s prevention or whether it’s cure, we attack on all the fronts at once. *All* the fronts... from diet to autosuggestion, from negative ions to meditation” (66). Similarly, as Susila, a young woman who helps Will heal psychologically, tells him, they learn to think about people “in terms,

simultaneously, of the Clear Light of the Void and the vegetative nervous system” (94). By gaining access to the “mixture of Mind and physiology” that constitutes the human essence, the Palanese are able to achieve a healthy balance in their lives.

The secret, according to them, is to be totally aware of whatever activity one engages in. Self-awareness transforms everything, so that one can experience even the most mundane action on both a material and a spiritual level:

concrete materialism is only the raw stuff of a fully human life. It's through awareness, complete and constant awareness, that we transform it into concrete spirituality. Be fully aware of what you're doing, and work becomes the yoga of work, play becomes the yoga of play, everyday living becomes the yoga of everyday living. (152)

Even love-making turns into the yoga of love-making. According to the Palanese, *maithuna*, which is “the same as what Roman Catholics mean by *coitus reservatus*,” not only enhances sexual awareness, it also provides a method of “birth-control without contraceptives” (75-6). The contribution of *maithuna* to population control seems to be its greatest advantage for Huxley, who believes that there is “no hope, not the slightest possibility, of solving the economic problem until [breeding is] under control” (148).

As the references to yoga indicate, the spiritual life of the island is based on Buddhism, specifically Mahayanist and Tantric Buddhism, which means that “you don't renounce the world or deny its value;.... you accept the world, and you make use of it; you make use of everything you do... as so many means to your liberation from the prison of yourself” (74). The Palanese, however, have deliberately decided to combine their religious beliefs and practices with Western science, particularly what Huxley calls “the sciences of life and mind”: biology, physiology, and psychology (216). Once again, the emphasis is on bringing together diverse, and even apparently incompatible, disciplines together for “nothing short of everything will really do.... You can't be a

good economist unless you're also a good psychologist. Or a good engineer without being a kind of metaphysician" (144). The novel tends to become moralizing and rather tedious when the characters start holding forth on the benefits of such peculiarly Palanese sciences as "pure and applied autology, neurotheology, metachemistry, mycomysticism, and the ultimate science... thanatology" (144). However, the didactic style does not detract from the validity of Huxley's point about the importance of seeing the interrelatedness of all things. And occasionally, amidst the lengthy sermons disguised as dialogue, one finds striking insights that have even more relevance now than they did when Huxley wrote. For example, the Under-Secretary of Education tells Will that they start their science teaching with lessons in ecology because it is a complicated subject: "Never give children a chance of imagining that anything exists in isolation. Make it plain from the very first that all living is relationship.... we always teach the science of relationship in conjunction with the ethics of relationship. Balance, give and take, no excesses" (217). They apply this philosophy not only to their approach to the physical world but also to social relationships.

If *Brave New World* confirms the notion that "the incompatibility of freedom and happiness... is the central issue in most anti-utopias" (Ruppert 106), then *Island* shows that utopia is a place where freedom and happiness are reconciled. Even its enemies admit that the Palanese system is "designed to make every man, woman, and child on this enchanting island as perfectly free and happy as it's possible to be" (55). The key to bringing happiness and freedom together is accepting that "only part of our destiny is controllable" (95). Contrary to what the social engineers of *Brave New World* thought, we cannot eliminate unhappiness from the human condition. The Palanese repeatedly quote the Buddha's words: "I show you sorrow... and I show you the ending of sorrow" (131). The recognition that the "aspiration to perpetuate only the 'yes' in every pair of

opposites can never, in the nature of things, be realized” leads to self-knowledge, attention to the here and now, and the “reconciliation of yes and no lived out in total acceptance and the blessed experience of Not-Two” (35). This view of the world gives people the freedom to accept grief, danger, loss, and death as parts of life and still be happy through their awareness of the experience of living.

As these passages indicate, *Island*'s main concern – the reconciliation of contradictions -- coincides with the primary concerns of this thesis. During an initiation rite where Palanese children first use *moksha* to achieve mystic vision, they are told to contemplate Shiva-Nataraja, the Lord of the Dance: “Dancing through time and out of time, dancing everlastingly and in the eternal now. Dancing and dancing in all the worlds at once” (170). They see the dance, with its emphasis on movement and process, as the metaphor for the universe. The question, as the Old Raja put it, is: “Tunes or pebbles, processes or substantial things? ‘Tunes,’ answer Buddhism and modern science. ‘Pebbles,’ say the classical philosophers of the West. Buddhism and modern science think of the world in terms of music” (176). The distinction is precisely the one Katherine Hayles makes in her discussion of the “revolution in world view” sweeping through modern culture (*Cosmic Web* 15). She points out that eighteenth-century rationalism saw the world as a clock, and nineteenth-century Romanticism saw it as an organism, both of which are, in Huxley's terms, substantial things. The twentieth-century metaphor of the “cosmic dance,” by contrast, is that of a process. Hayles does not relate this metaphor to Buddhism or any other religious tradition. However, she would agree with Huxley that it is indeed part of the view of the universe upheld by modern science. As a heuristic model for describing reality, the “cosmic dance” is used more or less interchangeably with the “network of events” and the “energy field” (15), and is thus part of the field theory in physics of which complementarity is a key concept.

Huxley returns again and again to the importance of overcoming dualism. In their lives, the Palanese try to emulate the ancient Greeks, who “were much too sensible to think in terms of either-or. For them, it was always not-only-but-also” (*Island* 228). To them, this means affirming, as we have seen, both spirit and body, both religion and science, both theory and practice. In addition, it means accepting and embracing both “beauty and horror” (169). Theirs is a utopian community because it does not attempt to eliminate pain or perpetuate happiness at all costs. Instead, it shows people how to accept that sorrow is as important a part of life as is the ending of sorrow. The goal of Palanese meditation is to attain a vision of “the paradox of opposites indissolubly wedded, of light shining out of darkness, of darkness at the very heart of light” (288). In other words, what they call the suchness of being is the recognition of the complementary nature of all phenomena, whether physical or spiritual.

This idea finds expression not only in the contemplative life but also in the practical organization of Pala. The description of the relationship between the two founders of Pala also serves to exemplify the principles on which the society is founded:

a pair...of complementary temperaments and talents, with complementary philosophies and complementary stocks of knowledge, each man supplying the other's deficiencies, each stimulating and fortifying the other's native capacities.... teaching one another to make the best of both worlds – the Oriental and the European, the ancient and the modern.... the worlds already realized within the various cultures and, beyond them, the worlds of still unrealized potentialities.
(129-30)

This is as good a description of complementarity as one is likely to get. Clearly, its value to Huxley is that it shows a way out of the dilemma of *Brave New World*. The third alternative is a union of the best aspects of divers existing worlds. But it does not stop there. This union of opposites is a process and, as such, it admits dynamism and change by allowing for the integration of latent possibilities that would be made manifest through time.

Field theory implies that a complementary system, in addition to being fluid and dynamic in nature, and composed of mutually interacting components, would also “include the observer as an integral participant” (Hayles, *Cosmic Web* 15). The participation of the observer is an essential element of *Island*'s plot. In traditional utopias, the role of the visitor from the outside is primarily to give the utopians a pretext for showing off their superior social system. The visitor may initially display some skepticism, which in turn prompts further descriptions and explanations of the advantages of utopia, but he is basically receptive towards what he is shown. He is converted to the utopian ideal but usually without any active role. Already sympathetic to what he sees, he does not need to be radically altered, nor does he alter anything within utopia. Will Farnaby, a reporter and thus a professional observer, thinks of himself as this type of detached spectator. Describing himself as “the man who wouldn't take yes for an answer” (*Island* 228), he resists believing in the reality of Pala. But it soon becomes evident that he is involved in the world into which he has stumbled. Despite his resistance, he is changed by Pala. His stay enables him to come to terms with his past and to overcome his ingrained cynicism. By the time he finally takes the *moksha*-medicine that helps him see the world as the Palanese see it, he has been “transformed from an outside observer of the random manifestations of reality into a participant in its richness and variety” (Ferns, *Huxley* 229).

However, the validity of Pala as a model of utopia is less than convincing because in many ways it is merely *Brave New World* turned upside down. George Woodcock observes that *Island*, “by inversion, turns to good purposes many negative aspects of *Brave New World*” (282). The negatives of the earlier novel are turned into positives in the later one. Thus, for instance, sex is as free and uninhibited in Pala as it is in the London of A.F. 632. But, instead of being yet another meaningless diversion intended to “reconcile [the State's] subjects to the servitude which is their

fate” (Foreword, *Brave New World* 14), it is accompanied by love and is seen as a means to enlightenment. Artificial insemination is popular in Pala but again its purpose is different than in *Brave New World*. It is not used to manufacture industrially efficient Bokanovsky clones but rather to preserve and pass on “superior stocks of every variety of physique and temperament” (*Island* 194). Conditioning too is an important part of education on Pala as it is in its dystopian counterpart. However, it is not used for reinforcing class consciousness in different castes or encouraging greater consumption of goods. Instead, it is used to teach love, compassion, and friendship with all living beings. It is “Pure Pavlov” but “Pavlov purely for a good purpose” (195). Finally, there is even a Palanese version of the drug *soma*, which is called the *moksha*-medicine. The description of Will’s experience when he finally takes the *moksha* is remarkably similar to Huxley’s accounts of his own experiments with mescaline a few years before he wrote *Island*. Ferns notes that in these accounts, Huxley “prefers the term ‘psychedelic’ (meaning mind- or consciousness-revealing) to hallucinogen as a description of the drug” (*Huxley* 196). Whereas *soma* is used to take a holiday from reality, *moksha* is supposed to enhance reality and expand consciousness.

The problem with Pala is that the efficacy of its reforms depends entirely on the enlightenment and good intentions of its rulers. The system that has made Pala the paradise it is “was introduced... by the Raja’s fiat, and successive Rajas have continued to develop Pala as a Utopian state, retaining a power in practice unused but in theory absolute” (Woodcock 283). The system is not only open to abuse and even dismantling under a militaristic ruler like Murugan, it is also philosophically inadequate because it lacks the grassroots involvement that is a prerequisite of a truly free society. *Island*’s greatest weakness is that it fails “to envisage any political concomitant to the social reforms” it suggests (Ferns, *Huxley* 230). As Ferns rightly points out, one might

reasonably expect a system of government “less primitive than enlightened despotism” (230). Moreover, Pala can hardly serve as a blueprint for a better world when its very existence depends on the fact that “the right people were intelligent at the right moment... [and] were also very lucky” (*Island* 80). Sex, drugs, and psychotherapy, even in combination with mysticism, seem like an inadequate basis for a dynamic yet stable society. It seems dubious that such a society, even if unthreatened by hostile forces from outside, could continue to flourish unless sustained by a more comprehensive religious or political ideology.

In fact, Pala *is* threatened by external powers and is finally forced to succumb to them. The world surrounding the island casts over it what Ruppert calls “a dark dystopian shadow” (132), a shadow suggesting its author’s fundamental pessimism even in the midst of writing a utopian novel. In *Brave New World*, Huxley expressed his fear that utopia might be realized and turn out to be a nightmare. In *Island*, he dreams of utopia but cannot bring himself to believe in its reality. The novel’s setting is closer to that of a classical utopia such as More’s than the utopias of the nineteenth century. Bellamy and Morris envisioned, even if they did not depict, global utopias. Wells made it explicit that “no less than a planet will serve the purpose of a modern Utopia” (*Modern Utopia* 8). Huxley, however, goes back to older conventions and “isolates his utopian community... behind fragile boundaries” (Ruppert 132). Inherent in the novel’s premise is the assumption that a utopian society can survive, if at all, only in isolation. Pala has remained safe as long as the world surrounding it had nothing to fear or to gain from it. With the discovery of oil on the island, however, it is doomed to be overrun by the forces of consumerism and militarism as represented by Rendang’s invading army. Bahu, Rendang’s somewhat Machiavellian ambassador, sums up the situation: “So long as it remains out of touch with the rest of the world, an ideal society can be a viable society” (*Island* 55). Huxley’s refusal, or perhaps failure, to envision a

world-wide utopia suggests that he cannot, any more than Bahu, bring himself to accept the relevance of utopia to the real world.

However, it is not only the material gain to be derived from the exploitation of Pala that condemns it to destruction. Paradoxically, the very field that allows opposites to be reconciled into a utopian whole also permits that utopia to be destroyed. Part of the network (or field) of world nations, Pala poses a threat to its less fortunate neighbours. According to Bahu, “for three quarters of the human race, freedom and happiness ... [are] completely out of the question.” Pala must be radically changed for two reasons: “First, because it simply isn’t possible for Pala to go on being different from the rest of the world. And, second, because it isn’t right that it should be different” (56). Its destruction is thus in one sense inevitable. But Will Farnaby, even though primarily an observer, also has a role to play in this scenario for he is not only changed by Pala, he also changes it. When he first comes there, he is an agent of Joe Aldehyde, one of the businessmen who want to win the island’s oil concession. Preoccupied with his personal gain, and not yet transformed by his utopian surroundings, he helps Aldehyde form an alliance with the Rani and Colonel Dipa which paves the way for Rendang’s invasion of Pala. Although he later dissociates himself from these intrigues, Will’s actions have consequences: they play a part, however small, in the eventual destruction of utopia.

Island may seem to fail to fulfill the promise of an alternative to the dystopian dilemmas raised in *Brave New World* and *The Long Tomorrow*. Neither Brackett nor Huxley (whether at the beginning or the end of his career) can really believe in the possibility of a viable and enduring utopia. But perhaps the ending of *Island* is not as despairing as it seems. If utopia is indeed dynamic in nature, then the destruction of one particular utopian society does not mean the end of utopian possibility. In fact, the destruction of Pala serves as a reminder that utopia must adapt

itself to the changes of time and place; it must open its boundaries to history. As Ruppert points out, even though Pala perishes, “the efficacy of Huxley’s ‘third alternative’ remains intact.” The true utopian alternative is “not a stable and ultimate place...but a state of mind” (Ruppert 133). Huxley himself does not extend the idea of a utopia based on complementarity far enough. He cannot explicitly envision a Pala capable of interacting with, and being changed by, the outside world. But by exposing the fragility of a closed utopia, Huxley’s novel implicitly demonstrates the need for an open utopia, one that is capable of synthesizing the changing sets of opposites that emerge through the course of history.

THE AMBIGUOUS UTOPIA
CROSSING THE BOUNDARY

Many critics have noted that the seventies and eighties witnessed a burgeoning in both utopian fiction and criticism. Many have also observed that while most male writers of speculative fiction continued to exhibit dystopian pessimism, women writers were producing optimistic eutopias in greater numbers than ever before. Joanna Russ and Frances Bartkowski both comment on “the predominance of pessimism in contemporary science fiction, which is not, however, shared by women writing in this genre” (Bartkowski 12). And Carol Farley Kessler shows that of the 137 book-length utopias written by women in the United States between 1830 and 1980, 17 were written in the 1970s (the previous high was six in the 1890s) (*Daring* 236). Indeed the classics of the genre in recent years have been written by women: Ursula Le Guin, Joanna Russ, Marge Piercy, and, in a different vein and different milieu, Doris Lessing.

Bartkowski asserts that “just as the adjective ‘socialist’ can be used to group a number of nineteenth-century utopian novels by both men and women, the term ‘feminist’ is apt to describe the utopian fiction of the 1970s” (8). Whatever the historical and cultural reasons for this phenomenon, Bartkowski appears to be correct in saying that “utopian thinking is crucial to feminism” in that both “declare that which is not-yet as the basis for...practice, textual, political, or otherwise” (12). A feature of particular interest in feminist utopias is that while strongly critical of contemporary society, and particularly of the prevalent patriarchal ideology, their outlook is generally positive. Another characteristic of these works, related to the first, is their use of utopia

and dystopia together in the same work. Russ's *The Female Man*, Piercy's *Woman on the Edge of Time*, Le Guin's *The Dispossessed*, and Lessing's *The Marriages between Zones Three, Four, and Five* depict two or three parallel worlds, each of which embodies some of the potentialities present in contemporary society.

I will not be examining Russ's novel in detail because it falls outside the range of works in which I am interested, that is works in which the evolution of a utopian society is at least as important as criticism of existing society. Russ subordinates the depiction of utopia to (often well deserved) polemical attacks on contemporary culture. Nevertheless, there is a passage early in *The Female Man* which sums up the significance of locating utopia in multiple worlds:

Every choice begets at least two worlds of possibility...or very likely many more....there must be an infinite number of possible universes...It's possible, too, that there is no such thing as one clear line or strand of probability, and that we live on a sort of twisted braid, blurring from one to the other without even knowing it. (Russ 6-7)

The image of the braid implies that the world consists of strands that are different but also inextricably twisted together. The use of the word "blurring" also suggests the possibility of movement and change. Thus Russ's metaphor acknowledges both the diversity and the dynamism that, I have argued, are inherent in the conception of utopia.

Recent critics have taken much interest in this braiding effect in utopian fiction. Chris Ferns, for instance, says that utopia has an "essentially hybrid nature" due to the fact "its aspirations are both political...and aesthetic" ("Dreams" 453). I would argue that for this reason, it makes sense that the critical approach used to analyze utopia should also be hybrid. The field of science and literature, which locates in both discourses the need for multivalence, provides the basis for just such an approach. A new understanding of utopia requires a move from the static to the dynamic. Chaos theory, the site of a major paradigm shift in modern science, can suggest a way of

discerning a similar paradigm shift in literature because of its concern with process and method. Like utopia, which is “a method rather than a state” (Suvin 52), so too chaos theory is “a science of process rather than state, of becoming rather than being” (Gleick 5). Clearly, there is a point of intersection between utopian fiction and chaos theory which promises new insights into both. Similarly, the intersection of utopian fiction with field theory allows utopia to move from a paradigm that sees the world as a collection of separate and isolated units to one that sees it as a system within which diverse entities are integrated into an interactive whole.

The novels by Piercy, Le Guin, and Lessing all take advantage of these points of convergence between scientific and literary theories to demonstrate what utopia means in the modern world. Piercy’s work is most usefully read in the context of chaos theory since the idea of nonlinearity is at the very centre of her view of historical change. Le Guin’s work has overt connections with field theory in the emphasis she places on complementarity as the guiding principle in all areas of life. Finally, Lessing’s work brings the two theories together by focusing on marriage, defined as the union of opposites in a dynamic relationship.

Woman on the Edge of Time *

The work of Marge Piercy provides a good example of how the insights provided by chaos theory about the dynamics of change can be applied to the development of utopia. In a lecture on her conception of “politically conscious” writing, Piercy has said: “If we view the world as static, if we think ahistorically, we lack perspective on the lives we are creating.... We must be able to feel ourselves active in time and history” (“Active” 104-5). Such activity is at the centre of Piercy’s

* This section of the chapter will appear in modified form in *Extrapolation* in 1997. It is reproduced here with the permission of Kent State University Press.

vision as expressed in *Woman on the Edge of Time*, a novel that has become a classic of feminist utopian writing since its publication in 1976. In its emphasis on the process of social transformation, Piercy's novel affirms the didactic, social function of utopian writings: it "acknowledges the power of the word to move an audience to action" (Kessler, "*Woman*" 310). The novel begins with the first contact between Connie Ramos, a mental patient and the time traveller of the title, and Luciente, her guide to the utopian future she visits. Luciente's role is analogous to that of the author as both not only display the distinguishing features of a new society, but also try to stimulate in their auditor/reader the activism that will bring that society into being.

The most obviously relevant aspect of chaos theory in relation to *Woman on the Edge of Time* is the concept of nonlinearity. In mathematics, nonlinear systems express relationships that are not strictly proportional; they generally cannot be solved. But nonlinearity may be more broadly defined: in the words of James Gleick, "[it] means that the act of playing the game has a way of changing the rules" (24). Piercy's notion of historical "cruxes" is clearly akin to this concept for it implies that history is nonlinear: it does not have one solution, one necessary outcome. One of the inhabitants of the utopian world of the year 2137 tells Connie, "at certain cruxes of history...forces are in conflict. Technology is imbalanced. Too few have too much power. Alternate futures are equally or almost equally probable...and that affects...the shape of time" (*Woman* 197).

In physical systems, nonlinearity translates into a high degree of unpredictability. There is often great incongruity between cause and effect such that a small cause can give rise to a large effect. Sensitive dependence on initial conditions is thus another characteristic of nonlinear or chaotic systems. In such systems, small uncertainties, even at the subatomic level, are quickly

brought up to macroscopic expression. By stressing the methods of nonlinear dynamics, chaos researchers have observed that “a small change in one parameter...could push... [a physical] system across a bifurcation point into a qualitatively new behaviour” (Gleick 291). Piercy seems to apply a similar principle to social systems. At crucial points in time, small acts can have great repercussions that will change the course of history. This is the reason why the utopians of the future have perfected a method of time travel that enables them to reach receptive individuals in the “crux-time” of the late twentieth century. They believe that it is not the powerful who make revolutions, but rather ordinary people who “changed how people bought food, raised children, went to school....who made new unions, withheld rent, refused to go to wars, wrote and educated and made speeches” (*Woman* 198). They repeat again and again that their very existence is precarious because Connie and those of her time may fail to engage in the struggle that will bring about the necessary changes.

Mattapoissett, the utopia depicted in *Woman on the Edge of Time*, is based on principles of community and equality. The people work together to provide the necessities of life for everyone but they have no money and no concept of ownership. They each have their own private space but most of their activities are communal. Their government is highly decentralized and based on consensus decision-making in local and regional councils. Their education combines study and work and involves a system of mentorship that makes learning personal. They are profoundly conscious of their place in “the web of nature” (278) and their sense of responsibility towards the environment is heightened by their awareness of the damage done to it by the excesses of the twentieth century. They believe in cultural diversity and, above all, in gender equality. Women and men are equal in all things: education, work, sexual expression (“all coupling, all befriending goes on between biological males, biological females, or both” [214]) and even parenting. Children

are grown in “brooders” and upon birth are given three “mothers,” of either sex and biologically unrelated to them, who share all responsibilities, including breast-feeding. As Luciente puts it, “It was part of women’s long revolution. When we were breaking up all the old hierarchies. Finally there was that one thing we had to give up too, the only power we ever had, in return for no more power for anyone...the power to give birth” (105). The revolution has also included the reform of language so that the pronouns “he” and “she” are now replaced by “person” or “per.”

However, unlike many of its utopian predecessors, *Mattapoisett* is not a static, finished object. Its inhabitants are still in the process of determining its laws and engage in controversies about matters of public policy, such as genetic engineering. But even more importantly, they are constantly fighting to protect their way of life against the dystopian alternative that exists side by side with them. Their enemies are the remnants of the old multinational corporations (with names like “Texaroyal” and “Mobilgulf”) who have taken twentieth-century consumerism and technological excess to their logical conclusion. They consist “mostly of androids, robots, cybernauts, partially automated humans” (267) and their weapons are those of “the biological sciences. Control of genetics. Technology of brain control. Birth-to-death surveillance. Chemical control through psychoactive drugs and neurotransmitters” (223). It would seem that their biggest victims are women, whose only choice is between becoming surgically altered prostitutes, or turning into “duds” who are nothing more than “walking organ banks” to be used by the “richies” wanting to prolong their lives indefinitely (288-91).

Having introduced us to the salient features of an ideal society in the first half of the novel, Piercy goes on in the second half to develop the idea that we must fight to make this society real. Utopia will win over dystopia only “if history is not reversed.” In the war to achieve utopia, “the past is a disputed area” (267). After accidentally visiting the dystopian territory, Connie realizes

that “that was the other world that might come to be. That was Luciente’s war, and she was enlisted in it” (301). The rest of the novel is concerned with how Connie becomes involved in this “war.” Back in her own time, her final act, which she considers a necessary act of war, is to poison the doctors and psychologists who have been experimenting on her with drugs and brain implants. The ending of the novel has, understandably, been controversial since Connie’s solution seems hardly utopian. And yet, there is something fitting about it, particularly if we keep in mind the idea suggested by chaos theory that a small cause can give rise to a large effect. Connie’s act is one whose ramifications will alter the future. Her success in averting one particular form of biological engineering will retard or even halt the development of the dystopian world populated by automated beings and will thus contribute to the emergence of the utopian Mattapoisett where human potential is valued.

Also present is the element of unpredictability that is inherent in the concept of nonlinearity. As Ferns puts it, “in Piercy’s hands, the normally static utopia has become kinetic with a vengeance” (“Dreams” 463) and, in order to remain so, it must remain open to change and motion. Once she has committed the murders, Connie can no longer reach over to Mattapoisett: “She had annealed her mind and she was not a receptive woman. She had hardened” (*Woman* 375). Her inability to see the future any longer underscores the personal cost of committing an act of violence, even if it is for a good cause. Symbolically, however, the loss of contact with the future also emphasizes the unpredictability of the utopian project. The openness of the ending discourages us from trying to reduce utopia to something fixed and permanent.

The idea of nonlinearity is not only a central theme of *Woman on the Edge of Time*, but also determines its structure. Piercy’s narrative, “unlike the traditional guided tour format of earlier utopias, proceeds by alternating utopian episodes and a narrative set in something resembling

contemporary reality” (Ferns, “Dreams” 462). Ferns observes that the alternating format is significant because it shows that “the utopian ideal is itself a product of the present, and that it changes as the nature of the present changes” (462). The nature of Connie’s initial visit to each of the two alternative futures is determined by what she is going through in her own time immediately beforehand.

