THE NATURE OF REALITY

1. Introduction: Attitudes to Experiential Reality

In this chapter we will look at general New Age theories and speculations about the nature of reality. This is a convenient starting point, because most of the beliefs discussed in later chapters presuppose certain ideas about what kind of universe we are living in. Arguably, such ideas will only carry conviction for specific individuals to the extent that they resonate with how they feel about living in the world of daily experience. Therefore I will begin this chapter with some remarks about the attitudes New Age adherents take to experiential reality.

These attitudes vary along a scale from this-worldliness, on the one hand, to otherworldliness, on the other. I use the distinction between these two poles in the sense of A.O. Lovejoy's classic study The Great Chain of Being¹. Lovejoy explains that otherworldliness does not refer to 'a belief in and a preoccupation of the mind with a future life'. On the contrary, such a preoccupation betrays a strong this-worldly focus, hoping for 'a prolongation of the mode of being which we know in the world of change and sense and plurality and social fellowship, with merely the omission of the trivial or painful features of terrestrial existence, the heightening of its finer pleasures, the compensation of some of earth's frustrations'². Otherworldliness, rather, refers to

the belief that both the genuinely 'real' and the truly good are radically antithetic in their essential characteristics to anything to be found in man's natural life, in the ordinary course of human experience, however normal, however intelligent, however fortunate. ... the human will, as conceived by the otherworldly philosophers, not only seeks but is capable of finding some final, fixed, immutable, intrinsic, perfectly satisfying good Not, however, in this world is either to be found, but only in a 'higher' realm of being differing in its essential nature, and not merely in degree and detail, from the lower³.

Of the temporal, sensible, essentially divided world, an otherworldly view of reality may give any one of three accounts. This world may be regarded as no

¹ Lovejoy, *Great Chain*. I will repeatedly refer to Lovejoy's work, because his discussions prove surprisingly relevant to New Age thought. Lovejoy provides us with a number of systematic tools for analyzing the essential structure of New Age views of reality. The backgrounds to this phenomenon will become clear from Part Three of this study.

² Lovejoy, Great Chain, 24.

³ Lovejoy, Great Chain, 25-26.

more than an illusion, as is the case in monistic Vedânta philosophy⁴. Or it may be stated that, although this world is real, it *ought* never to have come into existence. This is the position of the dualistic gnosticism of late antiquity, which sees the creation of the world as a disaster.⁵ Finally, the otherworldly-minded may simply refuse to discuss the nature of the world because this is deemed irrelevant to the sole aim of salvation from that world. Such is the case in early Buddhism⁶.

The alternative, this-worldly attitude can be found even in societies which officially espouse otherworldliness. According to Lovejoy, this is simply because people living in such societies

have never quite believed it, since they have never been able to deny to the things disclosed by the senses a genuine and imposing and highly important kind of realness, and have never truly desired for themselves the end which otherworldliness held out to them. The great metaphysicians might seek to demonstrate its truth, the saints might in some measure fashion their lives in accordance with it, the mystics might return from their ecstasies and stammeringly report a direct experience of that contact with the absolute reality and the sole satisfying good which it proclaimed; but Nature in the main has been too potent for it. ... the plain man ... has manifestly continued to find something very solid and engrossing in the world in which his own constitution was so deeply rooted and with which it was so intimately interwoven; and even if experience defeated his hopes and in age the savor of life grew somewhat flat and insipid, he has sought comfort in some vision of a better 'this-world' to come, in which no desire should lack fulfilment and his own zest for things should be permanently revitalized.⁷

I have quoted Lovejoy's ornate descriptions at some length, because we will find again and again that a correct view of this distinction is crucial for understanding the nature of New Age religion.

Implicit in Lovejoy's description of this-worldliness is a distinction between a focus on our world of experience as such, or on a better "this-world" to come which is modeled on the present world, but better. I propose to refer to the first variety as "strong this-worldliness" and to the other as "weak this-worldliness". Within this weak variety, again, the better "this-world" may be envisaged either as located on this earth (which amounts to some form of millenarianism) or in another reality beyond death.