The first encounter between Connie and Luciente takes place at Connie’s apartment, before she is committed to the psychiatric hospital. At this point, however, it is Luciente who comes to Connie’s time. Connie travels to the future only some time after her admission to the hospital when she is locked in seclusion because she resists taking the numbing drugs given to her. The world she steps into is in every way the opposite of the confined place she inhabits. The initial description of Mattapoissett emphasizes its rural, natural setting: a river, vegetable gardens, animals. Even the buildings are compared to “long-legged birds with sails that turned in the wind” (*Woman* 68). A little later, Connie visits Luciente’s “space” which contrasts with both the crowdedness and the isolation of Connie’s life. As a member of a poor Chicano family, Connie has grown up living with many siblings in a crowded home. In the hospital, she oscillates between two extremes: she is either denied all privacy in the general ward or denied any human contact in the seclusion cell. The utopian alternative, as Luciente explains it, combines personal freedom with a sense of community: “We each have our own space!...How could one live otherwise? How meditate, think, compose songs, sleep, study?...We live *among* our family” (72).

Connie’s visit to dystopia is also related to her experiences in her own time. After a dialytrode -- a device for administering psychoactive drugs directly -- has been implanted in her brain, she travels to the future, only to find herself, not in Mattapoissett, but in the other part of the future where everyone is mechanically enhanced. The link between what she sees in the future and

her own experience of being controlled by a machine is obvious. As more and more people on the ward are subjected to the same procedure, Connie begins to fight back so that they will remove her implant. At this point, she visits a third place in the future: the front where the two sides are fighting their war. As she joins Luciente and others in the battle, she seems to recognize among the enemies of Mattapoisett the faces of “all the caseworkers and doctors and landlords and cops, the psychiatrists and judges and child guidance counsellors...who had pushed her back and turned her off and locked her up” (336). Interestingly, Luciente later tells her that she had not been at the front. Connie’s experience thus points to the uncertainty and precariousness of the future and its sensitive dependence on her present condition.

The link between present and future also extends to what Libby Falk Jones calls a “web of character relationships radiating from Connie” (123). Parallels between sets of characters in the novel indicate that ultimately utopia is about fulfilling individual potentials that are denied and suppressed in contemporary society. There are a number of pairs or groups of characters that represent the utopian/dystopian versions of the same person. One example is the parallel between Connie’s daughter, Angelina, and Luciente’s daughter, Dawn. After an incident of child abuse, Angelina has been taken from Connie and placed in a foster home, forever beyond her mother’s reach. Dawn, beautiful, happy, and well loved, reminds Connie of her lost daughter and she thinks of her as what Angelina would be if she lived in utopia: “Suddenly she assented with all her soul to Angelina in Mattapoisett, to Angelina hidden forever one hundred fifty years into the future....She will be strong there, well fed, well housed, well taught, she will grow up much better and stronger and smarter than I” (141). Dawn thus becomes the fulfilment, not only of Angelina’s, but also of Connie’s own potential.

Another parallel is that between Skip and Jackrabbit. Skip is one of Connie's fellow patients in the hospital, committed after several botched attempts at suicide. He is intelligent and witty but he has been in mental institutions since he was thirteen because he is homosexual and, as he says, "My parents thought I didn't work right, so they sent me to be fixed" (144). Jackrabbit, who lives in Mattapoisett, is about the same age as Skip and he represents the fruition of all that has been blighted in Skip's life. Jackrabbit is a highly respected artist and a fully integrated member of his family and his community. He, like most of the others around him, has sexual relations with both women and men, and is beginning to prepare for his mothering duties. But the two are also linked in that they struggle against a common enemy, that of dehumanizing technology. Skip finally kills himself, after receiving the brain implant. Shortly thereafter, Jackrabbit, who has gone on defense duty, is killed in the war against the robots. They are both casualties but both die fighting. At Jackrabbit's wake, Connie's mourning explicitly joins the two young men: "Slowly tears coursed down her face, perhaps more for Skip than for Jackrabbit, perhaps for both" (316).

The most significant parallels, however, are between several of the characters and Connie herself. Connie and Luciente are obviously closely linked as together they create the bridge between the two times. Luciente's child reminds Connie of her own daughter; Luciente's two lovers remind Connie of the two men she has loved in her own life. She thinks of Luciente "as a fraction of her mind, as a voice of an alternate self" (252). She also sees herself in Parra, a woman who is people's judge for Mattapoisett. They are "roughly the same size and complexion" (206) and come from the same place. As they talk, Connie feels increasingly fascinated by Parra: "She was serving as people's judge. Doctor of rivers. She herself could be such a person here.... Then she would be useful. She would like herself" (214). She would become what she cannot be in her own time.

Significantly, however, Connie also meets an alternate self when she visits the dystopian side of the future. Gildina, the woman she talks to there, is “a cartoon of femininity” (288), surgically altered and implanted to conform to the fantasies of the men to whom she is contracted for sex. But underneath the cosmetic surgery, she too is a Chicana like Connie. And like Connie, she has potentials of which she is unaware. Connie recognizes that “Gildina has a special mental power, even if she doesn’t know it” (299) because it is her receptivity that has enabled Connie to travel to her time and place. Connie’s relationship to Gildina is similar to Luciente’s relationship to Connie. Connie initially mistakes Luciente for a man because she moves with “that air of brisk unselfconscious authority Connie associated with men...taking up more space than women ever did” (67). Similarly, the guard who finds Connie with Gildina tells her, “You look me in the eyes, unlike a fem” (300). The people of Mattapoissett are, as one of them tells Connie, “potentialities in [your loved ones] that could not flourish in your time” (189). Witnessing the fulfillment of these potentialities transforms Connie and enables her to start fulfilling them herself and thereby influencing the future.

The shifts back and forth between the present and the future, between utopia and dystopia, and between different versions of the same character suggest that Connie is a “woman on the edge” in more ways than one. Her life, as depicted in the novel, has been chaotic in the conventional sense of the term. She has been exploited and abused, raped and beaten, deprived of education and meaningful work. She has lost the men she has loved to violence and her child to a harsh, uncaring system. She has finally lost her freedom and control over her life by being confined to one mental institution after another. But seen from another perspective, Connie’s life is also filled with chaos in its new, positive sense.

With the rise of chaos theory, chaos is no longer synonymous with disorder in the traditional sense. It is rather, to quote Gleick, “order *masquerading* as randomness” (22). There are two main approaches in the scientific community to the relationship between chaos and order. One approach finds order hidden in chaos. Of particular importance to this view is the concept of nonlinearity, which combines determinism with unpredictability. It also accounts for the spontaneous emergence of self-organization in the world, which is at the centre of the second approach to chaos. This approach redefines chaos as a space of creation where being and becoming are reconciled. Clearly concepts of order, particularly order concealed within or arising out of disorder, are central to the creation of a utopian society. Chaos theory offers an understanding of the dynamics of emergent order which is applicable not only to physical systems but also, analogically, to cultural situations. Of particular relevance to *Woman on the Edge of Time* is the idea of the boundary between order and chaos. Gleick describes a computer program that generates fractal shapes by saying that “the boundary is where [it] spends most of its time and makes all of its compromises.” The boundary serves as a threshold where the system “chooses between competing options” (Gleick 232-3). Connie spends much of her time in the novel in a similar region as she crosses and re-crosses the “edge of time” separating her from utopia.

Frances Bartkowski observes that “Piercy’s novel is narratively structured through a process of gaining and losing consciousness” (62). The mechanism whereby Connie travels to the future involves her letting go of her own consciousness and receiving that of Luciente. Luciente explains that she is “a superstrong sender” and Connie “a top catcher” and this is what enables them to communicate. “If I was knocked on the head and fell unconscious,” she says, “you’d be back in your time instantly” (*Woman* 79). The novel begins with Connie’s dawning awareness of the boundary between her world and utopia but, at this point, her awareness is passive. She attributes

it to dreams or the hallucinatory effects of the drugs she has to take. Initially, her movement across this boundary depends entirely on Luciente. Gradually, however, she becomes more adept at tapping into Luciente's consciousness and crossing the boundary to the future at will. At one point Luciente tells her, "you could be a sender too. What a powerful and unusual mix!" (113). As the novel progresses, Connie travels to different parts of the future increasingly independently. The merging of her consciousness with that of the utopians is a process of empowerment whose direct outcome is Connie's ability to take control of her actions at the end, to decide not merely to visit the future but to take part in creating it.

Writing about her fiction, Piercy has said, "I am involved in showing people changing through struggle, becoming, always in process" (quoted in Kessler, "*Woman*" 312). Connie's experience of "becoming" illustrates that the realization of utopia can be understood as a chaotic process. The movement, within the novel, from contemporary reality to utopian ideal is in one sense deterministic: Connie and the reader witness the final achievement and so it must exist. At the same time, however, they are told that this is only one possible future and that they must make the choices that will lead to its attainment. The paradox can be resolved only in that boundary between consciousness and reality, between chaos and order, where the process of change occurs. Jones describes this process well when she writes, "Interacting with the future allows Connie to rescue her present as well as to preserve and even reinvent her past. Rather than establish past, present, and future as a logical continuum, the novel blends them in Connie's consciousness. The movement is not linear, but spiralling" (123). By integrating her memories of the past, her present experience, and her expectation of the future, Connie succeeds in recreating her own -- and, by extension, her society's -- reality. The emphasis on consciousness reminds us that the primary locus of utopia is in the mind. Once we are conscious of utopian possibilities, we can then realize

them in the world, but their greatest significance remains in the conception rather than the execution.

In discussing Piercy's fiction, critics generally focus on her feminism. It is of course entirely appropriate to do so since Piercy herself says that she is "writing politically, writing as a feminist, writing as a serious woman" ("Active" 118). I have not dealt with this issue in detail because my concern has been with *Woman on the Edge of Time* as a utopian novel. However, it is clear that, for Piercy, feminism and utopianism are inseparable. Her purpose is not to give the reader the blueprint for a new society but to engage her in the activity of bringing about social change by making a choice between utopia and dystopia. For Piercy, the transformation of existing society into utopia is a precarious enterprise, attainable only through a process of making choices and crossing boundaries.

The interest in crossing the boundaries between worlds is one that Piercy shares with her contemporary utopian writers, particularly Ursula Le Guin. The opening scene of *The Dispossessed* shows Shevek, the novel's protagonist, as he sets out to cross the space – both literal and metaphorical – that separates Anares and Urras, the twin worlds on which the story takes place. This act sets up the premise of everything else that follows in the plot, but it also points to the thematic core of the novel, which is the necessity of overcoming the things that separate different groups in order to build a unified yet diverse community.

The Dispossessed

Le Guin's novel, originally subtitled "an ambiguous utopia," was published two years before Piercy's novel and, although quite different in content as well as style, shares with it an interest in utopia as something both heterogeneous and evolving. Perhaps the most important feature of Le

Guin's novel is that it is at once about both dystopia and utopia. The dystopian planet Urras, a thinly disguised Earth, is divided into hostile nations -- capitalist A-Io, authoritarian socialist Thu, and "third world" Benbili -- whose uneasy coexistence periodically erupts into war. The social structures of the planet as a whole are characterized by injustice and extremes of wealth and poverty. A-Io, where half the action in the novel takes place, is a consumer society that has achieved "a kind of ultimate apotheosis of the excremental" (*The Dispossessed* 52). Luxury and waste mark every aspect of the life of the rich, while the poor live in deprivation and squalor. Urras's moon, Annares, is the utopian alternative. It is home to a group of anarchists who left Urras 150 years earlier and have successfully built a new society based on principles of equality and community. There is no property on Annares; the Annaresti use "propertarian" as a kind of swear word. As Shevek, the novel's protagonist, says, they have "no law but the single principle of mutual aid between individuals... [They] are sharers, not owners" (241).

The novel is the account of Shevek's journey from his native Annares to Urras and back, after a century and a half of no contact between the two worlds. It is clear that, morally and socially, Annares is superior to Urras. Why then, in a complete reversal of literary utopian convention, does a citizen of utopia need to visit dystopia at all? Le Guin makes it clear early in the novel that the relationship between Urras and Annares is more complex than one of simple opposition: the two complement each other and the recognition of this complementary relationship is essential not only to Shevek's growing up but to the fulfilment of Annares's utopian ideals. In one of a series of vignettes which depict Shevek's development from childhood to adulthood, he and his friends watch the sky as they discuss their sister world. One of them says: "I never thought before...of the fact that there are people sitting on a hill, up there, on Urras, looking at Annares, at us, and saying, 'Look, there's the Moon.' Our earth is their Moon; our Moon is their earth" (33). It is at this

point that Shevek first considers the possibility of going to Urras, something no Annaresti has ever done before.

It quickly becomes evident that despite its progressive social structure, Annares is not altogether what one might expect of utopia. It is a harsh and barren world where survival depends on solidarity, hard work, and sacrifice, and sometimes even these are not enough to prevent famine and suffering. Although Le Guin's "inversion of the expected pleasant utopian setting into an extremely unpleasant one produces an ambiguous utopia indeed" (Ruppert 142), Urras, despite its materialism and corruption, is not completely dystopian either. It is a beautiful, fertile, and prosperous planet that has learned to exercise "ecological control and the husbanding of natural resources" (66). Shevek's first view of Urras, revealing the "tenderness and vitality of the colours, the mixture of rectilinear human design and powerful, proliferate natural contours, the variety and harmony of elements, gave an impression of complex wholeness such as he had never seen" (52). His reaction is to think: "This is what a world is supposed to look like" (53). Peter Ruppert describes *The Dispossessed* by saying that it projects two fictive worlds "each of which contains utopian and anti-utopian potentials and neither of which is purely a good-place or a bad-place" (140). By dividing the traditional attributes of utopia and dystopia between the two worlds, Le Guin makes the point that utopia cannot be reduced to one form or fixed once for all; utopian and dystopian possibilities are both present in every society. Creating a true utopia is a matter of reconciling contradictions on an ongoing basis.

Shevek is a physicist who has dedicated his life to trying to discover a "general field theory of time" that will unify the apparently irreconcilable concepts of "Sequency and Simultaneity" (*The Dispossessed* 69). His scientific goal is symbolic of his social purpose: to "unbuild walls" (7) that separate the two worlds. The novel's first image is that of the wall that surrounds the spaceport on

Annare: "There was a wall....Where it crossed the roadway, instead of having a gate it degenerated into mere geometry, a line, an idea of boundary.... Like all walls it was ambiguous, two-faced. What was inside it and what was outside it depended upon which side of it you were on" (1). Le Guin's project is to show that in order to attain utopia, one must cross and re-cross the boundary. The first step towards unbuilding the wall is to live on both sides of it.

Thus, Shevek's journey to Urras not only drives the novel's plot, but is also its thematic focal point. The teachings of Odo, the revolutionary leader on whose philosophy Annaresti society is founded, are summarized in the following maxim: "To be whole is to be part; true voyage is return" (68). Shevek's journey allows him, some others on both Urras and Annare, and perhaps most importantly the reader, to see that the two worlds are indeed part of one whole and that each can grow only through the influence of the other.

Urras is the more obvious beneficiary of the renewed contact between the two worlds. In many ways, little has changed on the planet since the Odonian revolution. The wall between the rich and the poor remains, as does the barrier between men and women. Shevek discovers that his hosts, clever physicists and hospitable men, understand nothing but relations based on property. There is no real human contact between them and the lower classes. As Shevek tells them, "you the possessors are possessed. You are all in jail. Each alone, solitary, with a heap of what he owns" (184). They have a similar blind spot when it comes to women: "they...contained a woman, a suppressed, silenced, bestialized woman, a fury in a cage....They knew no relation but possession. They were possessed" (60). By sending the revolutionaries who recognized and criticized this state of affairs to the moon, the Urrasti have succeeded in "closing themselves off from history" and thereby allowing the revolution to reemerge on Urras (Bittner, *Approaches* 122).

Shevek's hosts try to prevent him from seeing the dark side of Urras but, increasingly frustrated by their political maneuvering, he eventually manages to escape and join in the demonstration organized by the new revolutionaries who consist of Odonians, syndicalists, libertarians, and other anti-centralists. He realizes that the spirit of the revolution started by Odo has been kept alive, though dormant, on Urras. One of the revolutionary leaders asks him: "Do you know what your society has meant, here, to us, these last hundred and fifty years?...To know that it exists, to know that there is a society without government, without police, without economic exploitation, that they can never say again that it's just a mirage, an idealist's dream!" More importantly "they've got no Moon to buy us off with this time. We make justice here, or nowhere" (*The Dispossessed* 237). Shevek agrees to write and speak in support of the demonstration. His presence helps the revolution go forward. At the end, he finally arrives at the theory that unifies sequency and simultaneity, which makes it possible to build the "ansible," a device that permits instantaneous communication between any two points in space. Shevek takes asylum in the Terran embassy so that he can give his discovery to Earth "and to Hain and the other worlds -- and to the countries of Urras. But to you all!...So that you cannot use the truth for your private profit, but only for the common good" (277). He thereby starts not only Urras but the universe at large on the journey towards a dispossessed future.

But Shevek's journey also changes Annares. Just as the Urrasti must recognize and embrace Annares as their future, so too the Annaresti must remember and acknowledge their past on Urras. They must complete the journey by returning to history and reliving the revolution. The most important reason is that in the course of time, their anarchism has gradually given way to subtle, but nonetheless oppressive, forms of control. Among Shevek's first observations about one of his Urrasti hosts is that "there were walls around his thoughts, and he seemed utterly unaware of them,

though he was perpetually hiding behind them” (13). But he realizes that the Annaresti have done the same thing: “We’ve made laws, laws of conventional behaviour, built walls all around ourselves, and we can’t see them, because they’re part of our thinking” (265). For example, the PDC (Production and Distribution Coordination) is meant to be a network of administration and management. In principle, “they do not govern persons; they administer production” (61). But in practice, they have become a bureaucracy concerned with the “use of power to maintain and extend power” (134). Shevek realizes that his people have allowed public opinion to rule them: “the social conscience completely dominates the individual conscience, instead of striking a balance with it. We don’t cooperate -- we *obey*.... We fear our neighbour’s opinion more than we respect our own freedom of choice” (265). By refusing to change and to acknowledge the primacy of personal initiative, Annares is in danger of ceasing to be utopia. Shevek and his friends take the first step towards rectifying matters by creating the Syndicate of Initiative, which establishes contact with Urras and eventually allows Shevek to travel there. Their initiative succeeds in its goal: “to shake up things, to stir up, to break some habits, to make people ask questions. To behave like anarchists!” (309). For them this is a true return to the roots of their society, which, “properly conceived, was a revolution, a permanent one, an ongoing process” (142).

The idea of utopia as a permanent revolution, implicit in all the texts we have examined, becomes explicit in Le Guin’s novel. Creators of utopia must deal with “the hostility and threats which alternate communities and states face from their neighbours” (Fitting 163) and they do so using different strategies. Wells eliminates the threat by asserting that his utopia is global. Huxley allows Pala to succumb to the militarism of the world surrounding it. Piercy shows that “external threats contribute to the society’s inner cohesion as well as demonstrating how far its members are prepared to go to defend it” (Fitting 163). Le Guin, however, is more concerned with

showing that the most important threats to utopia come from within. Complacency, stagnation, refusal to change – these are the dangers that the inhabitants of utopia must guard against. For this reason, she emphasizes that Annares is a utopia that is “alterable *in essence*” (Bittner, *Approaches* 120). And it is utopia’s essential dynamism, its capacity for permanent revolution, that gives meaning to the novel’s central metaphor of the journey.

In the world of *The Dispossessed*, the journey and return take place not only in space, but even more importantly, in time. The structure of the book asks us to move back and forth between Urras and Annares, but also back and forth between the present and the past. Shevek’s life story thus becomes another analogue of the union of sequency and simultaneity. Within each chapter, each period of his life unfolds in linear progression, but in the novel as a whole, past and present are juxtaposed so that they progress simultaneously. James Bittner describes the novel thus: “with a chiasmatic narrative structure that connects beginning and end... *The Dispossessed* is a marriage of the etioloical and teleoloical impulses” present in Le Guin’s work as a whole (*Approaches* 119). Past, present, and future exist in a complementary relationship and are always in flux.

Shevek tell the Urrasti: “You are our history. We are perhaps your future. I want to learn, not to ignore” (60). For him, accepting the past means being conscious of history by preserving memory. The early settlers of Annares had tried to make a new beginning by forgetting the past. But they were “wrong...to deny their history, to forgo the possibility of return. The explorer who will not come back...to tell his tale is not an explorer, only an adventurer; and his sons are born in exile” (72). By going back to Urras, Shevek ends his society’s exile and begins the process of “binding time into a whole” (269). As Ruppert points out, “utopia may, at times, entail a going backward in history” (143). By doing so, Shevek is able to recover the original impulse for revolution and renewal.

Le Guin has said that the Circle of Life which symbolizes the Odonian movement is “just a circle – not quite closed” (quoted in Bittner, *Approaches* 149). Shevek’s journeys in the novel also describe such open circles for he always returns, but not to exactly the same place. The Urras to which he travels is the same as when his ancestors left it, but it is also different if for no other reason than that it is now in contact with other planets, including Earth and Hain. The Annares to which he returns at the end of the novel is also both the same as and different from the one he left, for it too has now established contact with other worlds. Utopia, Shevek concludes, cannot be repetitive and atemporal for then it will not be “a journey and return, but a closed cycle, a locked room, a cell” (*The Dispossessed* 268). It will be confined within the very walls that he has sought to unbuild. If each journey is an open circle, then the sum of all the journeys, from Urras to Annares, back to Urras, and back again to Annares, is one open circle leading to another and yet another. It is, in other words, a spiral. The spiral is indeed a fitting image for the conception of utopia in *The Dispossessed* for it is both open-ended and ever-widening in scope. Its open-endedness allows for dynamic change, while its scope admits multiplicity and difference.

For those who live in dystopia – the people of Urras and of Earth, both of whom have persisted in denying the future – achieving utopia means believing “in change, in chance, in evolution” (281) and that involves making and keeping promises. According to Odo, “a promise is a direction taken, a self-limitation of choice....if no direction is taken, if one goes nowhere, no change will occur” (197). The promise, the idea of fidelity, is essential to the exercise of freedom. In the end, Shevek tells the Terran ambassador Keng: “We cannot come to you. We can only wait for you to come to us” (281). Only when the Urrasti and the Terrans (which include the reader) come to believe in Annares, will they be able to build what Shevek – and Le Guin – consider

utopia: “the fragile, makeshift, and improbable roads and cities of fidelity: a landscape inhabitable by human beings” (268).

Although for the greater part of the novel Urras serves as a counterpart of twentieth-century Earth in its materialism, chauvinism, and militarism, the introduction of “Terra” near the end is highly significant because it places the fictional world of the novel within the real world. In doing so, it reminds the reader that she too is part of the field of utopian endeavour. We find out that the story takes place several hundred years into our future and that Earth has all but collapsed in the meantime. In response to Shevek’s assertion that for him “Hell is Urras,” Keng says: “To me...Urras is the kindest, most various, most beautiful of all the inhabited worlds.... I know it’s full of injustice, greed, folly and waste. But it is also full of good, of beauty, vitality, achievement. It is what a world should be! It is *alive*, tremendously alive -- alive, despite all its evils, with hope.” Earth, by contrast, has lost its capacity for hope:

My world, my Earth, is a ruin. A planet spoiled by the human species. We multiplied and gobbled and fought until there was nothing left....We destroyed ourselves. But we destroyed the world first.... We failed as a species, a social species.... Well, we had saved what could be saved, and made a kind of life in the ruins, on Terra, in the only way it could be done: by total centralization.... We can only look at this splendid world, this vital society, this Urras, this Paradise, from the outside. We are capable only of admiring it, and maybe envying it a little....We forfeited our chance for Annares centuries ago, before it ever came into being. (280)

For the Terrans, only the present as it exists in Urras is real. Annares is a future that can never be reached, as their own past can never be changed.

However, as Shevek tells Keng, the Terrans do not understand time: “Things change, change. You cannot have anything.... And least of all can you have the present, unless you accept with it the past and the future. Not only the past but also the future, not only the future but also the past! Because they are real: only their reality makes the present real” (280-1). The novel allows us as

readers to integrate past, present, and future by making us aware of the connection between our world and the fictional world of *The Dispossessed*. Terra is our future. But Urras is also a possible future, as well as a representation of our present. And Urras and Annares are stages in Terra's future while also coexisting with it in the present. The confusion apparent in this state of affairs hints at the inherent difficulty of describing a world where simultaneity and sequency are united.

I spoke in Chapter 1 of complementarity as the relationship between equally true and necessary, but mutually exclusive, elements within a field. Shevek's theory of simultaneity/sequency describes a unified field in which time is both an arrow and a circle. Without the arrow, there would be "no change, no progress, or direction, or creation." Without the circle, there would be nothing but a "meaningless succession of instants, a world without clocks, or seasons, or promises" (180). Neither one alone will explain our experience of the world. Only by "[asserting] two contradictory statements about the same thing" (180), can one achieve a "complexity that includes not only duration but creation, not only being but becoming, not only geometry but ethics" (182). Shevek's field theory of time allows him to find complementarity in the seemingly contradictory facets of his world.

Utopia cannot be achieved once and for all. H. G. Wells said that "Each generation will have its new version of Utopia" (*A Modern Utopia* 354) and in the universe of *The Dispossessed* this is indeed the case. Utopia seems to be a matter of degree. In matters of moral behaviour and social organization, Annares is closer to utopia than Urras, Urras is closer than Terra, and even Terra is closer than present-day Earth. Physically and materially, the order is changed. Urras and Annares change places as do Terra and our Earth. But instead of judging these worlds hierarchically, it is possible to see that the relationship between Annares and Urras, between the twin worlds and

Terra, between Terra and the reader's Earth, is complementary. In each case, the two worlds coexist in time, but they also represent successive stages in the development of the same world. In this universe, utopia is truly "nowhere." It exists only in the field of possibilities that joins eutopia and dystopia.