On the strong this-worldly pole we find, first of all, many neopagans, particularly those of a strongly Goddess-centered perspective. Neopagans generally emphasize the beauty and splendour of the natural world, and show relatively little interest in non-empirical realities other than the "inner worlds" of the

⁴ Lovejoy, Great Chain, 96-97; cf. 30-31, 92.

⁵ Lovejoy, Great Chain, 97.

⁶ Lovejoy, Great Chain, 97.

⁷ Lovejoy, Great Chain, 26-27.

mind. They often explicitly attack New Age tendencies to escape from this world either spatially (into "higher spiritual spheres") or temporally (into past-life experiences or expectations of future bliss), emphasizing that our business is the here and now. The primary neopagan symbol of this-worldly spirituality is the *Goddess*, the essence of which is poetically evoked by Z Budapest:

This is God, children, listen up well. The beautiful blue planet, our mother, our sister. She moves with 200 miles per second, yet imperceptible; she offers the quiet of the lakes and the rushing of her rivers, the vast expanse of her oceans, the echoes of her mountains. This is God, children... listen up well. Lift your eyes to the heavens, and you behold her sisters the stars, and her cousins the suns and nebulas, and fill your senses with her infinite beauty. This is God, children... and she has made no other heaven but the heavens where you already reside, and she has made no hell except the one you insist to create for yourself. Here is paradise. Here is destiny. Here is infinite grace. This is God. When you seek her she is beneath your feet. When you seek her she is food in your mouth. When you seek her she is love in your heart, pleasure in your body. You share her heartbeat.⁸

Essentially similar sentiments can be found outside the neopagan community, very prominently in Matthew Fox's Creation Spirituality⁹ but also, less expectedly, in the teachings of the channeled entity Ramtha¹⁰.

Before discussing the varieties of "weak this-worldliness", I first focus on the radical opposite to strong this-worldliness. Although repeated allusions in New Age sources to the importance of the unitive experience of ultimate reality might make one expect otherwise, true other-worldliness is very rare in the New Age movement. The only unambiguous example in our corpus is A Course in Miracles. According to this text-which has correctly been characterized as a Christianized version of non-dualistic Vedânta¹¹—our world is just an illusory chimaera, which has nothing to offer but violence, sorrow and pain¹². We must awaken from the bad dream of separation, and reunite with God. Then the world will cease to exist¹³. Although many other New Age sources routinely use the Oriental concept of "maya" and refer to the world of space-time as ultimately illusory, they seldom come close to the uncompromising worldrejection found in the Course. The more usual view is that, in the final analysis, the world may well be an illusion, but that it is a meaningful illusion: one which should be used and worked with constructively rather than simply escaped from or dispelled. Thus, the "illusionism"-view is accommodated to an

⁸ HBWM 298. It is no doubt for poetic reasons that the Goddess, who is obviously female, is here referred to as "God".

⁹ For instance OB 59-61

¹⁰ RI ch. 9 'If this isn't Heaven'.

¹¹ Skutch, Journey, 72.

¹² Cf. Wapnick, Meaning of Forgiveness, 20-24.

¹³ CiM:MfT 35-36.

attitude of weak this-worldliness (to be discussed below). The second otherworldly position distinguished by Lovejoy, i.e., "gnostic" world-rejection, is remarkably absent from New Age thought. Although many New Age sources regard ancient gnosticism in a favourable light, this never includes its world-rejecting dualism, which is sometimes explicitly refuted¹⁴. Finally, Lovejoy's "Buddhist" variety is of marginal importance in New Age sources, although traces of it can be found, again, in *A Course in Miracles*¹⁵.