Perhaps the most important aspect of complementary thinking is that it allows one to perceive unity in diversity by transcending parts in favour of the whole. Shevek sums it up when he says: "If you can see a thing whole, it seems that it's always beautiful. Planets, lives...But close up, ... you lose the pattern" (153). Those critics who claim that Le Guin "questions the validity of the utopian project itself" (Fitting 162), or read her novel as "a penetrating critique of all utopian experience" (Brennan 117), fail to see the true importance of her achievement. Le Guin does not deny the utopian impulse but redefines it. She shows that every world has both eutopian and dystopian potentials. It is in the conjunction and interaction of these potentials, in their complementary relationships in the field of time, that a true utopia, dynamic and heterogeneous, can come into being.

The Marriages between Zones Three, Four, and Five

Like the other two novels I have examined in this chapter, Doris Lessing's *The Marriages between Zones Three, Four, and Five* also depicts utopia and dystopia side by side. The tale is the second book in Lessing's *Canopus in Argos: Archives* series. The first volume, *Shikasta*, is a cosmic rewriting of life on Earth, (named Shikasta in Lessing's cosmography), spanning human life from its earliest beginnings through "World War III" and its aftermath. It consists of a reworking of "the Old Testament, Darwinian theory, and history, accommodating them to each other by the related ploys of focusing on the Fall rather than on the Creation, and subordinating

evolution to the necessity to which planets themselves are subordinate” (Pickering 144). Earth’s evolution is guided by the Canopeans, a species of benevolent imperialists in the service of Cosmic Harmony or Necessity.

The precise relationship between Shikasta and the locales of *Marriages* is unclear, to say the least. In the first novel, the zones are seemingly ethereal concentric spheres surrounding Shikasta, with Zone Six serving as a sort of gateway into Shikasta itself. In the second novel, however, the zones have physical existence and are in various ways similar to our Earth. Although there is no mention of Canopus by name, the inhabitants of the zones are subject to the Providers, superior beings whose orders are implicitly obeyed. Apart from these two points – the naming of the zones, and the existence of powerful Providers – there is little connection between the two novels. Despite the suggestion of a possible renewal of civilization at its end, *Shikasta* is largely pessimistic in its world view. In contrast, *Marriages* is hopeful and positive.

Stylistically, *Marriages* is, as Lessing herself has said, “a fable or myth. Also, oddly enough, more realistic” (Preface, *Shikasta* ix). Its realism lies largely in its characterization, while the setting and the plot are for the most part mythical. Al-Ith, the queen of Zone Three, and Ben Ata, the king of Zone Four are ordered by the Providers to marry each other. The two zones are as unlike as it is possible to be. Zone Three is a feminist utopia “in the sense of being a feminized world, one in which women are independent and men do women’s work” (Rowe 197). With the disappearance of a sexual division of labour, women and men enjoy not only equality but friendship. Their social structures are peaceful, democratic and nurturing and they have developed the “feminine” qualities of responsiveness and attunement to the world around them to the point where they can communicate fully, not only with one another, but even with their animals. Zone

Three is a realm of “unalienated activity” which shows itself in a “harmony [which] is everywhere apparent” (Rowe 197).

Zone Four, on the other hand, is a militaristic society whose people suffer poverty and hardship because all their resources, although rich and plentiful, are used to support a war machine whose task is to defend the zone against non-existent enemies: “An economy entirely geared to war...but there is not much war...hardly any fighting...yet every man a soldier from birth till death” (*Marriages* 111). Moreover, Zone Four is a strict patriarchy where men and women are separated in all areas of life, including work, child-rearing, and cultural activity, coming together only for more or less violent sexual encounters. The zones, including Two and Five which are introduced later, are contiguous and yet “separated by differences in geography, social organization, modes of consciousness, and the very air itself” (Rubenstein 60). Initially, the inhabitants of each zone even need special shields to protect them against the air of the other zones when they enter them.

Even a cursory overview such as I have provided shows that *Marriages* has more in common with Le Guin’s *The Dispossessed* than with Lessing’s own *Shikasta*, especially in its approach to history. Although its narrative form is by no means linear, *Shikasta* depicts human history as a linear retrogression from an initial state of plenitude and harmony to the “Degenerative Disease,” which is Lessing’s version of the Fall extended through time. *Marriages*, however, like *The Dispossessed*, depicts historical change through the portrayal of worlds that, while representing different stages in the development of a utopian society, exist side by side. Another way of saying this is that both novels represent temporal change spatially, thereby eliminating the traditional distinction between utopias removed in time and those removed in space.

Despite the basic similarity in their methods, there are important differences between Lessing’s and Le Guin’s visions of history and, by extension, of utopia. In Le Guin’s novel, the

inclusion of Earth in the same universe as Annares and Urras suggests that utopia is real and physically reachable, though it may be very distant. In Lessing's *Marriages*, on the other hand, there is nothing that directly connects the zones to the real Earth. As Jean Pickering points out, any inference about the position of the zones within Lessing's Canopean universe "rests on a supposition of cosmographic consistency rather than on textual evidence" (152). The zones' importance is primarily mythical. Gregory Benford says that for British writers of utopias since the 1960s "the future is more approachable through dreaming than through extrapolation"(8). This is clearly the case in Lessing's *Marriages*, where the emotional and psychological truth of utopia is more important than the external fact of it.

Lessing conveys the precedence of perception over reality in a number of ways, most obviously through the tale's narrator, who is the first character we meet. One of the "Chroniclers and song-makers" of Zone 3 (*Marriages* 11), Lusik intersperses his account of the marriage between Al-Ith and Ben Ata with descriptions of the way artists of both zones depict various important episodes in the story in their works of art. His emphasis, at first, is on the differences between the way events happen and the way they are shown by the Chroniclers. His stance is that of one who has privileged access to the "truth" of matters and is qualified to judge their artistic depictions. For instance he describes Al-Ith's journey, escorted by Zone 4 soldiers, to her husband's land:

She and Jarnti set off across the blackness of the plain towards the first of the glittering lights.

This scene is always depicted thus: there is a star-crowded sky, a slice of bright moon, and the soldier striding forward made visible and prominent because his chest armour and headpiece and his shield are shining. Beside him Al-Ith is visible only as a dark shadow, but her eyes gleam softly out from her veil. (25)

But he immediately goes on to point out that “it could not have been anything like this” because “the wind was straight in their faces, strong and cold” and they were both wrapped up in their cloaks, their faces hidden (25). Similarly, he later describes a scene between Al-Ith and Ben Ata, when Al-Ith is overcome by the vast differences between their two zones: “In song, in picture, and in story, this scene is known as ‘Al-Ith’s Tear.’ It is popularly believed to have to do with the tender emotions of the pair when she told him she was pregnant, *but the truth of the matter is as I tell it here*” (95-6, emphasis added).

Later, however, he comes to acknowledge that the portrayals by the artists in Zone Three, and even Zone Four, capture the truth even though they may diverge somewhat from the reality of the situation. For example, shortly before the birth of their child, Al-Ith and Ben Ata travel together around Zone Four. The Zone Three artists’ early representations of this scene are crude caricatures that show Al-Ith as a prisoner among the barbarians of Zone Four. Later, the artists of both zones come to concentrate on Al-Ith’s gold dress which shows off “the evidence of this marriage, the strong triumphant curve of her stomach” (181) and thus symbolizes her position as the queen, now, of both lands. Lusik concedes that perhaps those “pictures that have the child already born...have got nearest” to the truth of that scene (185).

Finally, having accomplished the Providers’ purpose for them, the couple must separate.

Lusik once again describes Al-Ith’s departure:

Through the long dark night goes Al-Ith.... Her horse is slow and careful under her. And all night the tears run down her face.
So she is pictured. And so she was. (230-31)

At last, there is a scene in which all can agree that the inner truth of an event coincides with its outer reality. Lee Cullen Khanna, who discusses this process in terms of the importance of art in

the novel, concludes the following: "Lusik has moved from pride in his own individuality as the best singer, to acknowledging the general superiority of the artistic tradition in which he works, to questioning that tradition" ("Truth and Art" 130). To put it another way, it becomes clear that, as Chronicler, Lusik has moved from believing in the absolute correctness of his version of truth to acknowledging the truth in other perceptions of the events he describes.

The importance of the Chronicler's development resides chiefly in its demonstration of the idea that telling a story, or writing a history, is a process which must, of necessity, admit a variety of viewpoints. He reminds us that "language plays a central role in the construction of so-called 'truth' ...thus truth is never absolute" (Armitt 127). Lusik eventually recognizes that he as historian is as much a part of the historical field which he is describing as the actors in his story are. "What are any of us when we call ourselves Chronicler or song-maker, queen or farmer, lover, tender of children, the friend of animals?" he asks. "We are the visible and evident aspects of a whole we all share, that we all go to form" (*Marriages* 242). Recognizing the truth of history depends on the recognition of the complementarity of all the different "guises, aspects, presentations" that manifest "what we all are at different times, according to how these needs are pulled out of us" (242, original emphasis). An implicit message of Lessing's novel seems to be what many modern scholars have theorized: that complementarity is an inherent characteristic of language and the very quality that allows language both to limit and to liberate knowledge. As Niels Bohr suggested, every use of language requires the choice of a specific viewpoint which necessarily results in a partial and incomplete description of reality. A fuller understanding of the world requires the simultaneous adoption of a multiplicity of viewpoints.

In *The Marriages Between Zones Three, Four, and Five*, Lessing addresses this need for bringing together different points of view through the concept of marriage. Her novel's title,

cumbersome as it may be, is appropriate in that it identifies her central concern. Part of the richness of the novel derives from the variety of ways in which marriage is explored. At one level, the novel is about the struggles and rewards of the union between a man and a woman. Lessing shows, with insight and compassion, the stages Ben Ata and Al-Ith go through as they get to know one another, overcome their differences, change each other, and grow together until “everything come[s] into balance between them” (246). At this level, sex is not only an indispensable part of the marriage bond, it is, even more importantly, an indicator of the state of the marriage. Initially, for Ben Ata the sexual act is one of conquest and domination. Only gradually does Al-Ith teach him about “the answer and question, the mutual response and counter-response” of lovemaking between equals (88) and they come to make love with “a lightness, an impulsiveness ...a grace” (227) that is a sign of the maturation of their marriage. At this point, when they have become fully united in their marriage and thereby set in motion the integration of Zones Three and Four, Al-Ith is ordered by the Providers to return to her own zone and Ben Ata is ordered to marry Vahshi, the queen of Zone Five. This second marriage achieves in time the same kind of integration between Zones Four and Five until, finally, all three form complementary parts within a larger whole.

As this wedding of the zones indicates, marriage in the novel is more than just human mating; it is a metaphor for the convergence of opposites in all areas of life. Al-Ith recognizes that her and Ben Ata’s son, Arusi, is not an extension of either of them but an embodiment of “the possibilities of them both.” She thinks of the child: “this union of incompatibles could not be anything less than a challenge” (179). Like a number of other names in the novel^{*}, the child’s name, Arusi, is a

^{*} Other examples include: Vahshi (“wild”), the savage queen of Zone Five; Andaroun (“inner sanctum” or “women’s quarters”), the capital of feminine Zone Three; Shikasta (“broken”), Earth’s name after its bond with the Canopeans has been broken. Although I have not come across any statements by Lessing herself indicating that her sources for these names are Persian words, the correspondences seem too exact for them to be merely coincidences.

Persian word which means “marriage.” Thus marriage itself is seen as a union of incompatibles and its range is extended beyond physical coupling to the coming together of any two (or more) separate and even antagonistic entities to form a whole that is greater than the sum of its parts.

Roberta Rubenstein sees the marriage between the zones as a mystical or even alchemical marriage and goes on to discuss a variety of alchemical allusions in the novel. For instance, she points out that “the marriage of Sulphur and Quicksilver, Sun and Moon, King and Queen, is the central symbol of alchemy” (65) and applies this idea to the union of Ben Ata and Al-Ith by pointing out the associations between them and sun and moon, gold and silver, day and night, and so on. Interesting as all of this is, Rubenstein’s conclusion is more valuable than the details of her argument. She says that the novel not only comments on the interconnections of male and female as “expressions of equal and opposite powers,” but also emphasizes “the necessity for their ‘marriage’ or integration as a precondition for subsequent spiritual growth” (63). There is certainly a strong sense that Al-Ith and Ben Ata, and later Vahshi, grow as a direct result of their marriages. Vahshi, initially wild and unruly and concerned solely with sensual matters, is enabled through her association with Ben Ata to “allow the beginnings of thought to live in her mind” (264) and begins to change her ways. Ben Ata recognizes at the end that he has been influenced by Al-Ith and her ways “so that he could never again act without thinking, or be without reflection on his condition” (*Marriages* 259). And Al-Ith, in the course of her marriage to Ben Ata, breaks out of the complacency that had hitherto prevented her from looking beyond the borders of her own land, and eventually is the first person to go on to Zone Two, thereby extending the scope of the union between the zones.

Important as the personal growth of the characters is, the greater significance lies in the changes that their kingdoms undergo. After all, as the novel’s title suggests, the marriages are not

between mere individuals but between entire zones. In keeping with *Marriages*' mythic dimension, rulers in the tale are essentially linked to their lands. Travelling around Zone Three, Al-Ith at one point thinks about "how long had she roamed in it, summing up and accomplishing in herself all its potentials" (150). Like her, Ben Ata and Vahshi are also "representatives and embodiments of their respective countries" (61). The changes all three go through are translated into events in their realms, and the lessons they learn transform the ways of their people.

A number of critics have read *Marriages* as a feminist utopia and even gone on to lament Al-Ith's "victimization at the hands of a hostile system" (Armitt 126). Equating utopia with "pat answers," Ellen Peel seeks in the novel evidence of a skeptical feminism that would challenge both patriarchy and "the unitary concept of utopian perfection" (34-5). In her view, the novel "begins, rather than ends, with a utopia" (35). While Lessing undoubtedly endorses the indispensability of feminine qualities to the creation of a good society, readings such as this that reduce the novel to an opposition between feminist Zone Three and patriarchal Zone Four are surely missing the point. The main problem with Peel's argument is that she bases it on the traditional narrow definition of utopia as static and uniform, a definition that I have tried to challenge throughout this thesis and that Lessing challenges vigorously.

Marriages does not start with utopia; it starts with the ingredients for creating utopia. Lessing shows the strengths, but also the weaknesses, of all three zones and, interestingly, it is the weaknesses in each case that are most thoroughly explored. Although peaceful, prosperous Zone Three may seem like an ideal land at the beginning, it soon becomes clear that it suffers from problems, just as warlike, poverty-stricken Zone Four does. Lessing emphasizes the point by showing that all the living creatures in both zones suffer because of what has gone wrong: "Animals have ailed, and lost their fertility. And we, too, have not been as we were" (107). All of

nature is interconnected in this world and it can be healed only when each zone solves its problems by discovering its true purpose and fulfilling it.

Zone Four's problem is that all of its potential is untapped because it has neglected the cultivation of the land for the sake of perfecting a military hierarchy. As Al-Ith tells Ben Ata:

It isn't that you don't have all the arts and crafts in Zone Four -- but you don't practice them.. You don't develop them. How can you when all your men...are away playing war? ... Your women can't do everything while your men play games. And so your wealth stays in the earth and the rocks and in the thoughts of the people. (249-50)

They have substituted discipline and repression for sharing and equality to the point that the women of Zone Four have developed their own private beliefs and secret rituals. For example, people in Zone Four, which is in the lowlands, are forbidden to look at the mountains of neighbouring Zone Three. Those who "cloud gather" are punished by having heavy helmets put on their heads so they cannot look up. In their secret gatherings, the women sing the ancient songs that speak obliquely about Zone Three and they train themselves to look up at the mountains. Al-Ith's visit to one of these festivals is a turning point, after which Zone Four gradually begins to realize that "what the men should be doing was not making war.... That was a displacement of something else.... 'to climb the mountains' was the proper activity of men" (174). In the end, it becomes clear that climbing mountains means looking towards Zone Three -- both emulating its ways and resuming interaction with it so that the two zones are no longer inimical as they had been before the marriage of their rulers.

Zone Three needs to change too because, although it has progressed far beyond its neighbour, and is in one sense Zone Four's future, it has become insular and stagnant. The people have not only forgotten about Zone Four, they have also forgotten about their other neighbour, Zone Two, which is *their* future. As Al-Ith tells Ben Ata: "You need punishment helmets to prevent your

people looking *there* [Zone Three]...but our people never look beyond our borders, and this is without any punishments or forbiddings. *It never occurs to us. We are too prosperous, too happy*" (95). By observing the people of Zone Four, Al-Ith comes to understand herself and her own people better. When she returns home, she begins to see faces that had previously seemed "healthy peaceful faces" as "fat and mindless" (235). They are complacent and self-satisfied as she had been before. But her marriage has changed her so that she now looks towards Zone Two and the change in her gradually creates a change in others. Those who "suffered from an inability to live in Zone Three as if it was, or could be, enough for them" (297) are attracted to her and eventually follow her into Zone Two.

Of course, the differences between the zones remain even in the manner of their transformation. Whereas the change in Zone Four comes about through action -- Ben Ata disbanding his army, the women looking towards the mountains -- the change in Zone Three is largely one of feeling. As Lusik says, "it is through the unexpected, or the sidelong, or the indirect that truths come our way" (175), and the resulting transformation is gradual and, initially, far from universal. The people of Zone Three try to resist Al-Ith's influence. They, who previously knew nothing of soldiers or fighting, form a primitive army to keep people away from her and to prevent anyone from Zone Four from entering their land. Murti-, Al-Ith's sister and successor as queen, complains to Ben Ata who has come to visit his wife that "this realm of ours was once at peace. Content. No one had thoughts of change and destruction." Ben Ata's answer epitomizes the lesson he has learned and helped Al-Ith to learn: "content is not the highest good" (291).

Although they are not described in the same detail, similar changes take place in Zone Five. At first, Vahshi argues for what seems to Ben Ata to be "unrestrained freedom in all things, licence

-- anarchy." She sees in him what he saw in Al-Ith: "the law. Self-satisfaction. Contentment. Not to say -- smugness" (292). But little by little, she and her people also change and learn discipline at the same time as they impart some of their energy and vitality to Ben Ata and his people; they become "a balance for each other"(265). The daughter born of the marriage of Vahshi and Ben Ata is destined to be the ruler of Zones Four and Five in partnership with the son, born of the marriage of Al-Ith and Ben Ata, who will rule Zones Three and Four, thereby strengthening the link between the three zones.

Through their marriages, the zones learn that "what goes on in one zone affects the others...even when we believe we are hostile, or forget everything that goes on outside our own borders" (176). When they finally recognize that Zone Three's equality, Zone Four's discipline, and Zone Five's vitality are all necessary, there is movement and exchange between them and all three are energized and transformed. Inclusiveness and diversity replace exclusiveness and insularity. The true utopia is the one described at the very end of the novel:

There was a continuous movement now, from Zone Five to Zone Four. And from Zone Four to Zone Three -- and from us, up the pass [to Zone Two]. There was a lightness, a freshness, and an enquiry and an inspiration where there had been only stagnation. And closed frontiers...

The movement is not all one way -- not by any means. (299)

The description is reminiscent of Al-Ith and Ben Ata's lovemaking which, at the culmination of their marriage, had contained "a lightness, an impulsiveness,...a grace" (227). The novel thus closes with a tacit equation of utopia with marriage. Like marriage, utopia is a complementary state, a union of opposites in a relation of equal sharing and interchange. And appropriately, utopia is situated "no-place," but rather in the movement between places.

The repetition of the word "movement" in the passage is significant. Lessing is not satisfied with a static blending of the diverse elements of the zones but insists on a dynamic harmony

between them. The novel thus combines the two principles of heterogeneity and dynamism into that of intercourse. The pun is implicit in the novel itself, where Lessing explores a theme appearing elsewhere in her work: “sexual relationships as discovery, extension, evolution of the self” (Pickering 154). But clearly, in this novel, the implications go beyond mere physical copulation. As the zones “share in the marriage, in thought, and in sympathetic support -- and, of course, in emulation” (*Marriages* 89), each society as a whole extends and evolves and discovers what lies beyond its frontiers.

The process of change, however, is disquieting for many because it brings what they consider chaos into both realms. Jarnti, one of Ben Ata’s generals, sees the dissolution of the military structure in Zone Four as a denial of all meaning in his life. He is being told “that the army is nothing, and that all our old ways we were so proud of were nothing and that the great thing is to build barns and make drains. But that makes all the past nothing, too.... Just puffs of air and old rubbish” (289). Unable to cope with the new order, he ages prematurely and withdraws from life. Similarly in Zone Three, Murti, trying to keep things as they were in the past, puts her sister Al-Ith under guard to prevent her from “creating disorder” (292). But by the end it becomes evident that in the struggle to grow beyond self-satisfaction and stagnation, dynamism and even chaos are necessary elements.

Marsha Rowe observes that in *Marriages* “change is presented as the nucleus of things: no ‘realism’ appears constant. It is illustrated as a time-and-again dialectical continuity of process ...reaching resolution only to have to begin again at a new level” (194). There is certainly a clear sense that each zone marks a new level in a process of development. Interestingly, however, the process, though continuous, is not linear. Rather, the movement of the plot follows a pattern of bifurcation which is characteristic of nonlinear or chaotic systems. Chaos researchers have found

that in physical systems, “a small change in one parameter” could push a system “across a bifurcation point into a qualitatively new behaviour” (Gleick 291). The same is true of the zones in Lessing’s novel.

Even before the marriage, the inhabitants of the zones know that they are all part of one system. Lusik says: “That Zone Three was only one of the realms administered from Above, we knew. We did think, when we thought on these lines at all, of ourselves in interaction with these other realms, but it was in an abstract way” (*Marriages* 14). In reality, Zone Three ignores both of its neighbours, and the attitude of Zone Four towards *its* neighbours is one of purposeless and inconclusive aggression. After their marriage accomplishes its purpose of uniting their two zones as evidenced by the birth of Arusi, the visible embodiment of the union, Al-Ith and Ben Ata move in opposite directions. The marriage serves as the “change” which pushes the whole system into radically new behaviour by creating a bifurcation in it. Al-Ith advances further and further towards Zone Two, and Ben Ata marries the queen of Zone Five. As a result, Zone Three can no longer ignore its neighbours but must acknowledge and create links to them, and Zone Four must change hostility towards its neighbours into cooperation and peace. Many people in the zones perceive this change as the onset of disorder and chaos, which, in a sense, it is. However, this is chaos in its most modern sense, “randomness with its own underlying order” (Gleick 252). It is only by undergoing this process of change that all the zones can understand the Providers’ “Order” as an “inner listening to the Law” of cosmic harmony (*Marriages* 74).

The boundary, as we have seen in many of the works we have examined, is important both to chaotic systems and to utopia. The study of boundaries between attractors (the steady states towards which a dynamic system is pulled) shows that they serve as thresholds where “a system chooses between competing options” (Gleick 233). Significantly, Al-Ith and Ben Ata spend much of their time, and make many of their decisions, at the border between their two realms. Initially, the boundary is a dangerous place for them: they cannot cross it without suffering debilitating effects. For a long while, they come

together for brief periods at a time, only to be ordered apart by the Providers. But there finally comes a point – almost exactly half way through the novel – when they face each other across the boundary of their zones and realize that they no longer belong to their previous worlds but to the new reality they have created together. This is when Al-Ith first experiences the reality of her child, feeling “the creeping flutter that announced to her the child was more than a bundle of accumulating cells” (*Marriages* 153). After this, she and Ben Ata remain together until after the birth of Arusi. In effect, it is at this encounter along the boundary that they decide to commit themselves to the changes initiated by their marriage. Later, the same pattern is repeated. Ben Ata meets and marries Vahshi at the border between Zones Four and Five, and Al-Ith spends an extended period near Zone Three’s border with Zone Two until she is ready to pass into it. Remembering Gary Saul Morson’s definition of utopias as “boundary works” (48), it is appropriate that utopia in this novel should have its genesis in the boundary between the different realms of possibility.

The Marriages between Zones Three, Four, and Five is a suitable novel with which to end the discussion of individual utopias because it combines in its theme and structure the two principles -- diversity and dynamism -- that I have sought to explore in these works. It strongly affirms the necessity of bringing about the union of incompatibles which is at the heart of complementarity and at the same time pursues one of the goals of the science of chaos which is to understand systems globally, comprehending “the entire realm of possibilities at once” (Gleick 47). The novel thus achieves within itself a kind of marriage between complementarity and chaos which stands as a fitting emblem of what all the utopias in this study accomplish to a greater or lesser extent.

SCIENTIFIC THEORIES AND THE LITERARY UTOPIA
DIVERSITY AND DYNAMISM

The study of science and literature in conjunction with one another means that we can draw upon scientific theories and discoveries to formulate new ways of approaching literary texts. That is what I have attempted to do in the thesis so far. But the relationship between literature and science is reciprocal, which means that we can also use the insights provided by works of literature to better understand scientific concepts and to extend their scope. This is what I intend to explore in this chapter. What does utopian fiction teach us about the application of complementarity and chaos within the cultural field? Of course, my primary interest remains in the literary aspect of the works but if it is true that the study of both literature and science would benefit from less reductionism and more inclusiveness, then it is beneficial to consider ways in which the literary enactment of scientific concepts widens the meaning and the implications of these concepts.

Scientists sometimes object to the appropriation of scientific terminology by lay people (in this case, literary critics) for their own purposes. They construe the position taken by scholars in cultural studies, that science is a “mode of discourse,” as an attack upon the validity of science. But, as George Levine explicitly states, science “matters powerfully to us, for better or worse, in the way we live, the way we think, and the way we imagine. There is no literature more important.” Even if we accept that it is “merely one of many competing discourses...we need nevertheless to consider the nature of that discourse in great detail” (24-5). In other words, a discussion of science and literature that would be as convincing to scientists as it is to literary scholars needs to recognize the unique contribution of science to human knowledge.

However, it is also important to recognize that scientific knowledge does not remain pure and unchanged once it enters the broader cultural field. Science may continue to assert the powerful “epistemological authority... of objectivity and disinterest,” but it cannot control the circulation of its terminology in altered form: “our vocabularies are thick with the languages of science. Most of what we say has lost its scientific connotations. ‘Gravity’ is no longer Newtonian, ‘relativity’ Einsteinian, or ‘atomic’ Daltonian” (Levine 8). The same is becoming increasingly true of “complementarity” and “nonlinearity.” Moreover, the traditional meanings of a word such as “chaos” continue to resonate within it even when it is used in a technical context. Thus there can be no doubt about the usefulness of examining scientific terminology’s proliferation of meaning in other discourses such as that of literature.

I have talked about diversity and dynamism as the distinguishing features of a true literary utopia, and I have linked these two principles with field theory and chaos theory respectively. But in one sense these are shorthand terms, used for ease of reference, to describe complex ideas. The novels I have chosen suggest the real complexity of these attributes of utopia by the variety of their specific concerns and the multiplicity of the images they use to convey these concerns. A review of the novels’ depiction of diverse and dynamic societies sheds light not only on the representation of utopia but also on the implications of scientific concepts within the broader culture.

Field Theory

The most significant component of field theory, from my point of view, is the concept of complementarity, which I defined in the first chapter as the idea that various ways of talking about experience may each be valid and necessary for the adequate description of the world, and may yet be mutually exclusive. Complementarity implies that we cannot fully understand a phenomenon

unless we understand its seemingly contradictory manifestations, because even though it is impossible to observe these manifestations simultaneously, together they present a fuller description of the phenomenon than either taken alone. The important thing to remember is that complementary pairs are not isolated opposites. They are integral parts of a larger whole, the field in which they act and interact. The fact that they are mutually exclusive is a function of our position as observers. Since we cannot observe without a viewpoint, and since we must describe our observations through language, it is inevitable that our various descriptions of reality will be, at least partly, contradictory. We therefore need to combine the multiplicity of viewpoints in order to begin to understand reality in a way that is holistic rather than fragmentary.

In the case of literary utopias, one of the insights afforded by complementarity is that neither eutopia nor dystopia provides a complete picture of society's potential. The "good place" and the "bad place" are each only a partial manifestation of utopia which, as the field encompassing them both, is truly "no-place." All the works we have examined acknowledge this view to some extent, a few explicitly, others implicitly. *Unveiling a Parallel*, *The Dispossessed* and *The Marriages Between Zones Three, Four, and Five* all depict parallel worlds that are imperfect or incomplete by themselves but have the potential to reach utopian perfection as part of a complementary pair. *Island* suggests the same idea but approaches it from a negative rather than a positive vantage point, showing that utopian aspirations that do not allow for intercourse between complementary viewpoints are doomed to failure.

Le Guin's *The Dispossessed* is the most explicit of all the novels in its presentation of complementarity for it not only illustrates it through the portrait of the twin worlds of Anares and Urras, it also draws attention to the concept through the emphasis on Shevek's general field theory of time. The theory, which seeks to unify sequency and simultaneity, is in fact a metafictional

guide to reading the novel as a whole. Shevek explains that “Sequency explains beautifully our sense of linear time, and the evidence of evolution.... But there it stops. It deals with all that changes, but it cannot explain why things also endure. It speaks only of the arrow of time -- never of the circle of time” (*The Dispossessed* 179). Simultaneity does speak of the circle of time; it deals with cycles, repetitions, and continuity. Shevek’s eventual success in arriving at a theory that unites the two within the same field is a symbol of the uniting of Annares and Urras into a true utopia.

Each of the planets is characterized by certain unchanging qualities. Their climates, lush on Urras, arid on Annares, largely determine the boundaries of their development. But each of them also experiences evolution and change. Neither society is what it was a hundred and fifty years ago when the initial separation of the two cultures took place. In some ways, they have moved away from each other. Urras has become more materialistic and marked by a greater gap between the rich and the poor than ever before, while Annares has become increasingly rigid and militant in its anarchism. In other ways, however, they have begun to move towards each other. The Odonian movement at the root of Annaresti society has been reborn on Urras, while some of the Urrasti “propertarian” tendencies are surfacing on Annares. Although Urras may be gradually evolving towards Annares -- Shevek tells the Urrasti: “We are your future” (60) -- Annares itself is not a fixed entity. It too is in flux, sometimes regressing towards the power politics and materialism of Urras, at other times glimpsing new vistas of possibility.

The most important thing about the two societies is that they exist simultaneously, though at first in isolation. By joining the previously disconnected planets, Shevek’s journey from Annares to Urras and back becomes the enactment of his field theory. Or, to put it another way, the theory explains the meaning of the journey. Just as Shevek’s temporal physics unites the apparently

contradictory concepts of sequency and simultaneity, so does his journey unite the seemingly incompatible worlds of Urras and Annares. Just as sequency and simultaneity are complementary aspects of the field of time, so Urras and Annares are complementary elements in the field of utopia. The novel suggests that the idea of “permanent revolution” (267), with its paradoxical pairing of the contrary notions of permanence and revolutionary change, describes both time and utopia.

Like *The Dispossessed*, Huxley's *Island* also draws explicitly on field theory as a point of reference for defining utopia. Here too, the key point is that of bringing together diverse and previously contradictory systems and traditions in order to create something new. Just as the original settlers of Annares built what they considered a utopian society based on Odo's philosophy, so too the people of Pala have built their version of utopia based on the theories of Dr. MacPhail and the Old Raja. There is an important difference between the two novels, however. In Le Guin's novel, the creation of a society on Annares is only the beginning of the gradual evolutionary process, involving the interaction of Annares and Urras, which will lead to the emergence of a true utopia, beyond anything possible on either planet alone. In Huxley's novel, on the other hand, the creation of Pala is seen as the final achievement of utopia; it is not so much a process as a deliberate activity undertaken by beneficent social engineers. In Le Guin's cosmos, utopia is indeed nowhere but in the relationship between complementary worlds. In Huxley's world, utopia may draw upon complementary elements from East and West but it is a complete entity, and an entity, moreover, that is isolated from the surrounding world. For this very reason, it cannot in the end survive. But although the ending of the novel depicts the death of utopia as represented by Pala, it also suggests the possibility of the birth of another kind of utopia. With the opening of the boundary separating Pala from the outside, utopian ideals, now supported by

practical experience, can be released into the world at large. Huxley, who is not nearly as hopeful as Le Guin, seems reluctant to admit the survival of utopia except in the most oblique way. As the tanks roll into Pala, they illuminate the statues of the Buddha, “the serenely smiling face of enlightenment.” As the roar of the engines fades, “disregarded in the darkness, the fact of enlightenment remain[s]” (*Island* 295). Tentative as Huxley’s optimism is, it draws upon the same impulse that is at the centre of Le Guin’s vision: the desire to unbuild the walls between hostile worlds and to dissolve the boundaries between contrary states.

Huxley and Le Guin both use field theory as the structuring principle underlying their novels. Huxley’s view of field theory is basically syncretic: he sees complementarity primarily as a combining of opposite ideas and principles within the limits of society. Le Guin, on the other hand, extends the scope of complementarity to cosmic issues dealing with time and space. She, who is after all not a physicist, leaves the physics of her temporal field theory rather vague, but at the metaphorical level, the union of sequency and simultaneity is a key concept that runs through many utopian works. These works recognize that while society moves towards a utopian ideal sequentially, in time, different stages along the way to utopia may also coexist simultaneously, in space.

The most interesting examples of this convergence of temporal and spatial realizations of utopia are provided by Jones and Merchant’s *Unveiling a Parallel* and Lessing’s *Marriages*. The authors are, chronologically, the first and last women whose novels I have examined. Separated by nearly a century, their works are remarkably similar in their concerns and, to some extent, even their approach. Both are primarily interested in the place of gender in utopia, and both address the issue by looking at not just two but three complementary societies. In each novel, the three states, which are also stages on the road to perfection, exist simultaneously, side by side. It is true that in

the case of *Unveiling a Parallel* two of the countries, Caskia and Thursia, are on Mars while the third, America, is on Earth. However, this not a science fiction novel and the choice of an extraterrestrial setting is simply a way of defamiliarizing the situation so that the authors can make their point more freely and forcefully. The apparent ease of travel from Earth to Mars and the perfect mutual understanding and compatibility of the two planets' inhabitants makes it reasonable to group the three countries together. Similarly in *Marriages, Zones Three, Four, and Five* coexist but also represent successive stages of development.

Another interesting point of convergence between *Unveiling a Parallel* and *Marriages* is that they both see a correspondence between the characteristics of society and those of human individuals. Jones and Merchant emphasize again and again the importance of nurturing all facets of a person's triple nature: her physical, intellectual, and spiritual capacities. By identifying each of the three countries with one of these facets, they imply that society needs to develop on all three fronts as well. Lessing also links personal growth with social development, but does so more symbolically. As befits the mythic dimension of the tale, the ruler of each of the zones is mystically united with her or his land. Through the marriages, such diverse qualities as Al-Ith's intuition and nurturing, Ben Ata's discipline and strength, and Vahshi's vigour and adventurousness are brought together and thereby diffused through all three of the zones.

I argued in the previous chapter that marriage, in Lessing's novel, represents the ideal form of intercourse between opposites and is thus a metaphor for utopia itself. Not only *Marriages* but also *The Dispossessed* emphasize that interaction and mutual exchange between different societies are what constitutes utopia. This brings us to another aspect of field theory which finds expression in a number of the novels: the idea that reality is characterized by an "absence of detachable parts, and the mutuality of component interactions" (Hayles, *Cosmic Web* 15). As Katherine Hayles

points out, according to this new paradigm, the interaction between different points in the field is multidirectional and “the language of cause and effect is inadequate to convey the mutuality of the interaction” (20). This means that we should regard the pattern within a field, rather than the objects making up the pattern, as “real.”

In Lessing’s novel, the purpose of marriage is the development of those who undertake it, but marriage as such is more important than the parties to it. Establishing a pattern of “sensuous exchange” (62) between equals marks the culmination – the true consummation – of a marriage, whether it be between individuals or entire zones. Thus marriage, which is another name for mutual, multidirectional interaction, takes on a life of its own. This is why the marriage between Al-Ith and Ben Ata continues to exert its influence even after Ben Ata marries Vahshi. But as I have already argued, marriage is also a metaphor for utopia in this novel. Consequently, utopia too becomes real by virtue of the pattern of interaction between diverse components within the social field.

The Dispossessed conveys the idea that mutuality of interactions constitutes utopia using a different metaphor, that of the voyage which is also return. One of the fundamental principles of Odonian thought is that “the means are the end” (*The Dispossessed* 116). The voyage is the means of establishing connections between people and worlds that are separated by space and time. Were it not for the voyage that allows interaction between them, both the individuals and the societies would remain isolated and unable to fulfill their true function as interconnected parts of a field. The interdependence of the parts implies the need for dependability and therefore fidelity. The realization of utopia depends on creating a pattern of “loyalty, which asserts the continuity of past and future, binding time into a whole” (269). In Shevek’s view, “the return [is] as important as the voyage out” (43) because it allows one to keep a promise and thereby complete a pattern.

The means in effect become the end as the voyage comes to symbolize the interchange that holds people and places within the field of utopia.

Huxley's *Brave New World* and Brackett's *The Long Tomorrow* also deal with field theory but only indirectly. Both of these novels show the need for interaction between complementary elements more by the absence of these qualities than their presence. Huxley depicts two rigidly segregated societies which preclude any possibility of intercourse almost by definition. The Savage Reservation exists as a repository for whatever Brave New World cannot assimilate. As a dumping ground, it must be contained and isolated. But the outcome of such isolation, as Huxley shows, is the creation of two varieties of dystopia. Bernard Marx's brief expedition into the Reservation and John Savage's more prolonged stay in London may seem to be tentative steps towards breaking through the barrier that separates them. They fail, however, because no one recognizes that the two societies are indeed complementary in nature. There can be no real interaction between them as it does not occur to either Savage or Bernard to learn something from the other culture. The only thing Bernard takes home from the Reservation is Savage, whom he treats as a souvenir or an artifact that he can use to raise his own status. Savage, in turn, is so overwhelmed by the new world that he does not even attempt to return home, much less to take anything with him. Thus, the one possible channel of communication between the two societies is preempted because of a failure of imagination.

The Long Tomorrow also presents the need for interaction by illustrating its lack. The situation is in many ways similar to that in *Brave New World*. America at large and Bartorstown each defines itself in opposition to the other. The majority of the people would sooner destroy anyone or anything associated with Bartorstown than entertain the possibility of interaction with it. By necessity, the people of Bartorstown have become isolationists in order to protect their lives and

their work. This situation would seem to be as much of an impasse as the one in Huxley's novel. Brackett is more optimistic than Huxley, however (indeed, one would be hard pressed to find in this study an author less optimistic than Huxley). In *Len*, she provides a character who is capable of moving back and forth between the two communities and appreciating what is valuable in each. Within the scope of the novel itself, *Len* remains constrained to choose between one or the other alternative. But his ambivalence about the choice he makes indicates that he may potentially have the desire and the ability to create the kind of movement between the communities that would allow them both to see themselves as complementary parts of a larger field.

The issue of how people "see" utopia is central at once to the most conventional as well as the most innovative readings of the genre. Discussions of perception and vision in relation to literary utopias cover a wide range of approaches. At the most basic level is the claim that utopian visions are always provisional and relativistic because each individual's view of the ideal society is different. A more sophisticated version of the argument sees the aim of utopian writing as the realization of utopia primarily in the mind and only secondarily in the actual world. A related claim is that utopia is a heuristic device that enables readers to envision utopian possibilities and thereby be moved to social action. All of these views are germane to my approach. However, there is also another aspect of the question, based on field theory, which provides the most interesting insights into utopian novels, and that is the nature of observation within a field.

Bellamy's *Looking Backward* is fascinating in its treatment of vision as a motif. It shows, subtly but systematically, that Julian West's thoughts and behaviour are shaped by what he sees in the utopian Boston of the twentieth century, but that his previous experience also determines what he sees and thus in turn shapes utopia. In other words, there is close interaction between the observer and the observed within the field that constitutes utopia. Indeed, the very existence of

utopia is a function of this interplay between West as observer and Boston (both present and future) as the observed. Although, in one sense, West observes the new world from the viewpoint of an outsider, a traveller from another time, it is significant that his translation to utopia is final. Unlike earlier and even other contemporary travellers to utopia, Bellamy's protagonist does not return to his own time but remains in the future. Thus, in another sense, he eventually comes to observe and interact with utopia as an insider and thereby to demonstrate one of the underlying claims of field theory, that "there is no such thing as observing [a system] from a frame of reference removed from it" (Hayles, *Cosmic Web* 49).

William Guest in Morris's *News from Nowhere* is also an observer who interacts with his utopian frame of reference. The people and places he sees in Nowhere are better, happier, and more beautiful versions of those he is familiar with in his own time. In other words, his previous perceptual sets determine the shape of utopia in the novel, although he is in turn transformed by his experience as well. Guest's role as observer is more ambiguous than West's, however. For instance, he seems to be less closely integrated into utopia as a field, since Nowhere turns out to be a dream from which he wakes, back in the nineteenth century. The fact that Guest is a dreamer emphasizes his status as a "mere" observer, an observer in the traditional sense of spectator rather than participant.

However, Guest's very return to his own time and place enables him to become the kind of observer who interacts with the object of his observation at a much more fundamental level. As a dreamer, Guest is able to fully encompass Nowhere, which is his own creation. But he is also encompassed by Nowhere when he enters and travels around in it. Similarly, Nowhere is both a whole and a part of the whole. The relationship between Guest and utopia is thus an example of the kind of infinite regression that one must face when confronted with a system where "the whole

is (or can be considered) as a part of itself" (Hayles, *Cosmic Web* 32). Therefore, by locating Nowhere in a dream, *News from Nowhere* achieves two important insights. It reiterates the idea that the locus of utopia is primarily in the mind rather than "out there." It also confirms field theory's challenge to sequential analysis which assumes that a whole can always be defined as the sum of its parts. My argument that utopia consists of interaction between complementary elements in a field should by now be familiar. Morris's two insights combine to contribute yet another element to the argument: the interaction that constitutes utopia takes place, not only between individuals and social systems, but also within each individual. As a result, the individual and utopia can each be regarded as both a part and a whole in relation to the other.

The central position of the observer in the creation of utopia implies that different observers will create different utopias. Of particular importance to literary utopias is the role of language in this process of creation. The link between observation and description is evident, for observation without description is incommunicable and, for all practical purposes, meaningless. Physicist Niels Bohr believed that language, being an outcome of "the distinction between the subject and object," necessarily implies a viewpoint (Hayles, *Cosmic Web* 53). One can, therefore, describe anything -- including utopia -- only through a specific viewpoint, which means that any two descriptions will be different. Literary utopias, based as they are on their authors' visions of the world and their accounts of those visions, by definition cannot be unitary or final.

The multiplicity of utopian visions is at the centre of H.G. Wells's *A Modern Utopia*. Wells asserts emphatically that there must be many utopias, each version appropriate to a particular generation. The presentation of his own utopia confirms the tentativeness of any one version in at least two ways. Firstly, much of the book is written in the subjunctive mood, which has the effect of questioning what the narrative seems to state. Secondly, by providing two visitors to utopia,

observers with distinctly different insights and blind spots, Wells incorporates the inevitability of different viewpoints into the narrative itself. Moreover, in “The Scepticism of the Instrument,” the appendix to *A Modern Utopia*, he explicitly acknowledges that the observer’s viewpoint determines the limits of the process of observation: “The forceps of our minds...crush the truth a little in taking hold of it” (230). This brings us back to the first aspect of field theory we discussed, that is the need for complementary descriptions if we are to get closer to a complete understanding of reality. Complementary relations exist not only between diverse cultural entities, but even more importantly between different descriptions of these entities.

Complementarity has still another aspect, which is perhaps best illustrated by Piercy’s *Woman on the Edge of Time*. Like Julian West and William Guest before her, this novel’s protagonist, Connie Ramos, travels to the future too. Unlike her predecessors, however, she is able to move and back forth between the future and the present. Moreover, Luciente, her friend from the future, is able to travel to the past (which is Connie’s present). Their ability to move freely through time the way one normally does through space suggests that time and space may be complementary facets of the same reality. As Hayles points out, the Special Theory of Relativity has shown that space and time are interdependent parts of the unified matrix of “spacetime.” Piercy does not dwell on this point; her scientific interests lean more towards the concept of nonlinearity, which makes chaos theory more relevant to her work than field theory. However, her demonstration of the idea that space and time are integral components of the same field provides a useful bridge from one theory to the other.

Chaos Theory

In their influential book, *Order Out of Chaos*, Ilya Prigogine and Isabelle Stengers claim that “the central problem of Western ontology [is] the relation between Being and Becoming.” Their version of chaos theory attempts “to go beyond the identification of Being with timelessness” by noting that “initial conditions, as summarized in a state of the system are associated with Being; in contrast, the laws involving temporal changes are associated with Becoming.... Being and Becoming are not to be opposed to one another: they express two related aspects of reality” (310). The scientific details of this claim are not of primary importance here. In fact, according to Katherine Hayles, the branch of chaos theory associated with Prigogine “is known for its willingness to extrapolate beyond experimental results to philosophical implications” and indeed “has more philosophy than results” (*Chaos Bound* 10). What is of importance is that the work of Prigogine and Stengers suggests that it is possible to reconcile time with timelessness. This concept is of great importance to the study of literary utopias and indicates a useful starting point for the discussion of the relationship between utopia and chaos.

As I suggested at the end of the last section, Piercy’s *Woman on the Edge of Time* provides a point of convergence between field theory and chaos theory. By allowing free movement between different times and places, it suggests that time and space are parts of one unified field. But it also shows that it is possible to be, at once, in a timeless realm and part of the movement of time. As a woman on the *edge* of time, Connie inhabits a world where time has no conventional meaning. In one sense, she exists in different times simultaneously and, in another sense, all the different times are real only in her mind. But timelessness in this context is not the same as stasis. The novel follows Connie’s life in the present over the course of several months and shows the changes that she goes through in that time. It also follows the passage of time in the Mattapoisett of the future.

In both cases, the temporal sequence of events is important. The flow of time in the present allows Connie to develop from a helpless victim of race, class, and gender oppression into a woman who stands up against manipulation and injustice. The flow of time in the future is linked with various rites of passage in human life: coming of age, mating, and death. Time is thus shown to be the medium in which both individual life and the life of a community are played out.

However, time does not move in linear fashion. At the heart of *Woman on the Edge of Time* is the concept of nonlinearity as applied to history. Piercy suggests that there are historical “crux-times” at which alternate futures are equally probable. Very small changes can tip the scales in favour of one alternative or another, and the course of events is highly unpredictable. The main point is that history does not have one inevitable, necessary outcome. This conclusion, radically at odds with the social engineering approach to utopia, creates a space where chance and personal choice can play a part in the creation of a utopian society. Utopia is no longer seen as a product, constructed according to a predetermined blueprint, but rather as a process subject to various sources of unpredictability. In *Woman on the Edge of Time*, individual action, and indeed activism, is the determining factor in creating utopia instead of dystopia. In her own time, Connie is in effect at a bifurcation point: it is crucial that she see the possible alternatives so she can act in a way that will bring about what she has come to see as utopia.

Interestingly, *News from Nowhere*, though written some eighty-five years earlier, implies a similar view of historical change. Morris’s presentation of the idea is more understated than Piercy’s, but is nonetheless clear. Old Hammond believes that in giving Guest an account of Nowhere’s history, he may have been talking to the people of the past: “perhaps our guest may some day go back to the people he has come from, and may take a message from us which may bear fruit for them, and consequently for us” (*News from Nowhere* 116). In order for Hammond’s

version of the revolution to take place, Guest must return to his own time and work towards the future he has witnessed. It is important to note that nonlinearity does not imply that actions are not meaningful because their consequences are unpredictable. Rather, it implies that very small changes can have disproportionately large consequences and that it is therefore crucial to choose one's actions consciously and carefully. Therefore, the realization of utopia involves, first of all, an individual choice. Once it is set in motion, however, the process gains a momentum which amplifies the initial conditions to achieve an end that is much greater than the means.

The Marriages between Zones Three, Four, and Five is another novel which illustrates the nonlinear nature of the creation of utopian society. Creating utopia involves a process of achieving ever greater unities between diverse groups, as symbolized by the marriages between different zones. *Marriages* shows that these unions cannot take place all at once, or even serially. Rather, they come about as the result of passing through bifurcation points at which even a small change can push the whole system "into a qualitatively new behaviour" (Gleick 291). What marks these turning points for what they are is a sense of the inevitability of change in those who enter them. Ben Ata sees in all the people waiting, along with Al-Ith, to enter Zone Two "the same characteristic – not visible at all at first, but then, as you got to know them, it was like a brand. Each one suffered from an inability to live in Zone Three as if it was, or could be, enough for them" (*Marriages* 297). This quality of being dissatisfied with sameness and stasis is what allows people to enter a new state characterized by different perceptions and forms of behaviour. Such a state defines utopia in relation to the former state; for example, Zone Two is utopian compared to Zone Three, Zone Three compared to Zone Four, and so on. However, as I argued in Chapter 4, utopia is also the free and mutual interaction that is made possible through the coming together of all the zones. *Marriages* thus provides two separate but related images

of utopia: one that is local and marks only a stage in the process, another one that is universal and defines the ultimate goal.

Another way of looking at the different meanings of utopia in *Marriages* is to see them as expressions of different levels of order. Initially, Zone Five is completely disorderly: it is characterized by “unrestrained freedom in all things, licence – anarchy” (292). Zone Four is at the other extreme, bound by strict laws such that people “can respond only if ordered, compelled” (74). Zone Three’s notion of order is the most refined for its inhabitants are not ruled by compulsion but by an “inner listening to the Law” (74). After the marriages, all three zones move closer to an understanding of the Providers’ “Order” which combines elements from each of their versions of order: freedom, obedience and inner understanding all have a place in the “orderly disorder” (Hayles, *Chaos and Order* 1) of utopia.

The relationship between order and disorder is, almost by definition, at the centre of utopian thinking, which often concerns itself with the building of a new order. Also by definition, it is at the centre of chaos theory, which seeks to redefine traditional conceptions of order and chaos. It is to be expected, then, that notions of order in the two fields should shed light on each other. Different responses to the idea of order are essential to several of the other novels I have examined, particularly those of Bellamy, Huxley, and Brackett. Bellamy is generally regarded as a proponent of not only order but even regimentation. The other two, by contrast, are suspicious of order precisely because it can lead to regimentation and loss of freedom. However, reading their novels in light of chaos theory suggests that each of them, in his or her own way, is trying to redefine order and that their new definitions are not so far apart as might be expected.

Looking Backward has drawn much fire because of its glorification of the industrial army, which most modern readers view as an oppressive mechanism for turning people into automata.

However, it is essential to read Bellamy in the context of his own historical period. Kenneth Roemer attributes the popularity of utopias in the late nineteenth century partly to the fact that people perceived society as chaotic and therefore in need of improvement. Visions of a stable and orderly society appealed to them, whereas “visions of ever-changing utopias would constitute an act of answering chaos with more chaos” (129). Even so, *Looking Backward* shows that order and chaos can never be entirely separated. Bellamy’s approach to history is to discover in past events the roots of subsequent developments. By emphasizing that the transition to the new society will take the form of a rapid and inevitable evolutionary process once people begin to see the possibility of change, he shows that “the seeds of the future are immanent in the present” (Pfaelzer 58). Thus, the chaos that marks the late nineteenth century is seen to be the precursor of the order that characterizes the twentieth.