Although New Age thinking is on the whole more congenial to strong thisworldliness than to otherworldliness, most typical of the movement is a weak this-worldliness. Both varieties distinguished above may be found: either a better "this-world" located on our earth, or such an existence located in "higher" realms. Most typical for the last variety is the view that, although this world is not perfect, it is to be valued positively as a means for reaching the higher realities beyond. Although in New Age sources we find various degrees of "earth plane" devaluation, these are seldom of a radical kind. According to the most common view, physical reality is characterized by a relatively "dense" and limited level of consciousness. This implies a hierarchical universe consisting of levels of spirituality, in which pure spirit on the one hand and dense matter on the other are two poles of a continuum rather than radically separate and opposed principles. Our own level of existence is generally regarded as among the lowest and most material. Incarnation on earth, then, is not exactly a pleasant experience: 'Imagine that one day you put on many layers of shirts, trousers, and socks, then added to those several heavy sweaters and overcoats. How would you feel? This is what it feels like for your Higher Self to come into a physical body. You wonder why you feel so heavy at times!'16. In spite of such unpleasantness, life on earth is not on that account seen as negative. The world is essentially regarded as a domain for learning and growth (often referred to quite literally as a "school" 17), and the troubles associated with it must be approached as tasks. The school-analogy is actually very close

¹⁴ OB 76-77, 112, 307; SS 479-480. Seth, among others, is very concerned with refuting world-rejecting attitudes, emphasizing repeatedly that 'spirituality is a thing of joy and of the earth'. This does not prevent him from developing a theory of multidimensional reality which is thisworldly only in a weak sense.

¹⁵ See for instance its refusal to discuss subjects like reincarnation, because 'theoretical issues but waste time' (CiM:Mft 57-58).

¹⁶ SG 149. Cf. Shakti Gawain: 'Being a very evolved spirit in a relatively unevolved form is quite uncomfortable. It accounts for most of the problems we are having. It's as if we are gods and goddesses living in little mud hovels and driving around in clunky, funky, old jalopies. It can be frustrating and demeaning—especially when nobody even realizes who we are!' (LL 39)

¹⁷ For instance IAP 337; RBNA 102; RU 180. Cf. related formulations like "learning environment" (SoS 28), "learning lessons" (RR 15-21), doing a "course" or "curriculum" (CiM Introduction).

and illuminating. As indicated by the quotation above, entering the school of earth does mean that limits are imposed on an individual's freedom of movement and expression. But these are meaningful restrictions which serve a purpose, as indeed they do in any other school. New Age authors tell us that we are here to learn lessons which cannot be learned otherwise, and once we have learned them we will be free to leave the school and pass on to a higher level of development. As long as we have not absorbed the lessons, we are stuck with earth existence and have to make the best of it. Accordingly, the attitude of many New Age sources to life on earth is characterized by a certain ambiguity, not dissimilar to common feelings about attending school. Some love it because there is so much to learn. Some hate it, because they feel constricted by it. Mostly, however, one finds a mixture of both emotions. The essential point is that New Age authors—whether they hate it or love it or just take it as it comes—see it within a larger perspective. Just as school is only a preparation—but a necessary one—for "real life", life on earth is also just one stage in a much larger evolutionary process. Earth life must be seen as a stepping stone to larger realities, which is why we will not be able to leave it before having experienced it to the fullest. Strong world-affirming or world-denying elements may occasionally be accomodated within this "school"-view, with varying degrees of success¹⁸. Mostly, however, one finds an attitude in which everyday reality is simply accepted as something to be dealt with in a positive spirit, against the background of a larger, cosmic life which gives meaning to the relatively limited existence on earth.

Both the representatives of the New Paradigm, on the one hand, and those authors who focus on the coming of the Age of Aquarius, on the other, look for a better "this-world" on our earth. Nevertheless, from our present perspective these two groups must be rather sharply distinguished. The believers in an Age of Aquarius tend to combine their expectation of an imminent earthly millennium of Love and Light with an equally strong belief in higher realities and intelligences beyond this world. There is an element of contradiction is this: if heaven were to descend on earth then presumably humans would no longer need to ascend to heaven, and the reverse. It also is difficult to see how a world of pure bliss and harmony could continue to be effective as a "learning environment". We will return to these problems in due course. At this point I just call attention to the characteristics of this form of weak this-worldliness. The essential point is the expectation of an imminent transformation of both humanity and the world. Both will be transferred to a new, higher state of being and a "higher level of vibration". It is not just that humanity will change its

¹⁸ For instance Ramtha, who exalts the beauties of nature but whose spiritual authority derives from his attainment of enlightenment during his only life on earth, after which he no longer needed to be incarnated in that world he praises in such glowing terms.

ways and restore the world to its former state of harmony and beauty, although this is also involved. The transformation will be more radical and unprecedented, even involving changes in the atomic structure of the world which result in a spiritualization of matter as such. The whole world, together with humanity, will be transported "into a higher octave".¹⁹ In these expectations we recognize a form of this-worldliness which may be called even "weaker" than the preceding view of the world as a "learning environment". Although prophets of the Age of Aquarius may exalt the beauties of nature unspoilt by man²⁰, in the final analysis even this natural world appears to be in need of redemption²¹.