However, Bellamy goes even further. By superimposing images of the Boston of the year 2000 and the Boston of 1887, he shows the intermingling of the existing society and utopia, of chaos and order. As Jean Pfaelzer observes, “the imposition of the unknown on the known in utopian fiction functions as a palimpsest: the familiar seeps through the new” (“Immanence” 53). Surprisingly (for Bellamy’s detractors at least) his view of the relationship between chaos and order has clear affinities with the views of certain chaos theorists on the subject. For instance, as the title of their book *Order out of Chaos* indicates, Prigogine and Stengers consider chaos as “order’s precursor and partner, rather than as its opposite” (Hayles, *Chaos Bound* 9). Others, among them novelist Stanislaw Lem, see chaos as “bound together with order in a complex dialectic through which chaos and order come to interpenetrate each other without losing their distinctive identities” (Hayles, *Chaos Bound* 26). Bellamy does not question the traditional valuations of order and chaos: chaos is still allied to confusion and social disintegration, order to

stability and progress. But he does recognize, at least implicitly, that the two are closely interrelated and this recognition is an important first step towards the more radical reevaluation of the terms that is to come later.

The science of chaos provides a new way of conceptualizing order, “not as a totalized condition but as the replication of symmetries that also allows for asymmetries and unpredictabilities” (Hayles, *Chaos and Order* 10-11). Obviously, *The Long Tomorrow* was written long before the articulation of this concept in scientific circles, much less in the culture at large. Still, it too reveals a more complex understanding of the meaning of order than is apparent at first sight. As I argued in Chapter 3, Brackett finds that neither the society in Bartorstown nor the one outside it is entirely utopian or entirely dystopian. In Bartorstown, there is the pursuit of knowledge and the desire for freedom, but little in the way of comfort or personal fulfillment; in the rest of the country, there is plenty and harmony, but also dogmatism and rigid control. Each of the societies, however, reveals within it patterns of both order and disorder.

Mainstream America in the novel is founded on the principle of decentralization. Towns are deliberately kept small, government is primarily local, and there is a great deal of regional variety in the people’s lifestyles. All of this suggests the potential for liberty and diversity. At the same time, however, people are ruled by the force of public opinion, which acts as a restrictive and even oppressive limit upon their freedom. Within each community depicted in the novel – whether the nomadic (and highly ascetic) New Ishmaelites, the agrarian New Mennonites, or the urban businessmen and industrialists – most people show unquestioning adherence to the group’s values and practices. In the nation as a whole, there is the same kind of collective allegiance to laws, such as the amendment forbidding the building of cities, without regard to changing conditions or

individual circumstances. Thus, beneath the seeming diversity, one discovers rigid patterns of order.

Bartorstown, by contrast, is highly structured on the surface. Every member of the town has a specified role in its maintenance and is subject to severe limits upon his or her freedom of movement. And yet, there exists in Bartorstown a kind of intellectual freedom that is absent in the rest of the country. Here, apparently strict order is based on an underlying heterogeneity. Although “randomness” may be too strong a term to apply to the conditions depicted in *The Long Tomorrow*, the novel’s juxtaposition of the two societies suggests that future America has affinities with a chaotic system in which there is “order, with randomness emerging, and then one step further away... randomness with its own underlying order” (Gleick 251-2). Order and disorder never appear as exclusive and totalizing entities but as intertwining parts of a complex system. If neither Bartorstown nor mainstream America is utopian, then Brackett’s true utopia (unrealized in the novel) may be a society that recognizes itself as a complex system and acknowledges the role of both order and chaos in its development.

Huxley’s treatment of order and disorder in *Brave New World* and *Island* also affords valuable insights into the topic. His explicitly stated opposition to utopian perfection, which he equates with totalitarian control, seems to imply a corresponding opposition to order. But Huxley is not opposed to order as such, but only to order that is mechanistic rather than organic. Both *Brave New World* and *Pala* are ordered societies: each has a central government, a system of formal education, and social and religious institutions. Also, both follow a number of similar social practices such as eugenics, psychological conditioning, psychedelic drug use, and unrestricted sexual activity. However, Huxley depicts them as vastly different societies because they are based on different world-views. *Brave New World* is founded on the principle that society

can be run like an assembly line, hence the choice of Henry Ford as the object of its veneration. People are manufactured, used to carry out mechanical tasks designed to perpetuate the operation of the factory, and discarded when they wear out. In *Pala*, on the other hand, the emphasis is on natural processes. The underlying philosophy here is that people are not machines but dynamic beings in whom body and mind are joined together. Instead of rolling off a conveyor belt, people live among and are nurtured by loving families from birth to death. They pay as much attention to their spiritual growth and psychological health as to their physical well-being. They assert that “if it’s a choice between mechanical efficiency and human satisfaction, we choose satisfaction” (*Island* 151).

Many details of the two novels reinforce the difference between a mechanical and an organic society. *Brave New World* is primarily urban; *Pala* is mostly rural. In *Brave New World*, we see factories and helicopters; in *Pala*, agricultural fields and mynah birds. Whereas *Brave New World* begins with a description of the Central London Hatchery, where “wintriness responded to wintriness.... The light was frozen, dead, a ghost” (15), *Island* opens in the sunshine of a tropical island. As June Deery observes, there is a marked contrast between “cold” and “warm” science: “‘Cold’ science is cut off from, and even hostile to, nature; in *Brave New World* this means aggression, competition, and triumph over natural processes.... The “warm” science of *Island*, on the other hand, aims to work with nature, and the result is accommodation rather than exploitation” (268). Harmony and balance between diverse elements, rather than exclusivity and specialization, are the hallmarks of a well-ordered society.

But significantly, especially for my purpose, diversity also means allowing for unpredictability. In *Brave New World*, eugenics and conditioning are used to ensure that each person conforms to specifications and can perform its predetermined function precisely. Anything

unexpected – the wrong proportion of chemicals in an embryo’s blood-surrogate, a disruption in the hypnopaedia schedule, a delay of the daily *soma* ration – renders the affected individuals helpless and useless to society. There is no possibility for individuals to transcend their limitations or undergo a personal transformation. Pala, on the other hand, is open to the vicissitudes of human life and its inhabitants accept the unknown and the unpredictable, for instance death, as a valuable part of life. For them “being reconciled to one’s fate” (*Island* 229) does not mean fatalism. It is rather a sign that one is prepared for and capable of dealing with whatever circumstances may bring. The difference between order in Brave New World and order on Pala corresponds to Hayles’s distinction between order as “a totalized condition” and order that “allows for... unpredictabilities” (*Chaos and Order* 10-11). Clearly the distinction is crucial to the definition of utopia: a society that insists on eliminating the unknown and unexpected cannot lay any claim to being utopian, whereas one that welcomes change and chance is on its way to becoming a truly dynamic utopia.

Le Guin is another writer who clearly sees utopia as essentially dynamic rather than totalized. Although her theoretical interests are difficult to relate to nonlinearity directly, her notion of permanent revolution points, if only because of the terminology, to the kind of dynamism which is at the centre of chaos theory. She implies that a “society...conceived as a permanent revolution” (*The Dispossessed* 267) allows for the coexistence of both stability and change. Chaos theorists seem to have the same idea in mind when they talk about flow. As James Gleick describes it, “Flow was shape plus change, motion plus form....a Platonic idea, assuming that change in systems reflected some reality independent of the particular instant” (195). Le Guin’s utopia combines the unchanging attributes of Urras and Annares – topography, climate, history – with their dynamic institutions – culture, politics, science – into a fluid whole. *The Dispossessed* is dedicated to showing the profound interconnectedness of

seemingly contradictory realities. Shevek's search for a unified temporal field, his desire to unbuild walls, the voyage by which he creates a bridge between two worlds – all of these are signs of his ability to see things as a whole, rather than in isolation. He is able to see things “*all at once*, not locally but globally” (Gleick 70). Thus, the philosophy underlying the novel is in harmony with chaos theory's attempt to “understand the entire realm of possibilities at once” (47).

In its own different way, *A Modern Utopia* is also concerned with seeing things globally. Wells's interest in global vision is particularly significant because it is articulated mainly at the formal rather than the thematic level. In this regard, it has something in common with much more recent utopias. *The Dispossessed*, for instance, demonstrates the nonlinear nature of historical progression through its narrative structure as Shevek's past and present unfold before the reader simultaneously. Within each time frame, events follow one another in linear progression, but in the novel as a whole, different periods in history are present at once, thereby affording the reader a view of the whole realm of possibilities.

Similarly, in *A Modern Utopia*, Wells's conception of a “multiplex presentation”(xlvi) signals his desire to provide a global understanding of the issues. According to Wells's introduction, the book consists of all the following narrative devices: the Owner of the Voice “reading a manuscript about Utopias,” a lecture given from a stage and introduced by a chairman, and a “sheet...on which moving pictures intermittently appear” (3-4). The work as a whole has a “shot-silk texture between philosophical discussion... and imaginative narrative” (xlvii). It deals with both the “creation of utopias” and their “exhaustive criticism” (quoted in Hillegas 33) and as such is both a utopia and a meta-utopia. Patrick Parrinder says that one way of representing the Wellsian picture of utopia would be to imagine “a vast jumble of jigsaw-puzzle pieces, each different from its neighbour, but each slowly and imperceptibly changing its shape so that the pattern of the whole is

not constant. Yet at any given moment there is a discoverable pattern” (118). The image is suggestively similar to Hayles’s account of the resistance of language to describing a dynamic field in which “linear sequences of causality” are replaced by multidirectional interactions. The image she uses is the following:

a constantly turning kaleidoscope whose shifting patterns arise from the continuing, mutual interaction of all its parts.... Because we cannot describe the totality of the dance, which is incessant, and infinite, we must stop the kaleidoscope in our imaginations, calling each slice-of-time configuration a “pattern.” (*Cosmic Web* 19-20)

At the end of Chapter 2, I discussed how Wells’s work marked the point of transition between nineteenth- and twentieth-century utopias. Here, it once again provides a bridge, this time between the two theoretical frameworks I have been exploring. The move towards a global, rather than local, grasp of reality is characteristic of both field theory and chaos theory and thus indicates a point of convergence between them which I will consider in the remainder of this chapter.

Convergence

What does “global” mean in an epistemological context? The question is not an easy one to answer, especially since its philosophical ramifications are beyond the scope of this work. If having a global view means being able to encompass a subject, then developments in modern science as well as modern critical theory preclude the possibility of gaining a global perspective. As Katherine Hayles points out, the 1960s and 1970s saw both the emergence of a new physics and an intellectual shift in the human sciences:

The (old) New Critics had taken for granted that a literary work was a verbal object, bounded and finite, however ambiguous it might be within. But the (new) New Critics saw textual boundaries as arbitrary constructions whose configurations depended on who was reading, and why.... The well-wrought urn, it seemed, was actually a reservoir of chaos. (*Chaos Bound* 2)

According to this view, there is no possibility of achieving a global view even of a literary work, much less of anything as large and complex as “reality.”

In one sense, Hayles is right in seeing the paradigm shift as “a break from universalizing, totalizing perspectives and a move toward local, fractured, systems and modes of analysis” (2). However, her discussion of local versus global views is interesting, not only because it sheds light on the topic, but also because it reveals a critical stance which she takes for granted. Hayles claims that literary theorists “like chaos because they see it as opposed to order” whereas scientists value it “because it makes order possible” (23). Ironically, Hayles does precisely what she claims to be challenging: she takes a totalizing view of the literary field by assuming that the only value of chaos theory to literary criticism is as a confirmation of postmodern theories such as deconstruction. She does acknowledge that “chaos theory has a double edge that makes appropriations of it problematic for humanistic arguments that want to oppose it to totalizing views” (15), but she still assumes that all literary critics *want*, as she does, to oppose chaos to a global perspective. This is patently untrue, certainly in my case.

To go back to the task of defining “global,” it is possible to say that having a global view means being able to discern connections between disparate entities and to find unity in diversity. It would still be impossible, and indeed undesirable, to impose a totalizing description upon something that cannot be encompassed and comprehended. The difference lies in the underlying assumptions. Hayles’s approach is based on the premise that universalism is essentially pernicious because there is no epistemic ground on which it can be founded. My approach, on the other hand, is based on the opposite premise, that there are truths which transcend partial descriptions and which can best be understood in terms of the complex relationships within a universal framework.

My definition is clearly in line with field theory, which views reality as a pattern of complementary relationships between mutually exclusive parts of a system. Knowledge of any

part of the field, taken in isolation, is incomplete. Only a global view that takes into account the interaction between parts as well as the essence of each part can provide true knowledge of the field. My definition can also accord with chaos theory (though perhaps not to Hayles's approach to it). Chaos theory reveals order within disorder and disorder within order. It also discovers links between events that are separated by time but joined together by nonlinear transformations. In their metaphorical application to literature, the two theories are in a complementary relation with one another. Although it may be difficult to combine them into one general theory, using them together to analyze literary texts allows one to discern patterns that may be otherwise invisible.

One of the things that the conjunction of chaos and field theories brings to light is that the boundaries between complementary pairs are highly permeable. Field theory makes it possible to juxtapose aspects of reality that are widely divergent but still indispensable parts of one system. Chaos theory makes it possible to see that these realities are not discrete but interpenetrating. As Hayles points out, by identifying "a third territory that lies between order and disorder, chaos theory draws boundaries where previously there was only bifurcation" (*Chaos Bound* 27). Space and time constitute one such set of complementary realities linked through a pervious boundary.

Traditionally, critics have made a distinction between utopias removed in time and those removed in space in relation to the writer's own world. Samuel L. Macey points out that "it was only in the seventeenth century that the word progress acquired its modern meaning of a progress through time rather than through space" (26). Thus utopias, which are typically concerned with social progress, were generally placed in a different place in earlier periods, while more recently, many of them are positioned in a different time. In a related vein, John Goode observes that what characterizes late nineteenth century utopias such as those of Bellamy and Morris is "not their alternative geography but time travelling" (15). Focusing on transition rather than contrast as the

narrative motivation, they see utopia “not as no-place but as the present visibly transformed” (16). Frances Bartkowski, while reminding us that utopia is “alternatively the good place... and no place,” also notes that it continues to be “modeled in space as well as time” (4). A cursory review of the novels I have discussed shows that they can be divided almost equally into the two categories. *News from Nowhere*, *Looking Backward*, *Brave New World*, *The Long Tomorrow*, and *Woman on the Edge of Time* all situate utopia in a future time. *Unveiling a Parallel*, *A Modern Utopia*, *Island* and *The Marriages Between Zones Three, Four, and Five* locate it in a different place. Finally, *The Dispossessed* removes utopia to both another place and another time.

A closer consideration of the novels reveals, however, that all of them to some extent cross over and sometimes dissolve the boundaries between space and time. Bellamy and Morris both “superimpose images of the past and future” (Roemer 136) of the same place in order to jar static perceptions of both place and time. Boston in the year 2000 is different enough from Boston in 1887 to show Julian West that the evils of contemporary society are not unavoidable necessities but are subject to change. At the same time, it is similar enough to convince him that what he is witnessing is not something alien and out of reach, but his own world transformed into something better. Similarly, the Thames valley of the future is at once a new world and a familiar environment for William Guest. Once again, place is shown to be historically contingent and dynamic. By allowing “utopian space [to represent] the passage of time” (Pfaelzer, “Immanence” 54), these novels show the interdependence of time and space in bringing utopia into being.

In *Unveiling a Parallel* and *A Modern Utopia*, the good society is displaced not in time but (literally) in space: it is, in both cases, situated on another planet. However, Jones and Merchant downplay the importance of travel through space as such. Their narrator claims that between Earth and Mars, “travelling was as swift as thought” (*Unveiling a Parallel* 2). Moreover, with the

exception of its pink sky, Mars is outwardly remarkably similar to Earth. Landscapes, cities, and even social institutions are more advanced versions of their earthly counterparts, suggesting that what is now found in another place could also potentially be realized through the passage of time. Similarly, Wells's language suggests that in reaching utopia, the journey through space is only a metaphor for the movement in time. He prefaces his description of the World State by stressing that utopia is not a "permanent *state*" but a "hopeful *stage*" (*A Modern Utopia* 5, emphasizes added). He problematizes the kind of binary analysis that would define utopia in terms of either an alternate time or an alternate place but not both.

More recent works move increasingly close to bringing time and space together. Huxley, for instance, depicts two separate utopias: one that is limited to a future time in *Brave New World*, another that is confined to a specific place in *Island*. However, his work, seen as a whole, deals with progress towards utopia through both space and time. In fact the inadequacy of each of his utopian visions by itself suggests that it is only in the combination of these visions, in the conjunction of the spatial and the temporal, that the possibility of utopia resides.

Of all the novels under discussion, *Woman on the Edge of Time* and *The Dispossessed* come closest to integrating time and space into one dynamic whole. The presentation of present and future side by side in *Woman* creates a sense of timelessness in each in relation to the other. Just before the outset of her time travels, Connie feels as though she is "caught in a moment that had fallen out of time and would never be over" (*Woman* 20). She thinks of the two periods not so much as different times, but more as different places in and out of which she can step: "As if her mind had developed muscles,...she could leap in and out of Luciente's time" (195). And yet, time continues to move forward within each period. Neither the future nor the present is static since events take place in each one that have important consequences for both.

As I earlier argued, *The Dispossessed* shows that there are two complementary ways of seeing the relationship between the “real” world and utopia. One can see them as separate places that coexist in time, as in the case of Urras and Annares. One can also see them as the same place as it appears at different times, as in the case of Earth and Urras. The two worlds coexist in time, but they also represent successive stages in the development of the same world. The combination of the two views blurs the boundaries between time and space and suggests that they are indeed part of a larger dynamic field. It is difficult to express this view clearly and part of the difficulty stems from the resistance of our language to describing a field of which we are a part. Nonetheless, recognition of the convergence between time and space is crucial to a full appreciation of the significance of *The Dispossessed*.

Finally, Lessing’s placement of time and space in a mythic realm which goes beyond them both serves to highlight the philosophical significance of the relationship of time and space. In *Marriages*, unlike the other novels, there is no clear indication of the position of the zones in relation to the reader’s world. There are similarities between aspects of each of the zones and contemporary society but utopia, it is implied, transcends the temporal and spatial limitations of the mundane world. Ultimately, the most important point is that the convergence of time and space in utopian fiction indicates that utopia can transcend the boundaries created by the attempts of finite human knowledge to know an infinite truth. Although in everyday experience, it is difficult to comprehend the union of time and space, in reality, there is no separation between them. The concept of spacetime is thus one of those paradoxes that are not real but only apparent. Utopia is valuable because it is truly nowhere. It exists beyond space and time, in a realm where “space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality” (Minkowski, quoted in Hayles, *Cosmic Web* 46). If it

exists nowhere, then utopia is potentially anywhere and everywhere in both space and time. It is this intrinsic and pervasive openness to potentiality that makes utopia capable of sustaining diversity and dynamism and provides the ground for hope without which utopia cannot exist.

SCIENCE, NATURE, RELIGION, GENDER
UNION OF INCOMPATIBLES

In this thesis in general, and in the last chapter in particular, I have used science as a guide to interpretation. My emphasis has been on how scientific theories may be used to shed light on the forms and themes of utopian writing, and on how they help crystallize the concept that utopia is both diverse and dynamic. But, as the discussion of some of the novels has already indicated, the relationship of science to literature is not one-sided. Science may have something to say about utopia, but most of the utopian novels written since the industrial revolution also have something to say about science and, even more so, about technology.

Science is often presented in the novels, as well as in the wider culture, as one pole of a dichotomy. Interestingly, however, the other pole is not always the same. I have already discussed at some length the supposed opposition between science and literature. But science is also depicted as being opposed to nature, to religion, and to the feminine. This chapter will take these three dichotomies as a starting point for a discussion of science, nature, religion, and gender in the novels. In the process, I hope to show that these binary divisions, like the one between science and literature, are largely illusory. When the opposite poles are viewed as parts of dynamic and interconnected fields, the gaps between them can be bridged, and even closed.

Science and Nature

The utopian authors writing between the 1880s and the turn of the century -- Bellamy, Morris, Jones and Merchant, and Wells -- found themselves facing a choice between science and technology on the one hand and a return to nature on the other. Bellamy and Wells chose science;

Morris and Jones and Merchant favoured nature. Or so it would seem when reading most critical discussions of these writers' works. Closer reading of the texts themselves, however, indicates that these positions are less extreme than they may at first appear. Bellamy and Wells certainly do not want to sacrifice everything to technocracy nor does Morris ask that all forms of technology be eliminated in favour of a natural existence.

W. Warren Wagar divides utopias into two categories, romantic and positive, which are distinguished by their different sources of authority. Romantic utopias are those that locate authority in "the proclamation of an archetypal noetic lawgiver, the revelation of a god, or the collective will of the *Volk*.... drawing their truth from the many-tiered realms of the suprarational" (107). Although Wagar does not mention it as an example, *News from Nowhere* would seem to belong to this group, which is said to also include the visions of Plato, More and Rousseau. Positive utopias consider the source of authority to be "the expert knowledge of scientists, engineers, and managers" (Wagar 107). The best known literary examples of the latter are, according to Wagar, *Looking Backward* and *A Modern Utopia*, which exhibit a "granitic belief in the power of modern science to tell us precisely what we need and how to get it." As "positive utopographers," Bellamy and Wells are each "a prophet of scientocracy." (108). Wagar's categories pit misguided if not downright despotic scientific utopias against more natural – though sometimes equally misguided – romantic ones. His objection seems to be to all utopias, which are "by definition, systems of prearranged harmony, dictatorships of gnosis or science" (107) because they preclude conflict and uncertainty.

Clearly, Wagar's definition of utopia is radically different from the one I have proposed. Utopia, by my definition, does include the possibility of uncertainty, change, and even conflict. Neither a scientific nor a natural utopia need be monolithic and therefore oppressive. For example,

although *Looking Backward* may seem to be overly preoccupied with technical innovations such as radio transmissions, electrical lighting, and credit cards, it is also concerned with technology on a philosophical level. As Howard P. Segal shows, Bellamy advocates the use of what has more recently become a catch phrase, namely appropriate technology. Mismanaged technology is the source of the problems he identifies throughout his novel: inefficiency, inequality, immorality and urban blight. But technology can also be used in a purposeful, positive way to solve these same problems (Segal 91). To give just one example, the public storehouses which distribute all goods may seem to be the impersonal instruments of a centralized government that controls all the means of production. However, they are widely dispersed throughout the city so that “no residence [is] more than five or ten minutes’ walk from one of them” (*Looking Backward* 80). They thus contribute to the possibility of more widely separated towns and villages which still enjoy what a big city can offer. In Segal’s view, Bellamy shares the vision of a number of his contemporaries who sought to combine the benefits of city and country. His Boston is a kind of “industrialized garden” that, by domesticating both technology and nature, “reconciles machine to garden and centralization to decentralization” (Segal 96). It may be going too far to say Bellamy achieves a balance between technology and nature in his utopia. But it would be fair to say that the gulf between the two is not as wide as the critics often claim.

In Bellamy’s America, applying “the principle of universal military service... to the labour question” is regarded as “absolutely natural and reasonable” (*Looking Backward* 57). It is, in a sense, a “scientific” act. Wells, similar to Bellamy in that he too is fascinated by technological advances, also advocates a centralized government based on scientific principles. “Science” in this case is identifying the temperament of every individual in society according to a four-part system of classification. Although the classifications are provisional and not hereditary, they influence the

course of education for each person and are used to “determine the broad lines of political organization.” The higher classes, the Poietic and the Kinetic, “constitute the living tissue of the State” (*A Modern Utopia* 157) and are eligible for membership in the order of the samurai or voluntary noblemen who rule the state. The other classes, the Dull and the Base, “persons of altogether inadequate imagination” (159), are relegated to the lowest strata of society.

While this kind of (pseudo) social science may seem repugnant to most modern readers, it is not the only kind of science Wells deals with. He is in favour of using technology to eliminate the “dull, unavoidable imperative” of toiling merely in order to survive, so that one can instead act “under the direction of one’s free imagination” (60). Those who oppose machinery for fear of being enslaved by it are wrong, Wells suggests. He writes: “Science stands, a too competent servant, behind her wrangling under-bred masters, holding out resources, devices, and remedies they are too stupid to use” (60). Rather than rejecting science out of hand, we must learn to use it.

Despite Wagar’s claim that he is a scientocrat, Wells does not advocate the glorification of technology at the expense of harmony with nature. It is true that he ridicules those who argue, often hypocritically, for a return to nature. For example, the narrator meets an eccentric utopian who spends his time lecturing on the simplicity of nature, and who claims that he is a vegetarian and wears leather and woolen clothing in order to keep the vegetable and animal kingdoms distinct in his person – “no animal substance inside, no vegetable without” (70). The man is clearly a figure of fun, used to show the folly of carrying love of nature to ludicrous extremes. But to balance that, Wells also envisions that part of the Rule of the *samurai* life would be a period of communion with nature: “For seven consecutive days in the year...[they] must go right out of all the life of man into some wild and solitary place.... They must be alone with Nature, necessity, and

their own thoughts” (178-9). The ideal is a balance between communion with nature and rational use of technology.

It is significant, moreover, to note that in a 1939 radio broadcast on “Utopias,” Wells talked about the “collective utopianism of scientists” (quoted in Parrinder 116). Patrick Parrinder observes that a “scientific” utopia may be a paradox because “science is an inherently dynamic force, relying, (as Wells puts it) on ‘the perpetual criticism, increase and diffusion of more knowledge and more.’” Its effect is to “subvert any stable social order” (116). This is precisely Wells’s point in *A Modern Utopia*, in which he rejects a static utopia in favour of a kinetic or dynamic one. Wells, like Bellamy, achieves a better balance of science and nature than he is usually credited with.

Morris understandably appears on the other side of this debate. *News from Nowhere* is generally cited as not only a response but an antidote to Bellamy’s mechanistic world-view. Hammond, Morris’s guide to utopia, says: “England was once a country of clearings amongst the woods and wastes.... It then became a country of huge and foul workshops.... It is now a garden, where nothing is wasted and nothing is spoilt” (*News from Nowhere* 61). Morris’s use of garden imagery to valorize cultivated nature allies him with a tradition for which the “organic” is a central term, emphatically opposed to the “mechanical” and the utilitarian. Alexander MacDonald repeats John Stuart Mill’s view that Bentham and Coleridge, representing the mechanical and the organic respectively, are the “seminal minds” of the nineteenth century, and goes on to claim that “Bellamy and Morris represent a fruition of those two seeds of social and political thought” (87).

It is certainly true that Morris rejects the kind of urbanization and industrialism that Bellamy and Wells embrace. His Nowherians criticize the nineteenth century as a time when people made an artificial separation between mankind on the one hand and everything else, “animate and

inanimate -- 'nature,' as people used to call it," on the other. The source of much of their misery was that they tried, through the use of machines, to "make 'nature' their slave, since they thought 'nature' was something outside them" (154). In the new decentralized utopia, the emphasis is no longer on mass production and the demands of a market economy, but rather on handicraft and the quality of wares that are made "because they are needed: men make for their neighbours' use as if they were making for themselves" (82). But in some ways, Morris's position is not as far from those of Bellamy and Wells as critics generally suggest. He may denounce huge factories but he does not reject technology altogether. In *Nowhere*, "all work which is irksome to do by hand is done by immensely improved machinery; and in all work which it is a pleasure to do by hand machinery is done without" (82). In thus advocating the use of appropriate technology, Morris has something in common with Wells, for instance, who believes that making "all routine work... automatic" would contribute to "the effectual abolition of a labouring and servile class" (*A Modern Utopia* 60).

The approach of Jones and Merchant towards the opposition between technology and nature is perhaps the most balanced one of all. This may be partly because they do not delve into the issue with the same depth and breadth as the others. But there is also in their work an ideological commitment to harmony between opposites that prevents them from depicting different positions as being black and white. The first people the narrator meets, including his future friend and guide, are scientists, specifically astronomers; but the first place he visits is a part of nature, a beautiful grove filled with rare trees, choice shrubs and delightful flowers. The Martians use a form of high-speed travel between towns since "electricity has annihilated distance" (*Unveiling a Parallel* 117), but they also ride in horse-drawn sleighs and pony carriages. In their mines and factories, "physical labour... is reduced to a minimum; machinery has taken the place of muscle," but the

resulting profits are shared equally by all and give everyone the chance to “devote his energies to the service of other than merely physical needs” (120). *Unveiling a Parallel* may not be as sophisticated as the other novels in its analysis of technology but it is dedicated to showing that the natural and the scientific need not be in opposition, that there can be balance between them.

I do not wish to minimize the importance of the differences between the technological utopias proposed by Wells and Bellamy, the humanistic utopia envisioned by Morris, and the combination of the two imagined by Jones and Merchant. It is just as important, however, to recognize that, notwithstanding authors’ and critics’ attempts to draw boundaries between diverse visions of utopia, there are many points of convergence between them. If each new version of utopia is to be, as Wells says, “a little more certain and complete and real” (220), readers of utopias should recognize the similarities as well as the differences between the various versions. In any case, even though their works often had more in common than they would admit, the major writers spanning the turn of the century saw themselves as making a choice between two extremes. By the middle of the twentieth century, many writers, such as Huxley and Brackett, had come to recognize that perpetuating a binary division between science and nature was a dangerous practice for it could be both dehumanizing and destructive.

Huxley’s condemnation of mechanism as opposed to vitalism, which I discussed in Chapter 3, would seem to place him with Morris. Samuel L. Macey says that in twentieth-century dystopias such as Huxley’s, “the Romantic values of a simple country life are implicitly juxtaposed with the dangers of a clock-dominated technological society” (39). However, Huxley uses oppositions for rhetorical effect: to show not that one side is more right than the other, but that they can both be wrong (in *Brave New World*) or both be right (in *Island*). *Brave New World*, as befits its satirical purpose, is primarily concerned with depicting the shortcomings of both technology and raw

nature. In the *Brave New World*, the rulers use scientific technology malevolently and the masses use it mindlessly. The result is the manipulation of reality by a few and escape from it by the majority. However, the alternative provided by the Savage Reservation is not really an alternative at all. The Indians may not have hatcheries and helicopters, but they use their primitive practices to much the same end as their “civilized” neighbours. The *Penitente* rituals are used to create and maintain social hierarchies -- John Savage, for example, is made an outcast by being excluded from them because of his complexion -- and blindly followed by the mass of people. As Alexandra Aldridge persuasively argues, it turns out that “the pure scientific society,... has become merely an antiseptic and inverse primitivism” (58). Neither is preferable to the other.

In *Island*, Huxley moves beyond his earlier pessimism to a considerable extent, although he does not leave it behind entirely. On Pala, harmony with nature and technological development are deliberately and explicitly linked to one another. The Palanese secretary of education tells Will Farnaby that they do not conduct large-scale research in physics and chemistry for they have no need of it: “no heavy industries to be made more competitive, no armaments to be made more diabolical, not the faintest desire to land on the backside of the moon. Only the modest ambition to live as fully human beings in harmony with the rest of life” (*Island* 216). Every Palanese child is taught elementary ecology: “Treat Nature well, and Nature will treat you well. Harm or destroy Nature, and Nature will soon destroy you” (218). This view is in sharp contrast to that of *Brave New World*’s researchers who “view themselves as conquistadors who, in an ecstasy of quantification, are out to put nature in its place” (Deery 259). There is also an important contrast between Pala’s approach to science and that of the dictator in neighbouring Rendang, who is obsessed with conquest and domination. Through these parallel comparisons, Huxley stresses the

idea that technology used with no concern for its effect on people and their living environment leads to consumerism and militarism of the most destructive kind.

Brackett's position is fundamentally similar to Huxley's, although her emphasis is different. Where Huxley worries about the unbridled advancement of technocracy, Brackett fears a backlash against technology that would lead to insularity and fanaticism. The plot of the novel centres on the effort to restore faith in the value of scientific knowledge following "the Destruction" (*Long Tomorrow* 9), but the underlying theme is the need to balance the belief in science with commitment to its moral use. Len Colter recognizes that he and his world face "the battle of decision, the time of choice" (255). The proper approach to science is neither to deify it nor to demonize it, for to do either is to be controlled by it. Rather one must see science for what it is, a tool, and choose how to use it. A central insight into the way science works has been provided by Thomas Kuhn's distinction between "normal science," proceeding according to the rules of a prevailing paradigm, and "revolutionary science," when one paradigm is replaced by another. The scientists in *Brave New World*, in *Rendang*, and in America before the Destruction, have all replaced science by technology such that "'pure' science has been muzzled to create a permanent state of normal science" (Deery 260). The alternative is not a repudiation of all science but rather the pursuit of revolutionary science, "the art of independent thinking" (*Long Tomorrow* 189).

The most recent utopian literature, particularly by the feminist writers of the 1970s, sees a waning interest in the mechanics of science and technology and a corresponding rise in concern with their morality. This is an interesting development, particularly given that Piercy, Le Guin, and even Lessing are better known as writers of science fiction than of utopian fiction. Many of their works, even though they portray technological advances, move away nonetheless from what Raymond Williams calls "the hypothesized 'science' of SF" (212). Piercy, for instance, devotes a

considerable amount of time to the description of technical gadgets, both in the present and in the future. The use of devices such as the “dialytrode” drives the plot of *Woman on the Edge of Time* as Connie struggles against the psychiatrists’ attempts to control her mind and her behaviour through technology. But ultimately, the gadgetry is more important as a means of reinforcing the thematic concerns of the novel. Connie’s poisoning of the doctors is presented as being less reprehensible than their attempt to use technology to oppress and manipulate her. At a time when “technology is imbalanced” (*Woman* 197), argues Piercy, one must make a deliberate choice, no matter how radical, about the direction it takes. The choices that would result in the extinction of species and the wasting of natural resources are strongly condemned. The dystopian future that Connie briefly visits is completely overwhelmed by technological excess. Artificially enhanced people live in skyscrapers without windows. They take it for granted that they cannot see the city around them (let alone what countryside there may be left) because of the pollution: “It’s thick. It’s air. How could you see through air?” (*Woman* 295). The building of a utopia that is in harmony with nature, rather than its dystopian alternative, depends on the use people choose to make of technology.

Unlike Piercy, Lessing’s references to technology are so oblique as to be almost unnoticeable. The setting of *The Marriages Between Zones Three, Four, and Five* is more mythical than realistic, and even its realistic elements are those of a pre-industrial society. The inhabitants of the zones are nomads, herders, and farmers. They travel on horseback, meet around campfires, and wear clothes of medieval style. But still, in the midst of this, there is also mention of scientific concepts such as gene-parents as opposed to mind-parents, and technological inventions such as “death ray” weapons and protective shields. Another dimension is added through the interposition of elements of magic. In the pavilion built for Al-Ith and Ben Ata by the Providers, for instance, a

mysterious drum beats while they are together, and they are able to summon food and drink just by thinking about them. By combining these different elements, Lessing suggests that modern science is, at most, a small part of what makes up utopia. Mystery and magic, as well as knowledge of the natural environment, are much more pertinent to the attainment of utopia than is scientific achievement. In fact, the highly technological devices are in the end irrelevant to what really matters. For example, the death ray fortresses turn out to be fakes, and the protective shields become obsolete as the boundaries between the zones are opened. The ability to establish connections with the natural world, on the other hand, is shown to be valuable. The ability of the inhabitants of Zone Three to speak to and understand their animals is a good example because it combines the capacity for communion with nature with an element of mystery. As Lessing moves from realistic to symbolic space in writing space fiction, the alchemical notion of a mystical union of incompatibles -- a symbolic marriage -- becomes more important to her project than any scientific model.

Le Guin occupies a middle ground between Piercy's preoccupation with technology and Lessing's near-neglect of it. For her, the use of modern technology is an integral part of utopian society, as is the preservation of nature. Interestingly, both Annares and Urras have learned to exercise "ecological control and the husbanding of natural resources" (66). The difference between them lies in their attitudes towards both nature and technology. The Urrasti have "An ecological policy, existing by means of rules and regulations enforced by the government" (Cogell 167). They see nature as another one of their possessions which they must protect if they wish to benefit from it. They see nothing wrong with waste and excess, what Shevek calls "excrement," as long as it is controlled. The Annaresti, by contrast, extend their philosophy of dispossession and sharing to the natural as to the social environment. Because they own nothing, they share everything and they

have “no law but the single principle of mutual aid between individuals” (241). The Annaresti’s way of life is partly necessitated by the harshness of their planet’s climate, which makes their love of nature faintly ironic. The ideal, once again, would be a coming together of the natural splendour of Urras and the reverent attitude towards nature found on Annares. Le Guin goes beyond the issue of the relationship between nature and technology to consider the relationship between nature and morality.

The significance of technology in *The Dispossessed* lies more in its metaphorical than its instrumental usefulness. Le Guin is interested in the possibility of inventing an “ansible... a device that will permit communication without any time interval between two points in space” (*Dispossessed* 276). But the device plays no role in the resolution of the conflicts between the various planets of Le Guin’s universe. Rather, it serves as a metaphor for Shevek’s mission to unbuild walls and to unite time and space into one entity. The ansible’s primary importance is in terms of the novel’s themes, not its plot. The essence of science, as embodied in Shevek, is “not to deny one reality at the expense of the other, but to include and to connect” (229). And in order to do this, one must first *know* about other realities. The primacy of knowledge is indeed a thread that links all utopias. The goal of visitors to utopia -- including readers of utopian fiction -- is to gain knowledge of a different place and time in order to synthesize their own utopia. It is to obtain what Shevek calls ‘knowledge of the foreign, of the alien: *news*’ (224). By the end of the novel, not only Shevek, but also the reader, has obtained the “news from nowhere” that will make the synthesis of utopia possible.

To the utopian writers around the turn of the century, the place of technology in utopia was a central issue. As the twentieth century has passed, the existence of technology has become more of an inescapable fact. The focus of interest has therefore shifted from its mechanics to its morality.

Chris Ferns suggests that in *Brave New World*, Huxley links technology and religion in order to satirize both (*Huxley* 141-2). In a more positive vein, he advocates, in *Island*, the synthesis of science and mysticism into something new. Similarly, Lessing links science with magic, and Le Guin intertwines it with moral philosophy. All these attempts to create a bridge between modern science and various forms of spiritual belief point to the importance of religion -- in its most inclusive sense -- in literary utopias.

Science and Religion

In our world, “there are no new religions, no new orders, no new cults -- no beginnings any more” (156), laments the Owner of the Voice in *A Modern Utopia*. Wells’s utopia, on the other hand, is not only based on new conceptions of social order, it also allows for the rise of new creeds. Openness to new belief systems seems to be a hallmark of utopian writing, although it takes various forms from one work to the next. It is as important to literary utopias as science, but is discussed much less often by critics than science is. The reason may partly be that the writers of utopias talk more indirectly about religion than they do about science. But perhaps, the fault lies more with critics who are unable to find relevance in discussions of spirituality and therefore neglect it altogether. As I hope this section will show, however, spiritual and religious matters are highly relevant to the understanding of utopias.

Wells’s lament about the lack of new religions is representative of many writers’ implicit questioning of the sufficiency of traditional Christianity in a modern utopia. From Bellamy to Lessing, all the writers under discussion recognize the need for something new to meet the spiritual needs of the inhabitants of utopia. Of course, as with other issues, their suggestions for ways to meet these needs are highly diverse. In general, however, the approaches can be divided into two

main groups. Those writing at the end of the nineteenth and the beginning of the twentieth century favour some more or less secularized form of Christianity, while those writing in the middle and the latter part of this century are more interested in alternative religious traditions.

Bellamy's view of religious practice in *Looking Backward* is very much part of his general approach to organizing utopia. Both its weaknesses and its strengths are those of his larger vision of society. He suggests that religion in the year 2000 will be centralized and automated much in the same way that other communal activities are. Groups are free to rent buildings from the state to use as churches and an individual may act as a clergyman as long as the congregation contributes "from their credit cards an indemnity to the nation for the loss of his services in general industry." Moreover, it is possible to listen to sermons broadcast on the radio and indeed most people prefer to get their preaching, "like [their] musical performances... delivered in acoustically prepared chambers, connected by wire with subscribers' houses" (*Looking Backward* 182). Bellamy's early version of televangelism is certainly not the best part of his utopia because it reduces religion to mere preaching and vitiates religious practice even further by making it entirely passive.

His approach to religion takes on a more positive aspect when he moves away from its institutional details. The sermon Julian West listens to is in part an analysis of the decline of Christianity in the nineteenth century and its revitalization in the twentieth. In the nineteenth century, even the best people "believed that greed and self-seeking were all that held mankind together" and that "the only stable elements in human nature... were its worst propensities" (188). Bellamy's analysis is valuable but his explanation of the outcome is less than convincing. He claims that the "change from the old to the new order" (189) came about when a desperate

humanity finally realized that human nature is essentially good, not evil. He does not provide any suggestions as to why and how people came to this realization.

What is most important, however, is that the new society is based on what Bellamy sees as the true meaning of Christianity: the premise that all are entitled to the same share of the nation's wealth by virtue of their common humanity. Doctor Leete tells West: "the solidarity of the race and the brotherhood of man, which to you were but fine phrases, are, to our thinking and feeling, ties as real and as vital as physical fraternity" (99). This is the basis of an ethic which Bellamy calls the "religion of solidarity" and, as the world-view that determines the structures of utopian society, this ethic is more of a "religion" than the impersonal and rather perfunctory preaching which goes by the name of religion in the novel. In addition, there seems to be no conflict between the religion of solidarity and the technological orientation of Bellamy's utopia. Both are founded on scientific principles and are, in one sense, different manifestations of the same impulse to improve the quality of life through systematic organization.

Like Bellamy, Morris is also interested in redefining human nature. Like Bellamy, who maintains that it is not human nature "but the conditions of human life [that] have changed" (*Looking Backward* 56), Morris too believes that there is a great difference between the "human nature of paupers, of slaves, of slave-holders, [and] the human nature of wealthy freemen" (*News from Nowhere* 74). Where Bellamy endorses the religion of solidarity, Morris similarly upholds "the religion of humanity." It is easy, he says, to love humanity when its individual members are "free, happy, and energetic at least, and most commonly beautiful of body also, and surrounded by beautiful things of their own fashioning, and a nature bettered and not worsened by contact with mankind" (113-14). Morris's humanist religion is even more secularized than Bellamy's. There are no mentions of religious institutions in *News from Nowhere* and Morris makes no attempt to

reconcile his world-view with Christian beliefs. His religion is based on an “intense and overweening love of the very skin and surface of the earth on which man dwells.” To him, this view is akin to “the spirit of the Middle Ages to whom heaven and the life of the next world was such a reality, that it became to them a part of life upon the earth; which accordingly they loved and adorned” (113). Morris’s religion of humanity is based on the principle of harmony between human life and the natural world. He admits religion into utopia on the same terms that he allows technology: it must be in the service of a natural life. In this sense, technology and religion occupy similar positions in *News from Nowhere* since both are subordinate to the ideal of a natural existence.

Both Bellamy and Morris are, as I showed earlier, avidly interested in the pros and cons of science and technology. Their interest in matters of religion and spirituality is at most secondary. In the case of Jones and Merchant, the order is reversed. Science plays only a small part in their novel whereas religion is given a much more prominent role. Carol Kolmerten criticizes the description of Caskia largely because she dislikes “the vaguely religious, abstract language -- the language of spiritualist fiction,” and because she questions “why utopia must be linked with traditional Christian values” (xxxvii). While it is true that Jones and Merchant align themselves with Christianity more closely than any of the other writers being studied here, their values are not as conventional as Kolmerten suggests.

Like Bellamy and Morris, they are not interested in religious dogma and ritual but in the relationship between religion and human nature. In a sense, their Christianity is also a religion of humanity and solidarity for it encompasses all people regardless of whether they believe in Christ or not. The narrator observes that the Martians “have never had a Christ -- in flesh and blood -- but they have put into effect every precept of our Great Teacher” (*Unveiling a Parallel* 128). But

unlike their predecessors, Jones and Merchant do not attribute the betterment of human nature to the amelioration of the conditions of human life. Rather, they see the practice of spiritual values as the cause of human improvement. The Caskians try to “work out [their] own salvation” by practicing the Golden Rule: “Whatsoever ye would that men should do to you, do ye even so to them” (151-2). They understand the “innermost meanings” of the words of Christ related by the narrator because they implement them in their lives. The writers thus stress the necessity of religious values to the creation of utopia.

Jones and Merchant also emphasize that religious understanding need not be confined to the teachings of Christianity. The Caskian “Master” with whom the narrator discusses these questions says, “I can see how a great number of religious societies... are possible, as corresponding with the requirements of different groups of people” (155). At the same time, the Caskians themselves have progressed beyond sectarian division because they have learned that the “finite mind is prone to worship its own creations of God” and they guard against this error by reminding themselves that “worship is not a ceremony, but profound contemplation of infinite wisdom, and infinite power, and the infinite love of God” (153). Their affirmation of diverse religious experiences indicates that Jones and Merchant are much more progressive than they appear based on the remarks of critics who equate any interest in religious matters with conservatism.

Wells carries the spirit of inclusiveness found in Jones and Merchant another step towards outright ecumenism. “Both Christendom and Islam,” he says, “are indeed on their secular sides imperfect realizations of a Utopian World State” (*Modern Utopia* 192). But whereas these religious traditions did not succeed in fully realizing their vision, the development in the nineteenth century “of material forces, and especially of means of communications” has made it increasingly possible to overcome national and sectarian isolation and approach “the extension and

consolidation of such a world-wide culture as mediaeval Christendom and Islam foreshadowed” (192-3). Wells thus links the achievement of religious aspirations for human advancement to the acceleration of scientific progress.

Wells believes that utopia will be closely linked to religion, but will see it in a new light. The utopian view, according to him, “will hold God to be complex and of an endless variety of aspects, to be expressed by no universal formula nor approved in any uniform manner.” Religion is a relationship between an individual and God and it is “perversion to make it a relation between man and man,” for which reason Wells does away with clergy (177). He explicitly articulates what is implicit in the novels of Bellamy, Morris, and Jones and Merchant: “The leading principle of Utopian religion is the repudiation of the doctrine of original sin” (176). His utopians, like the inhabitants of Boston, Nowhere and Caskia, believe that humanity is essentially good. In addition, they believe that humanity is naturally religious: “They accept Religion as they accept Thirst” (176). But they approach religion as they do everything else, with thought and discrimination, and using reason. Wells applies his synthetic impulse to matters of religion as he does to technology, politics, and culture. He claims that it is “possible to regard God as a Being synthetic in relation to men and societies” (236). Just as there will be many utopias, so will there be many views of God, in other words, many religions.

In the scheme of the novel as a whole, Wells’s acknowledgement of Islam is made only in passing, but it sets the stage for later writers’ more far-reaching interest in other, particularly Eastern, religious traditions. These more recent writers are not only more receptive to alternative religions, they are also much more openly critical of traditional Christianity. Huxley, for instance, sees Christianity as a form of escapism. *Soma*, which allows people to take a holiday from reality, has “all the advantages of Christianity and alcohol, none of their defects” (*Brave New World* 53).

Despite the cynical attitude towards institutional Christianity displayed by characters in both *Brave New World* and *Island*, Huxley acknowledges the importance of religion to social life. Mustapha Mond argues that people have become “independent of God” because they no longer suffer, they have “youth and prosperity right up to the end” (187). When John Savage argues that if they had a God, they would have a reason for self-denial, heroism, and nobility, Mond replies, “But industrial civilization is only possible when there’s no self-denial. Self-indulgence up to the very limits imposed by hygiene and economics. Otherwise the wheels stop turning” (190). Mond sees the loss of religion as part of the price one must pay to obtain happiness, but to Savage the price is too high. “I don’t want comfort,” he exclaims, “I want God” (192).

The alternative presented by the rituals of the Savage Reservation is far from satisfactory, but it is still better than the oblivion that has altogether replaced religion in *Brave New World*. The religion of the Reservation is an orgiastic fertility rite embellished with Christian and Native Indian symbolism. The participants dance with snakes, which are “commonly regarded as phallic deities among certain Indian tribes” (Aldridge 59), sprinkle them with such fertility signs as corn meal and water, go through an exercise in self-flagellation, and finally offer their acts to Pookong and Jesus, the “painted image of an eagle” and that of “a man, naked, and nailed to a cross” (*Brave New World* 97). The ceremony is presented as being rather barbaric but it gives the Indians’ lives a meaning and purpose that is entirely lacking in the lives of the “civilized” people in the novel. The Indians have “a reason for bearing things patiently, for doing things with courage” (189) whereas the inhabitants of *Brave New World* are automata conditioned to do what is required of them to maintain identity and stability. In other words, Huxley suggests that religious belief and practice, even at their most primitive, are valuable because they give people a sense of individuality, which

is the greatest defence against the deadening uniformity of a mechanistic dystopia. Religion, in other words, can serve to balance and leaven science.

As I earlier argued, however, there is very little optimism or hope in *Brave New World*. The Savage Reservation, though marginally more human than London in some respects, is by no means Huxley's recommended solution. In the end, he rejects what he considers the worst of both worlds: mechanistic technology, and both Western and primitive religion. It is left to *Island* to provide a vision of what Huxley's preferred alternative would look like. An important part of this vision is the combination of the *best* of the West and the East: humanistic science and Buddhist mysticism. For Huxley, the most important thing about Mahayanist or Tantric Buddhism is its concern with the here and now. One of Farnaby's Palanese guides tells him that if you are a Tantric, "you don't renounce the world or deny its value; you don't try to escape into a Nirvana apart from life." You develop self-knowledge and awareness by paying attention to the experience of living. The philosophy is "pragmatic and operational. Like the philosophy of modern physics -- except that the operations in question are psychological and the results transcendental" (*Island* 74). By thus linking religion with physics and psychology, Huxley not only suggests that they all are interrelated parts of one whole, he also distinguishes Buddhist enlightenment from both Christian escapism and primitive superstition.

Like Wells before him, Huxley wants to bring about synthesis. Wells's approach, at least in the matter of religion, is ecumenical and allows for different traditions to coexist. Synthesis is a historical process which will take its due course. Huxley's approach is more dogmatic. He spells out the way Buddhist philosophy and ritual are to be combined with scientific knowledge and physical exercise in order to yield his version of a synthetic religion. Still, Huxley, like Wells, belongs to the tradition that seeks to balance religion and science in utopia. But there is also

another approach which relegates religion to a secondary position in utopia. Bellamy and Morris take this approach to some degree, as does Brackett, to a much greater extent.

Of all the novels under discussion here, *The Long Tomorrow* is the least concerned with the role of religion in society. This may seem paradoxical since much of the novel portrays and contrasts the lives of different religious communities -- New Mennonites, New Ishmaelites, and fundamentalists -- in the America of the future. However, both the fundamentalists and the Ishmaelites are presented as dangerous extremists who can have no place in a balanced and progressive utopia. The fundamentalists, "who met secretly in fields and woods and preached and yelled and rolled on the ground," are the same ones who stone a suspected Bartorstown man to death. As Len's father says, they "have no religion or sect. They're a mob, with a mob's fear and cruelty" (*Long Tomorrow* 8). The equally fanatical Ishmaelites are extreme ascetics who renounce every material comfort to the point of near-starvation. They are, at the same time, capable of orgies of violence where they "whoop and screech and beat themselves with thorny branches or maybe whips... [and then] butcher some rancher that's affronted the Lord by pampering his flesh with a sod roof and a full belly" (164). Clearly neither group has anything to offer to the building of utopia.

The description of the Mennonites is much more sympathetic. Because they based their way of life on simple crafts and rejected cities and machines, they have turned out to be "of all folk best fitted to survive" in a post-nuclear world and have multiplied into millions (4). Their basic values of simplicity and decency are clearly right and beneficial to the creation of a harmonious and contented society. The people of Bartorstown, the other sympathetic group in the novel, have taken science and the pursuit of knowledge as their creed and are quite uninterested in religion as such. They and the Mennonites see themselves as opponents. However, there is a potential for the

convergence of their two systems. I have argued that the true utopia of the novel is not in Bartorstown but beyond it in some as yet unrealized alternative that reconciles Bartorstown to mainstream America. Implicit in this third alternative is the possibility of Bartorstown science and Mennonite religion coming together to bring about a more balanced and less fanatical world-view.

In discussing the novels up to this point, I have focused on their common belief that religion is an integral part of the social fabric and as vital to it as science is. Religion may fulfill a different purpose than science but, in a utopian society, progressive forms of religion complement the scientific elements. The most recent literary utopias are fascinating because they suggest that the relationship between science and religion goes beyond complementarity towards convergence and even fusion. This view is particularly evident in works that juxtapose Eastern philosophies with Western science. Huxley is already hinting at a union of the two in *Island*, where he writes that both “Buddhism and modern science think of the world in terms of music,” specifically a cosmic dance (176). Even more thoroughly than Huxley combines science with Buddhism, Le Guin integrates modern physics with Taoism and Lessing relates it to Sufism. Elizabeth Cummins Cogell identifies “the eternality of change” as one of the principles of Taoism and says that definitions of the Tao “are often paradoxes -- it is both... being and becoming” (156). Lessing quotes Sufi writer Idries Shah describing his book, *The Way of the Sufi*, as “a course in non-linear thinking” (Lessing, *Voice* 135). It should come as no surprise that contemporary utopian writers turn to religious traditions in which they can find ideas in common with those of modern science, ideas such as nonlinearity, dynamism, and the convergence of becoming and being.

Le Guin’s interest in and references to Taoism have been documented by a number of critics, who ascribe varying degrees of importance to its role in her work. Darko Suvin, for instance, argues that “the attempts to subsume her under Taoism (which has undoubtedly had an influence)

are... retrospectively revealed as inadequate" ("Parables" 271). Cogell, in contrast, argues that Taoism is at the heart of Le Guin's work and determines much of its "pattern and configuration." Moreover, *The Dispossessed* is, in her view, "the culmination of Taoist philosophy in Le Guin's writing" (179). It is not my purpose to repeat Cogell's enumeration of aspects of Taoist philosophy that appear in the novel. However, I would point out that knowledge of Taoism seems to yield many of the same insights into *The Dispossessed* that the study of field theory does.

Like field theory, Taoism acknowledges the potential for union between seemingly incompatible parts of a system because it "recognizes that within one concept or entity is always contained its other, that there are no true opposites but that all possibilities are contained within one" (Cogell 157). This idea, together with the Taoist concept that "change is eternal, reality is process" (157) explains Shevek's unified theory of time which reconciles sequency and simultaneity. Another point of similarity between Taoism and Annaresti philosophy is their common view of not only the fact but also the process of cyclical change. James Bittner observes that Odo, the name Le Guin gives to the revolutionary founder of Annares, is significant because "the Greek word *odos* [is] a rough cognate of the Chinese *Tao* and the English *way*." Used to denote an action, *odos* also means a journey or voyage (251). Thus it is no coincidence that the Odonian maxim that "true voyage is return" (*The Dispossessed* 68) accords with the Taoist belief that "returning is the (characteristic) movement of the Tao" (Cogell 175). In both cases, the central idea is that historical change takes place through recurring cycles, each of which is a little different from the previous ones. But as Shevek's theory asserts, "you *can* go home again... so long as you understand that home is a place where you have never been" (44). Inherent within the concept of return is the paradox that stability and change can coexist together.

In addition, Taoism is at the root of a number of the moral principles on which Annaresti society is founded. For instance, Taoism is supposed to have come into being as a challenge to the traditional class society in China. It advocates an undifferentiated, classless society in which the emphasis is on mutual service. Le Guin herself equates Odo's teaching, the philosophy underlying the utopian project on Annares, with both anarchism and Taoism: "Odonianism is anarchism; not the bomb-in-the-pocket stuff... but anarchism, as prefigured in early Taoist thought... its principal moral-political theme is cooperation (solidarity, mutual aid)" (quoted in Bittner, "Chronosophy" 251). The concept of "mutual aid" not only characterizes Annaresti social organization, it is also its strongest link to Taoist thought.

Taoism is clearly as much a part of the external background of *The Dispossessed* as is physics. But there are also internal links in the novel between religion and science. Shevek tells an Urrasti who thinks the Annaresti are atheists, that on Annares religion is considered "one of the natural capacities of the mind." He is shocked that anyone believes "we could do physics while we were cut off from the profoundest relationship man has with the cosmos" (12). As he later, observes, even on Urras, "some of the old... physics is all in the religious mode" (189). In Le Guin's work, then, science and religion are inextricably bound together.

Lessing's work presents a marked contrast because there is very little about science in *Marriages*. Although in *The Making of the Representative for Planet 8*, the next book in her Canopean series, she does view reality "through the double lens of particle physics and Eastern mysticism" (Fishburn 122), she does not explicitly mention either in *Marriages*. However, Sufism helps define the parameters of Lessing's story much as Taoism does Le Guin's. Sufi thought is in the background of both the themes and the narrative method in *Marriages*. Perhaps the most important tool Lessing borrows from Sufism is the Sufi teaching story, a method of indirect

teaching through parables by which “we learn... through the empirical act of reading itself a new way of knowing” (Fishburn 12). Although she does not make the connection explicit, this approach to story telling is related to Lessing’s view that the role of the writer is to present the reader with a “point of rest” between opposite philosophical positions. At this “resting point, a place of decision, hard to reach and precariously balanced,” the reader has to weigh the alternatives and make “his own personal and private judgements” (Lessing, *Voice* 12). The aim is not for the writer to impart knowledge or impose her own viewpoint but for the reader to recover existing but hidden or dormant knowledge. As Katherine Fishburn explains, during this process, the reader is enabled to “realize” things in both senses of the word: she recovers what she already knows, and she also makes that knowledge real (46). This act of realization is particularly crucial in utopian works, which ask the reader to participate in the creation of utopia.

Within the novel too, Sufi ideas play an important role. It is a Sufi tenet “that enlightenment is partially a matter of uncovering or recovering the hidden knowledge we all have” (Fishburn 130). The inhabitants of the zones have forgotten why they stopped looking beyond their own borders towards their neighbours. Only after the marriage of Al-Ith and Ben Ata do the people of Zone Four slowly begin to realize that their wars are “a displacement of something else, some other aim, or function, something enjoined that they had forgotten” (*Marriages* 174). The knowledge of this “something else” is preserved in their songs and games which suggest the proper activity of men is to climb the mountains, in other words to move in the direction of Zone Three. Similarly in Zone Three, they have stopped looking toward the blue air of Zone Two and cannot even remember that they ever did so. The marriage makes possible the recovery of forgotten knowledge and thereby sets all the zones on the road to enlightened development. As I mentioned in the previous section, science plays only a minor part in *Marriages*. But there is an implicit tie between spiritual

enlightenment and technological progress in the novel for it is only after the barriers separating the zones are overcome that they start to develop materially, especially in the lower zones.

This brings up another element of Sufi thought, the notion that the purpose of life is to progress through a number of stages in order to draw ever closer to a state of union with the Divine. For the Sufi, these stages are often described through the metaphor of Seven Valleys or Seven Cities. In Lessing's Canopean universe, the planet Shikasta is surrounded by six zones or spheres, and there is a suggestion that souls advance through these seven worlds as they try to achieve their purpose. Although in *Marriages* there is no mention of Canopus or Shikasta by name, the notion of progress from one zone to another is even more pronounced here than in *Shikasta*. In both novels, the zones seem to be Lessing's somewhat modified version of the Seven Valleys of Sufi mysticism. Given the mythical setting of the tale, Sufism is not identified as such in *Marriages*, but it does provide the underpinnings for the novel's structure and themes. Thus, although presented indirectly, religious philosophy is more central to this novel than to any of the others I have examined.

At the other extreme, *Woman on the Edge of Time* seems to be the novel that is the least concerned with religious matters. Piercy does not draw on any particular religious system or tradition and organized religion seems to have no place in her utopian Mattapoissett. But obviously, she is interested in the spiritual as well as the material well-being of the future society she has envisioned. Her approach is closest to what is called a New Age philosophy these days. A "self-proclaimed pluralist" (Kessler, "*Woman*" 313), she draws on Native spirituality, environmental awareness, and multiculturalism to create a holistic philosophy that serves in place of religion. Her world-view is based on the need to eliminate sexism and racism. I will discuss her feminism in the next section but her desire for racial harmony is equally important. The future utopians decided

that they want “diversity, for strangeness breeds richness,” but they also want to get rid of racism. Therefore, they have used their knowledge of genetic engineering to “breed a higher proportion of darker-skinned people and to mix the genes well through the population,” while at the same time holding on to separate cultural identities by giving each village its own particular traditional culture. By implementing scientific knowledge in conjunction with ethical principles, they have succeeded in breaking “the bond between genes and culture” so that each village is inhabited by people who are genetically diverse but culturally united (*Woman* 103-4).

In addition to upholding cultural diversity as one of their highest goods, the people of the future also see themselves as “part of the web of nature” (278). This link to nature affects all aspects of their lives and is often expressed through ideas that are reminiscent of Native American beliefs and practices. Luciente says, “we have a hundred ceremonies to heal us to the world we live in with so many others.” One example is the song of thanksgiving they sing to every tree or bush they pick from: “Thank you for fruit./ We take what we need./ Other animals will eat” (278-9). Also, they have healers who combine medicine with spiritual healing. Connie meets one, for instance, who “teaches people to heal themselves. Does surgery. Manipulating, pain easing, bone knitting” (159). Even in political life, they rely on dreams to guide them towards the right offices. Although most positions on the local planning councils are chosen by lot, those who represent the rights of other living things and the environment as a whole are chosen by dream: “Every spring some people dream they are the new Animal Advocate or Earth Advocate. Those who feel this come together and the choice among them falls by lot” (151). Just as she insists on technological choices that would safeguard rather than degrade nature, Piercy also advocates religious practices that take into account the unity of human beings with their natural as well as social environment.

I hope the foregoing discussion has shown that these writers' views about the place of religion in utopia are as different as their opinions about the role of science in utopia. At the same time, there is clearly agreement among them that since utopia is diverse and dynamic, then both its science and its religion should serve to unite diverse approaches and traditions into dynamic wholes. Indeed there seem to be, in every aspect of utopia, possibilities for reconciling apparent oppositions. This inclusive potential is especially apparent in the case of the relationship between women and utopia, which is the final topic I will discuss in this chapter.

Science and Gender

The question of gender in utopia is a fascinating one to explore, partly because the role of women in society is a topic that every utopian writer must address in one way or another. Following the rise of feminism beginning in the late eighteenth century, modern utopias have become increasingly concerned with women's issues. In *Feminist Utopias*, Frances Bartkowski asserts: "Feminist fiction and feminist theory are fundamentally utopian in that they declare that which is not-yet as the basis for a feminist practice" (12). I would argue that, conversely, much of utopian fiction and theory is, at least implicitly, feminist. This may seem an untenable claim, given that "beginning with Thomas More's *Utopia* the question of women in utopia is always asked and usually summarily answered" (Bartkowski 9). However, utopia as I have defined it -- an open-ended state which allows for diversity and dynamic change -- has much in common with the feminist ideal of a "revolutionary, subversive, heterogeneous and 'open'" discourse which encourages "a free play of meanings and prevents 'closure'" (Selden 137). There are of course many "feminisms" and it would be beyond the scope of this brief discussion to deal with even one of them thoroughly. This is not meant to be a feminist reading of the literary utopias under review.

Rather, I hope to indicate some of the points of intersection between feminist approaches to utopian texts and the science-oriented approach I have taken.

All the utopian writers I have discussed in this thesis were, or considered themselves to be, feminists in the context of their own time and place. In retrospect, however, one can see that many of them, especially the men, fail to transcend the patriarchal attitudes of their societies. Although it is perhaps unfair to judge Bellamy or Morris or even Huxley by the standards of the present, it is reasonable to consider the extent to which they practice what they preach in the novels. One useful measure of the writers' commitment to gender equality is their depiction of the relationship between women and scientific activity. Traditionally, there has been "a masculinist bias at the roots of modern science, both as an enterprise and world-view" (Deery 263). Science has been primarily a masculine domain where women, even if allowed in, were kept in the periphery. Although it is by no means the *only* criterion of their advancement, women's inclusion in the scientific endeavours of utopian society is a significant indicator of the rise in their status.

Both Bellamy and Morris are ostensibly committed to the equality -- particularly in the economic sphere -- of women and men. In Bellamy's utopia, women are members of an auxiliary industrial army in which they perform tasks "adapted, both as to kind and degree of labour, to [their] sex" (*Looking Backward* 173). The crucial point is that women are no longer dependent on men for their economic security but are rather entitled to the same share of the nation's wealth as men. Moreover, they are valued for their role as mothers and are freed from domestic labour so that they can contribute to society in other ways. The general of the women's army is part of the President's cabinet and "has a veto on measures respecting women's work" (174). In many ways, Bellamy's vision represents significant areas of progress for women, especially at a time when they were still struggling for the right to vote or to own property.

But even in theory, Bellamy sees the differences between men and women as intrinsic rather than culturally determined. This view has disturbing implications for the role of women in society because the consequences of physical differences are extended to the political realm. For instance, Bellamy claims that the types of work women are given and the conditions under which they perform them are determined by the fact that women are “inferior in strength to men, and further disqualified industrially in special ways” (173). The result is that women are marginalized not only in the industrial army but also in the political affairs of utopia. It is understood that women constitute “a sort of *imperium in imperio*” in the overall social system (14). They may be beneficiaries of the scientific reorganization of society in the form of an industrial army but there is no indication that they have had any role in the process of reorganization. More importantly, they have been given their place in the social structure because “the inner *imperium* is one from which... there is not likely to be much danger to the nation.” Rather, the arrangement ultimately increases women’s “power of giving happiness to men” (174-5). It is thus men who constitute “the nation” and it is their well-being that is of primary concern in Bellamy’s utopia.

One might argue that Bellamy’s vision, despite its inadequacies, is still progressive for its time. There is some justice to this argument but it is weakened by the fact that what Bellamy shows of the position of women falls far short of what he professes. Edith, the main female character in *Looking Backward* and the so-called “consummate flower” (219) of the new age, is “stuck in the nineteenth-century sentimental romance” (Pfaelzer, “Immanence” 61). Her main purpose in the novel is to provide a love interest for Julian West. Otherwise, she “spends her time shopping, blushing, and retiring early so that the men can talk meaningfully” (Kolmerten xxvii). Even though she is young and unmarried and therefore eligible for the industrial army, she is never shown working. Nor does she ever demonstrate any knowledge of the scientific or technical

principles underlying her society. What we see of the women of twentieth-century Boston does not distinguish them from their nineteenth-century forebears.

By contrast, Morris's female characters are different from their ancestors in important ways. Their appearance, the first thing about them that William Guest reports, is healthy, strong, and comely: "they were clothed like women, not upholstered like arm-chairs, as most women of our time are" (*News from Nowhere* 11). They take part in telling Guest about Nowhere, and interact freely with the men. Indeed this freedom of exchange between women and men is the main focus of Morris's vision of gender equality. In his utopia, the abolition of the concept of property has led to the elimination of traditional marriages, which were defined by the inequality between the partners. The idea of "a court for enforcing a contract of passion or sentiment" (47) appears ludicrous to the people of Nowhere. Instead, both women and men are free to relate to one another in a variety of ways without feeling the obligation to keep up "a pretence of unity when the reality of it is gone" (49).

Although this kind of equality is evident in the relationships between various characters in the novel, it is somewhat undermined by their language, which remains largely male-centred. For example, old Hammond, explaining the reason why love relations should not be ruled by laws, gives three examples of types of love that bring with them sorrow as well as happiness: "Calf-love, mistaken for a heroism that shall be life-long,... the inexplicable desire that comes on a man of riper years to be the all-in-all to some one woman,... or lastly the reasonable longing of a strong and thoughtful man to become the most intimate friend of some beautiful and wise woman." To take pleasure in these loves while they last and to shake off their grief when they end is considered not "contemptible and unheroic" but "necessary and manlike" (48-9). In the entire passage, the focus is on the man who falls in love and who then must deal with its joys and sorrows. The

language suggests that the woman is, in the chivalric tradition, merely the recipient of love.

Clearly, Morris does not quite achieve in practice the ideal of equality that he professes in theory.

In his vision of utopia, Morris replaces science and technology by artisanship and handicraft. Women's engagement in these activities would be a sign of their full participation in the life of society. However, there is little of such participation in evidence. Indeed, few people of either sex are shown at work; the mood of the novel, as Guest himself observes, is one of holiday. Still, the only people who are identified by their occupations are men: Dick the sculler and metalsmith, Boffin the dustman and writer of antiquarian novels, Robert the weaver, and so on. The women, on the other hand, although they work on farms and in guest houses, are not closely associated with any particular skills or jobs. The only exception is Philippa, a stone carver Guest comes across on his travels up the Thames. Even in Morris's egalitarian utopia, women and men are more equal in name than in actuality.

Wells follows in much the same tradition as his predecessors in that he professes the equality of men and women but does not demonstrate it. He claims that in his utopian speculations, "He" indeed is to be read as "He and She," but acknowledges that "women may be free in theory and not in practice" (*Modern Utopia* 110). So far, he shows greater awareness of women's situation than Bellamy or Morris, but he goes on to qualify his statement about women's freedom in ways that compare unfavourably with the views of the two older writers. Like Bellamy, Wells wants to give women freedom by ensuring their economic independence. However, his approach to economic equality is based, even more overtly than Bellamy's, on an essentialist and deterministic view of differences between women and men. Believing that "the things that are essentially feminine are different qualitatively from and incommensurable with the distinctly masculine things" (119), he bases women's economic status in society on their role as mothers. Thus, even though

they have a place in all aspects of social life, including membership in the caste of the *samurai* and by implication in the work of invention and discovery associated with the Poietic mind, their economic equality with men is ensured only by the fact that they receive wages for motherhood. Because initially Wells seems to be more conscious of gender inequality, the conventionality of his treatment of the role of women in society is all the more disappointing.

Finally, among the nineteenth-century utopias, *Unveiling a Parallel* presents an interesting case because, despite its overt commitment to the cause of equality between the sexes, it is not very different than the other novels I have discussed when it comes to the relation of women to science. Although Jones and Merchant emphasize the central role women play in running utopian society, they, like Bellamy, Morris, and Wells, show little of women in action. It is true that Elodia is a banker and a prominent member of Thursian society but she is ultimately not the ideal utopian woman but a parody of the "successful" nineteenth-century American man. Her presence in the novel is intended to show that women's natures are no different than men's but she is by no means a model to be emulated. The more positive female characters, the Caskian Clytia and Ariadne, are ironically more conventional types. Clytia appears to be a housewife and Ariadne is a schoolteacher; neither is involved in scientific or technological enterprises. By contrast, Clytia's husband oversees a steel works and Elodia's brother is an astronomer. It seems that even writers like Jones and Merchant, who are acutely aware of the arbitrariness of gender roles and deeply committed to subverting them, are to some extent bound by the cultural constraints that view science as men's domain.

Although they are more radical than any of their male contemporaries in addressing "the absurdities connected with the social construction of 'femaleness' and 'maleness'" (Kolmerten xvii), Jones and Merchant do not extend their challenge of the traditional order into the realm of

scientific activity. Indeed, despite their general concern with the role of science in utopia, none of the writers of the late nineteenth and early twentieth century associate it with the advancement of women within utopia. Even the most progressive utopian visions thus fall short of the ideal in which women would gain entry into the closely guarded bastion of male technological control.

The exclusion of women from the scientific arena continues well into the twentieth century, for instance in *The Long Tomorrow*. Like most other science fiction writers of the 1950s, Brackett writes about male protagonists (Albinski 163) and both the main female characters in her novel are far from admirable. One of them, Amity, is a selfish and clinging girl who has no interest in any ideological issues. Her goal, in which she succeeds, is to achieve domesticity by trapping Len's cousin Esau into marriage. The other girl, Joan, a resident of Bartorstown whom Len eventually marries, is more adventurous and politically minded. However, not only is she not involved in the scientific work of Bartorstown, she is positively opposed to it. She calls Bartorstown "The Hole" and dismisses its scientists' promotion of their research as "propaganda" (*Long Tomorrow* 213). Much as Brackett emphasizes that it is necessary to "accept the dangers of knowledge rather than return to ignorance, however familiar and secure" (Albinski 124), she does not provide a role for women in the acquiring of such knowledge.

Huxley is the first of the writers to give women a place in utopian society's technological sphere. Even though it is a dystopia, *Brave New World* "offers women a better deal than the contemporary British society of the 1930s" (Deery 260). They are freed from the demands of housework and childbearing, and the double standards of sexual morality. Working as they do in factories and hatcheries, they seem to be part of the technological activity that is at the centre of life in *Brave New World*. However, women and men are in reality treated differently in most areas and "the difference often means inequality, with women being assigned the lower status" (260).

For instance, the symbols used to label the bottled embryos on their assembly line are “a T for males, a circle for females” (*Brave New World* 22). The T, a cross with its top cut off, is of course the symbol of the Fordian technology that has replaced religion, art, science, and everything else in the future. Thus men are identified with the technological order that characterizes *Brave New World*. The circle, on the other hand, “apart from its obvious genital associations, suggests zero,” thereby reducing women to the position of “nothingness, hollow space, and passivity” (Deery 263).

The characters and the plot of the novel further reinforce this symbolic division between men and women. Men hold most positions of power, from the provost of Eton and the director of the central hatchery, all the way to the World Controller. They are the ones who drive the helicopters (Deery 261) and design and conduct the scientific experiments. Women, on the other hand, are merely technicians. Of course, as Mustapha Mond tells Savage, *Brave New World* has almost no use for scientific inquiry; its rulers are more interested in science as cookery. But even in such a context, women are subordinated to men in terms of scientific knowledge. All that John Savage’s mother, a former worker in the Fertilizing Room, can tell him about chemicals is that “you get them out of bottles. And when the bottles are empty, you send up to the Chemical Store for more. It’s the Chemical Store people who make them, I suppose.... I don’t know. I never did any chemistry” (*Brave New World* 109). Moreover, women are deprived of motherhood, the one thing that in earlier utopias was the source of their power. Their reproductive ability has been appropriated by a science which they do not understand or control. In the end, as June Deery points out, women “don’t do science; they have science done to them” (264).

Because *Brave New World* is a dystopia, it is difficult to know whether Huxley is indirectly criticizing the subjection of women, or is oblivious to it as he concentrates on other evils he wishes

to satirize. *Island*, being an unequivocal eutopia, provides a clearer picture of Huxley's views as well as his blind spots. Here there is a better balance between men's and women's roles. Women have regained their role as mothers together with greater control in matters relating to sex and reproduction. For them, *maithuna* is apparently a means to sexual satisfaction as well as a method of birth control: "for women... the yoga of love means perfection, means being transformed and taken out of themselves and completed" (*Island* 83). They are also more involved in different areas of social life than was the case in *Brave New World*.

Although women have positions of responsibility on Pala, the ones we see are mostly healers and teachers, fulfilling the roles traditionally assigned to women. Those who hold senior positions -- doctors, biochemists, agricultural experts, political figures -- are all men. Moreover, it is significant that even when supposedly combining the best of East and West, Huxley perpetuates traditional gender roles by linking men with science and women with mysticism. The family of Dr. MacPhail, Will's main guide, have been in Pala for four generations. Except for the original MacPhail who came from Scotland and married the Raja's daughter, they are all more Palanese than Scottish. Still, Dr. MacPhail identifies only his grandmother and great-grandmother -- but not his grandfather -- as Palanese. The men of the family all have such traditional Scottish names as Andrew, Robert, and Dugald; Will thinks of them as Highlanders. The women, on the other hand, are obviously Palanese, with names such as Lakshmi and Susila. The men are thus subtly associated with the West which is in turn identified with science, while the women are associated with the East which is identified with mysticism. When it comes to women and science, Huxley reverts to the gender stereotypes of his own society.

As we have seen so far, most writers recognize that bettering women's lives is an indispensable part of creating utopia. But no matter how enlightened and progressive in their

principles, these writers fall more or less short when it comes to implementing equal rights for women. Not until the 1970s do we see the emergence of works that make women's rights the central issue in utopia. Since Le Guin, Piercy, and Lessing are above all else feminist writers, every aspect of their novels relates in one way or another to the position of women in utopia. In *Annares*, *Mattapoisett*, and *Zone Three*, the most utopian of the societies in each of the novels, women and men share common privileges and responsibilities in all areas, whether political, economic, social, or sexual. Clearly there is much to be said about each of these areas. But rather than attempt the lengthy task of discussing all of them, I will confine myself to the theme I have pursued so far, namely the relationship between women and science. The examination of this topic alone will demonstrate the great difference between these recent utopias and their predecessors.

The treatment of the topic in *The Dispossessed* is probably the least radical of the three novels in question. For one thing, Le Guin's protagonist, like that of all the earlier novels, is a man. Moreover, physics, which she chooses to place at the centre of the novel is traditionally the most male-dominated of the sciences. However, she uses Shevek's revolutionary approach to physics as a vehicle for showing how feminist principles can alter the way science is practiced and used. Urras is similar to present-day Earth, though even more extreme, in its exclusion of women from scientific activity. Shevek is shocked to learn that on Urras, although there are female technicians and teachers in the girls' schools, the scientists are all men because, according to the Urrasti, women have "no head for abstract thought;... what women call thinking is done with the uterus" (*The Dispossessed* 59). This deeply rooted inequality is one of the most negative things about Urras because it makes the relationship between men and women one of possession. As Shevek eventually recognizes, Urrasti men "[contain] a woman, a suppressed, silenced, bestialized woman, a fury in a cage," with whom they recognize no relation but that of possession (60).

Similarly, Urrasti women, although they claim to be content with their role as coquettes, are in reality dissatisfied and dangerous because they know that “in the eyes of men [they] are a thing, a thing owned, bought, sold” (173). Both sexes demonstrate the validity of the Odonian belief that in a society based on ownership and property the possessors are the possessed.

In sharp contrast, society on Annares, being founded on Odonianism, is both “anarchist and feminist” (Ferns, “Dreams” 458). Having rejected property, the Annaresti have based their social structures on sharing rather than ownership. This sense of community applies to the relationships between men and women and to scientific work. As Shevek casually remarks, “about half” the scientists on Annares are women (*The Dispossessed* 59). To the Urrasti’s surprise, the physicist who first started Shevek on the path to his great theory was a woman. The original utopia on Annares owed its existence to the vision of ongoing revolution held by a woman, Odo. So too the new utopia that is to arise out of the union of Annares and Urras has its roots in a revolutionary science which in turn owes its existence to the participation of women in scientific work.

In *Woman on the Edge of Time*, women’s involvement in the world of science and technology has wider and more pronounced consequences, both for women themselves and for society at large. If Le Guin suggests that present-day science is used to exclude women, Piercy goes a step further to say that present-day technology is used to subjugate them. At the psychiatric hospital, the patients – mostly female – are treated like guinea pigs on whom the researchers – all male – can experiment. Earlier in her life, Connie has been given an unnecessary hysterectomy “because the residents wanted practice” (*Woman* 45). Now she is given drugs and a brain implant designed to deprive her of all control over her own life. Furthermore, it becomes clear that, if unchecked, the doctors’ manipulation of her can lead to a frightening dystopian future where technology is used to turn women either into custom-made sex objects for rich men or into “walking organ banks” (291).

Connie's murder of the doctors is the only way she can find to take control of the technology whose helpless victim she has hitherto been.

In the eutopian future that is made possible because of Connie's "act of war" (375), women have not only entered the realm of technology, they have transformed it. Women in Mattapoisett are artists and healers, but also computer experts and plant geneticists. Parra, one of these women of the future, is an expert in cleaning up water pollution. But she is more than just a technician; she is described as a "doctor of rivers," one who can heal the waters (214). In addition to involving women in scientific work, her society has also changed the way science is done so that it conforms to the "feminine" principles of inclusiveness and nurturing. Of course, these qualities pervade all aspects of the utopians' lives. One significant example is the way town councils use a process of consensus decision-making to determine "general questions of direction of science" (277), particularly those like genetic engineering or environmental modification that affect everyone. The mutuality of scientific research and community life is one of the basic principles of Piercy's utopia and one that is clearly linked to the feminization of utopian science .

Lessing also feminizes science but more subtly and at the same time more radically than Le Guin and Piercy. She goes beyond changing the way science is used to change the very meaning of science. Even though modern technology is not an important part of any of the zones, they all do possess skills and knowledge that are the equivalents of technology at a more primitive level. And although I do not agree with those critics who see Zone Three as a eutopia to Zone Four's dystopia, it cannot be denied that Zone Three is more advanced than its neighbour in a number of ways. Its people have capabilities that the people of Zone Four cannot hope to attain for many more years. The "rightness and flair" (*Marriages* 84) that stamps everything in Zone Three, from

dishes to garments to buildings, finds expression in “designs and patterns that [are] like a new language” (273). Such harmony between form and function is lacking in Zone Four.

The advantage of one zone over the other is partly explained in terms of whether or not women have a say in decisions about technology, i.e., such things as arts and crafts, weapons of war or defence, or methods of communication. In Zone Four, where there is a sharp division of labour between men and women – men being the rulers, women the custodians of private beliefs -- technology is used for war. In Zone Three, where women are the rulers of the land and yet share the responsibility for the making and implementation of decisions with men, technology is used to enrich rather than impoverish society: there, everyone knows that “if the fat and fullness of a land were not continually poured away into war, then everything, but everything, would start to fill, and flower, and grow lovely and lavish with detail” (275). The argument in *Marriages* is in favour of women’s open participation in the technological dimension of society.

There is also a more deeply rooted difference between the zones, in their respective attitudes towards technology, which arises out of the different sensibilities informing their world-views. Society in Zone Four is hierarchical and “obsessed with order and orders” (Peel 36). The relations between women and men are based on conflict between opposites since the very nature of the zone is “battle and warring. In everything. A tension and a fighting in its very substance: so that every feeling, every thought held in it its own opposite” (*Marriages* 144). Zone Three, on the other hand, is characterized by free and open interchange between opposites, leading to harmony and nurturing for all. The landscapes of the two zones reflect the difference between the linear uniformity of the one and the near-chaotic heterogeneity of the other. Much of Zone Four consists of “a uniform dull flat, cut by canals and tamed streams that were marked by lines of straight pollarded trees, and dotted regularly by the ordered camps of the military way of life.” Zone Three, in contrast, is “by

no means regular, but is ringed by mountains and broken by ravines and deep river channels.... the eye is enticed into continual movement” (35). In absolute terms, Zone Three’s inclusiveness and flexibility, traditionally seen as female values, are clearly preferable to Zone Four’s exclusiveness and rigidity, commonly identified with male values. The link between utopianism and feminism is evident here as both affirm heterogeneity and openness to movement and change.

And yet, as I have argued throughout, the ideal, both in Lessing’s novel and in utopian fiction generally, lies somewhere beyond binary alternatives. By its own affirmation of diversity, feminism gives up any claim to being the only way to read – or to achieve – utopias. The marriage pavilion of Al-Ith and Ben Ata, which is the embodiment of the zones’ highest technological achievement, symbolizes the union between their realms by combining the formal order of Zone Four’s landscape with the freedom and openness of Zone Three’s. The dimensions of the pavilion and its surrounding gardens, fountains, and walks are “every one exactly specified, prescribed, measured” but they are “in the damndest of measurements – everything in halves and quarters and bits and pieces, irregularities and unexpectedness” (51). The highest utopian good, of which marriage is a symbol, does not consist in either complete liberty or absolute regimentation but in a dynamic combination of freedom and order.

In general, the literary utopias I have discussed all try to apply the principle of complementarity to the relationship between the sexes. The problem with the earlier works is that they concentrate on the divisive rather than the unifying characteristics of complementary pairs. They see men and women as essentially different beings with mutually exclusive needs and capacities. Attempts at bridging the gap between them are seldom entirely successful. The more recent utopias still acknowledge the differences but focus more on the position of both women and men within a social field which is modified by their interactions. The changed emphasis allows

more room for variety and growth for women and men alike, and allows them to move towards greater equality. As with the apparent dichotomies between science and nature, and science and religion, the opposition between science and the feminine can to a great extent be resolved by the recognition that these poles are not irreconcilable opposites but interrelated parts of a complex, diverse, and dynamic cultural network.

CONCLUSION
MOVEMENT TOWARDS UTOPIA

The purpose of this study of nineteenth- and twentieth-century utopian fiction has been to develop and articulate a new theory of what constitutes utopia in the modern world. Traditionally, readers have considered utopia to be a personal vision of the ideal society crystallized into a rigid and static entity that is potentially oppressive because “one reader’s [or writer’s] utopia turns out, inevitably, to be another reader’s nightmare” (Ruppert 150). However, many of the same readers have also criticized literary utopias for being riddled with contradictions and paradoxes. The foundation of my argument has been that it is precisely these contradictions that indicate that utopia is not uniform and unchanging but diverse and dynamic. Indeed, in radical contradiction to the conventional view, I argue that diversity and dynamism are the two defining characteristics of utopia.

In practice, these two principles imply the convergence of seeming opposites into unified wholes. Such union does not mean homogenization or immutability. Rather, it consists of a multifaceted and variable process which can accommodate both stability and growth. These descriptions, however, may seem too abstract to be of much use in describing utopia, which is, after all, a representation of an entire society. This is why I chose to examine two theories of modern physics in conjunction with the utopian texts so as to arrive at a more concrete comprehension of the meaning of dynamism and diversity. Field theory is crucial to understanding the significance of diversity. Chaos theory similarly plays a central role in clarifying the importance of dynamic change.

There is a tendency to see these scientific concepts as analogies to be applied to the literary texts point by point. Such an approach is incompatible not only with the way literature works but also with the way modern science operates. In both cases, tapping the potential for new discoveries through the expansion of paradigms is far more important than finding exact correspondences between known facts and existing theories. Thus, both field theory and chaos theory serve not as formulas to be imposed upon literary utopias but as heuristic guides to reading them. I have already discussed in detail the various aspects of these theories as they apply to the novels. All I would like to recapitulate here is the fundamental importance of the two concepts of complementarity and nonlinearity to my definition of utopia.

Nonlinearity is an essential feature of modern utopianism because it allows for a complex understanding of the process of historical change. Nonlinearity means that every choice, every action, has consequences that are sensitively dependent on initial conditions. At the same time, the chain of events ensuing from each action goes through crisis points that magnify small changes so that the final result is highly unpredictable. Nonlinearity implies that very small changes can have disproportionately large consequences and that it is therefore crucial to choose one's actions consciously and carefully. Once it is set in motion, the process of change gains a momentum which amplifies the initial conditions to achieve an end that is much greater than the means. Historical change is dependent on individual choices but paradoxically, because of the pervasiveness of crux times, it does not have one inevitable, necessary outcome.

Many writers and readers of utopia resist change because it implies unpredictability, which is doubly threatening. For the writer, unpredictability lays utopia open to the uncertainty of individual interpretations and idiosyncrasies which may be at variance with the original conception of utopia. For the reader, unpredictability suggests a negation of individual autonomy for it seems

to rob personal actions of meaning by rendering their consequences unpredictable. But as a society that consists of interacting individuals, utopia is by its nature subject to change so that no matter how much we may try to resist, we cannot (either as writers or as readers) avoid utopia's intrinsic dynamism. Nonlinearity alleviates the anxiety of change by creating room for both personal action and the operation of the forces of history in the realization of utopia. It allows us to affirm utopia's complex dynamism as one of its positive attributes. The concept of nonlinearity brings together seemingly irreconcilable agents of change, one personal and the other impersonal, by showing that each has its place in the process of historical evolution. Only by taking both into account can we understand the process as a whole. In other words, nonlinearity demonstrates that these forces are complementary in nature. In one sense then, complementarity is not only crucial to field theory but is also closely related to chaos theory.

Complementarity is the central concept that determines the relationships between various sites in contemporary culture. The proliferation of new discoveries, inventions, and theories in the modern world, together with the increasing compartmentalization of learning, has tended to create the illusion of opposition between different areas of human knowledge. Paradoxically, as the range of science (in its broadest sense of "knowing") has widened, the attitudes toward it have become more reductive and narrow. The concept of complementarity is a powerful antidote to the futile exercise of studying parts in isolation from the whole because it transcends the binary logic that insists on seeing difference as contradiction. Instead, it reconciles ideas that have traditionally been regarded as opposite and incompatible and places them in a unified field where difference implies interaction and reciprocity.

As I have shown, science, far from being in opposition to other areas of human life, is closely related to them. Although it is often contrasted with literature, religion, and nature, it in fact

complements them so that together they provide a more comprehensive understanding of the world than any of them could by itself. The creators of literary utopias realized the underlying unity of these diverse areas long before the critics did. If there is one theme that runs through all the novels I have discussed, it is the idea that in order to reach utopia, we must go beyond dualism and achieve the capacity for integrating diverse points of view into a holistic vision. As Huxley puts it, we must learn to think not in terms of “either-or” but in terms of “not-only-but-also.” Bellamy’s demonstration of “double vision,” Wells’s “multiplex presentation,” Le Guin’s reconciliation of “sequency and simultaneity,” Lessing’s “union of incompatibles” through marriage -- these are all different ways of expressing the concept of complementarity in the language of literature.

In the same year as *News from Nowhere* was published, Oscar Wilde wrote: “Utopia... is the one country at which Humanity is always landing. And when Humanity lands there, it looks out, and, seeing a better country, sets sail. Progress is the realization of Utopias” (43). Wilde’s metaphor confirms my argument that utopia is not fixed in one time or place. Rather than a static and uniform entity, it consists in the interaction of heterogeneous elements within a dynamic and ever-changing field. But Wilde also draws attention to the relationship between utopia and progress, supporting my assertion at the beginning of the thesis that progress is the movement towards utopia. Similarly, Peter Ruppert writes that “utopia has always implied a faith in progress” (99). But if utopia itself involves continuous movement from one state to another, then progress, or the movement towards utopia, is no longer a teleological process but a process that has no end. It is part of utopia itself.

I spoke in the Introduction of the paradoxes that characterize utopian fiction. Statements that are self-referential have the potential to turn into paradoxes. The claims that progress is inseparable from utopia, or that utopia is both the goal and the agent of social transformation, are

such statements because they suggest that, in a certain sense, utopia creates itself. The statements cease to be paradoxical, however, when we recognize that utopia is not a product to be built or a destination to be reached. Utopia is the process of change itself so that we can find it in a literary text -- and perhaps also in the real world -- wherever dynamic interaction between diverse entities is affirmed and promoted. What I have called the "method" of utopian fiction is the movement within the text across the boundaries that separate divergent points of view.

The focus of this thesis has been on utopia as a literary phenomenon. But as I have argued all along, literature is not separate from the broader culture. The study of literature, particularly in conjunction with science, can teach us something about our culture. As a genre that brings literature and science together, the literary utopia is therefore a good indicator of the state of our world. Ultimately, utopia is worth studying because it tells us about the potential for change in the real, as well as the fictive, world. In bringing together literary and scientific discourses, in pointing out the role of complementarity in social relations and of nonlinearity in historical development, in illustrating the desirability of unity in diversity, utopian fiction indicates the directions that existing society ought to take in order to advance.

The proliferation of utopian works over the last hundred years seems to deny common claims that apathy and hopelessness are pervasive in today's world. Although these attitudes are undeniably common, there clearly is another aspect to modern culture, one that finds in the world's turbulence reason for hope. In the last analysis, utopia's abiding fascination, as well as its power as an agent of change, lies in the fact that it is truly nowhere and therefore potentially anywhere and everywhere. This inherent openness to potentiality provides the ground for hope, the force which sustains the desire for change and thus drives the movement toward utopia.

APPENDIX
AN EVER-ADVANCING CIVILIZATION

I would like to end on a note that is at once more personal and more universal. In this thesis I have approached utopia largely by way of science. I have used scientific concepts to theorize the place of utopia in culture, and have examined how scientific activity, both in itself and in relation to other areas of life, fits into various visions of utopia. I have also argued that science and religion are complementary ways of understanding the world. It is fitting then that I should end with a brief view of utopia through the eyes of religion, particularly since I owe, not only my insight into the relationship between science and religion, but also my interest in utopian thinking, to the teachings of the Bahá'í Faith, a religion which is "utopian" in the best sense of the word.

The Bahá'í Faith was founded in the mid-nineteenth century by Bahá'u'lláh (1817-92), a Persian nobleman who proclaimed that he was the one expected by all the religions of the past, come to fulfill the promise of the millennium. The foundation of his teaching is the oneness of humanity, a principle which he said constitutes the spirit of this age. Bahá'u'lláh writes: "The earth is but one country and mankind its citizens" (250). His writings; those of his successors, 'Abdu'l-Bahá and Shoghi Effendi; and those of the Universal House of Justice, the elected governing body of the Bahá'í world community, all emphasize the indispensability of unity to the establishment of global justice, peace, and prosperity. In the words of Bahá'u'lláh himself, "The well-being of mankind, its peace and security, are unattainable unless and until its unity is firmly established" (286). What gives this vision of unity its potency is also what makes it "utopian" in the sense that I have proposed throughout this thesis. In the Bahá'í world-view, unity is a dynamic process; it is, moreover, meaningless without diversity. The qualities that characterize the modern utopia are precisely those attributes which, according to Bahá'u'lláh, will make the earth "one

country.” The Bahá’í Faith is utopian in that it unequivocally believes that the world is advancing towards a glorious future of spiritual and material well-being for the whole of the human race. Indeed, such progress is seen as one of the purposes of human life. Bahá’u’lláh writes: “All men have been created to carry forward an ever-advancing civilization” (215). This positive vision of the future is not mere idealism, however, for it is rooted in a philosophy of history that binds together past, present, and future into a meaningful and coherent whole. The Bahá’í writings compare the world to the individual human being. Just as each individual goes through different stages on the way to adulthood, so too humanity has gone through different stages in its collective life on this planet:

The human race, as a distinct, organic unit, has passed through evolutionary stages analogous to the stages of infancy and childhood in the lives of its individual members, and is now in the culminating period of its turbulent adolescence approaching its long-awaited coming of age. (Universal House of Justice, *Promise* 36)

The world’s present turmoil and confusion are characteristic of the stage of adolescence, while its impending coming of age is signalled by a dawning consciousness of the unity of humankind, the principle which will characterize the period of humanity’s maturity.

An important implication of the analogy between the individual and the world is that it shows unity to be an organic concept. The human body is the most fitting model in the phenomenal world on which to base our understanding of global society because it is composed of cells and organs that are highly differentiated and yet are not only interdependent but synergistic in their operation. Similarly, human society consists of a wide variety of individuals and cultures that are nevertheless interrelated parts of a unified whole. In the same way that “the purpose of biological development transcends the mere existence of the body and its parts” but finds its meaning in “the expression of human consciousness,” so too the purpose of social development is “to establish enduring

foundations on which planetary civilization can gradually take shape” (Bahá’í International Community 7-8). Consciousness of the oneness of humanity is thus the cornerstone of a new global civilization. But unity, as the analogy suggests, is not and indeed cannot mean uniformity or stasis because it is only in the interaction of diverse but complementary manifestations of individual and social consciousness that the processes of change necessary to human progress can take place.

In recent years the phrase “new world order” has gained wide currency among world leaders, journalists and academics. Although for many people the phrase remains rather nebulous, it has a clear and specific meaning for Bahá’ís as the dynamic system outlined by Bahá’u’lláh to implement the full range of his teachings, teachings which are intended to transform both the inner lives of individuals and the structures of social organization. Over a century ago, Bahá’u’lláh wrote: “The world’s equilibrium hath been upset through the vibrating influence of this most great, this new World Order. Mankind’s ordered life hath been revolutionized through the agency of this unique, this wondrous System” (136). Bahá’u’lláh’s description of this vibrating and revolutionizing order suggests that it is dynamic in its effect. As Shoghi Effendi makes clear, it is also based on diversity:

Far from aiming at the subversion of the existing foundations of society, it seeks to broaden its basis, to remold its institutions in a manner consonant with the needs of an ever-changing world.... It does not ignore, nor does it attempt to suppress, the diversity of ethnical origins, of climate, of history, of language and tradition, of thought and habit, that differentiate the peoples and nations of the world. It calls for a wider loyalty.... It repudiates excessive centralization on one hand, and disclaims all attempts at uniformity on the other. Its watchword is unity in diversity. (*World Order* 41-2)

Bahá’u’lláh envisioned a dynamic and diverse world order that would enable the people of the world to fulfill their highest potential in a peaceful and prosperous society. His vision is what has

inspired me to examine the literary utopias of the last hundred years, which I consider to be individual approximations of that universal vision.

The expansion of the Bahá'í Faith into a global community has taken place at the same time as the resurgence of the interest in utopianism which I have outlined. This concurrence is not accidental. Part of the Bahá'í view of history is that the advancement of civilization has always taken place as a result of the revelation of God in the world through his messengers. The religions established by these messengers, which include Hinduism, Judaism, Buddhism, Christianity, Islam, and the Bahá'í Faith, are all from the same source, part of a single historic "plan of God" for educating humanity about its creator and for cultivating its spiritual, moral, and intellectual capacities. "This is the changeless Faith of God, eternal in the past, eternal in the future," writes Bahá'u'lláh (136). The differences among the religions are due to differences in the historical and cultural circumstances surrounding them. While they all share common spiritual principles, their social teachings and laws vary according to the needs and capacities of people at the time each religion was revealed. "Every age hath its own problem," counsels Bahá'u'lláh, "The remedy the world needeth in its present-day afflictions can never be the same as that which a subsequent age may require. Be anxiously concerned with the needs of the age ye live in" (213). The process of divine revelation is thus seen to be progressive and subject to change.

The coming of each new messenger of God represents a pivotal time in history when a new spiritual impulse is released into the world. This impulse gives rise to progress not only in spiritual matters but also in the material realm, with the emergence of new sciences, arts, discoveries, and inventions. According to Bahá'u'lláh, today is one of those pivotal times: "A new life is, in this age, stirring within all the peoples of the earth" (196). One of the manifestations of this new impetus is the rising interest in visions of a new world. While many critics observe that the last

hundred and fifty years have witnessed a burgeoning of utopian speculation, few, if any, provide a reason for this phenomenon. Of these critics, the one who comes closest to providing an explanation is Katherine Hayles, who argues for “a field notion of culture.” She sees culture, which encompasses within itself literature, science, religion, and other modes of discourse, as “a societal matrix which consists of ...a ‘climate of opinion’ that makes some questions interesting to pursue and renders others uninteresting or irrelevant” (*Cosmic Web* 22). Still, Hayles does not explain how a climate of opinion comes about. Based on Bahá’í beliefs, I would argue that the climate of opinion that encourages the pursuit of utopia has come into being through the influence of Bahá’u’lláh’s “wondrous System.”

Although they may not have been aware of the Bahá’í Faith, the work of many utopian writers of the nineteenth and twentieth centuries bears striking similarities to the vision expressed by Bahá’u’lláh. An extended comparison of the two bodies of work is beyond the scope of this discussion but brief examples from two of the authors I have discussed may serve to illustrate the point. Edward Bellamy and Marge Piercy are, chronologically and ideologically, at opposite ends of the spectrum. It is all the more interesting then to note that they share a similar awareness of the significance of the “present” moment in history. Bellamy ends *Looking Backward* with the following assertion: “All thoughtful men agree that the present aspect of society is portentous of great changes. The only question is, whether they will be for the better or the worse” (222). Piercy also claims, in *Woman on the Edge of Time*, that ours is “a crux-time. Alternate universes co-exist. Probabilities clash and possibilities wink out forever” (177). At this point in history, “[a]lternate futures are equally or almost equally probable” (197). In both cases, the direction of these great changes, the choice of alternative, depends on decisions made by the characters in the

novels and, by extension, by the reader. At the same time, these choices are not only necessitated but also formulated by historical circumstance.

This convergence of personal and universal forces is also at the centre of the Bahá'í view of history. In a meeting in 1890 with orientalist E.G. Browne, Bahá'u'lláh made this emphatic promise: "These fruitless strifes, these ruinous wars shall pass away, and the 'Most Great Peace' shall come" (quoted in Shoghi Effendi, *Promised Day* 121). In a 1985 statement on peace, addressed to "the peoples of the world," the Universal House of Justice reiterates the promise and says that it is now near fulfilment: "For the first time in history it is possible for everyone to view the entire planet, with all its myriad diversified peoples, in one perspective. World peace is not only possible but inevitable. It is the next stage in the evolution of this planet" (*Promise* 12). Here is the Bahá'í vision of the unfolding of God's plan for humanity through history. But within this vision there is also a role to be played by individual human beings. The Universal House of Justice goes on to present a choice: "Whether peace is to be reached only after unimaginable horrors precipitated by humanity's stubborn clinging to old patterns of behaviour, or is to be embraced now by an act of consultative will, is the choice before all who inhabit the earth" (14). At this turning point in history, the shape our immediate future will take is in our own hands.

There are many more points of similarity between parts of the utopian visions of the writers of the past century and the Bahá'í vision of a new world order. Wells's assertion that a modern utopia must be planetary in scope reflects Bahá'u'lláh's exhortation to the leaders of the world to hold "a vast, an all-embracing assemblage" (249) to lay the foundations of a world federation of nations. Huxley's attempt to reconcile science and religion parallels the Bahá'í belief that these two systems of knowledge are "the real progenitors of civilization," most effective during those periods when, "each in its own sphere, religion and science were able to work in concert" (Bahá'í

International Community 12). Brackett's insistence on the individual's right to knowledge as a prerequisite of utopia echoes the Bahá'í principle that every person must be free to investigate reality for himself or herself because "sciences, knowledge, arts, wonders, institutions, discoveries and enterprises come from the exercised intelligence of the rational soul" ('Abdu'l-Bahá, *Questions* 217). Lessing's view that the "marriage" of male and female principles is a metaphor for utopia itself resembles 'Abdu'l-Bahá's use of another metaphor to illustrate the Bahá'í concept of the unequivocal equality of women and men: "The world of humanity has two wings -- one is women and the other men. Not until both wings are equally developed can the bird fly" (*Selections* 302). The list of parallels can go on but these few examples suffice to place Bahá'í teachings and utopian thought within the same field or climate of opinion and to confirm that, as Hayles claims, "it is this climate, rather than direct borrowing or transmission, that is the underlying force guiding intellectual inquiry" (*Cosmic Web* 22).

Whether or not one agrees with the views I have expressed in the preceding few pages, one thing seems evident: the utopian writings of the last hundred years share with the Bahá'í writings an abiding sense of hope for the future. In both cases, this hope is based not on naiveté but on an understanding of historical process and on the belief that human progress can take place in a society that welcomes both difference and change, but at the same time places them within a holistic and unifying paradigm. Let me end with a metaphor used by 'Abdu'l-Bahá to illustrate the power of unity in diversity:

The [difference] which is a token of diversity is the essence of perfection....

Consider the flowers of a garden: though differing in kind, colour, form and shape, yet... this diversity increaseth their charm, and addeth to their beauty....

In like manner, when divers shades of thought, temperament and character, are brought together under the power and influence of one general agency, the beauty and glory of human perfection will be revealed and made manifest....

This unity is made possible through the “power of the Word of God” which is able to “raise up from the heart of the world a voice that shall dispel war and strife, uproot dissension and disputation, usher in the era of universal peace and establish unity and concord” (Selections 291-2).

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