Such is not the case with the typical "New Paradigm" literature. Although representatives of this category seldom celebrate the beauties of the natural world as poetically as Z Budapest, they are equally concerned with its preservation; they tend to talk of "spirituality" in terms of living in harmony with nature and its laws rather than in terms of other spiritual realities beyond this world. Defenders of the New Paradigm share with those who expect the Age of Aquarius a strong dissatisfaction with the present state of the world. This dissatisfaction, however, is not with the world as such, but only with our present culture. The ecological crisis has been created by a society based on fundamentally flawed presuppositions. Humanity has to change its way of thinking, perceiving and acting, and then it will hopefully still be possible to heal the world. It is on such a positive transformation of humanity that representatives of this category focus their attention. A transformation of the world, however, is not necessary: the earth must just be restored to its former natural beauty and balance. We have to conclude that in this New Paradigm variety the boundary between strong and weak this-worldliness is blurred. New Paradigm and Neopagan views about nature, although expressed in different literary styles and terminologies, are fundamentally compatible. The question whether the balance tilts slightly in favour of either strong or weak this-worldliness in specific cases is of minor importance here.

It can be concluded that otherworldly thinking and world-rejection, at least in its stronger forms, is not typical of New Age thinking. On the whole, New Age-adherents are this-worldly oriented, either completely or somewhat ambivalently. Weak forms of this-worldliness dominate, but strong forms can count on widespread approval even by weak this-worldy New Agers. It will be seen

¹⁹ For instance RBNA 99-109; VAA 111, 114-116, 118.

²⁰ See Trevelyan's frequent quotations of Romantic nature poetry, in particular his favourite poem 'God's Grandeur' by Gerald Manley Hopkins (EiG 191).

²¹ Cf. George Trevelyan, *Operation Redemption* (OR). See for instance OR 181-182, which illustrates that, in spite of his exaltation of natural beauty, he is almost exclusively concerned with the destiny of *humanity*. Sorrow and indignation about the destruction of nature, so prominent in Matthew Fox's Creation Spirituality, is strikingly absent in Trevelyan's work.

later that these conclusions have important consequences for various aspects of New Age religion, such as the view of reincarnation. First, however, we will look at general New Age ideas about the nature of reality and its relation to the world of experience.

2. THE MEANINGS OF HOLISM

There is no doubt that the quest for "wholeness" at all levels of existence is among the most central concerns of the New Age movement. "Holism", a term originally invented by the South-African statesman J.C. Smuts²², has been adopted as a universal catchword for this orientation. However, it is important to emphasize from the outset that the term "holism", in a New Age context, does not refer to any particular, clearly circumscribed theory or worldview. The only thing which demonstrably unites the many expressions of "holism" is their common opposition to what are perceived as non-holistic views, associated with the old culture which the New Age movement seeks to replace or transform. Such non-holistic orientations boil down to two categories which can be referred to as dualism and reductionism²³. The main forms of dualism for which the New Age movement tries to develop holistic alternatives are: 1. The fundamental distinction between Creator and creation, i.e. between God and nature and between God and man: 2. The distinction between man and nature, which has traditionally been conceived as a relation based on domination of the latter by the former; 3. The dualism between spirit and matter in its various derivations, from Christian asceticism to Cartesian dualism. It is generally assumed in the New Age movement that such dualistic tendencies are ultimately based on the Judaeo-Christian roots of western civilization. Reductionism is a more recent development, associated with the scientific revolution and the spirit of modern rationalism. Its main forms are: 1. The tendency to fragmentation, which treats organic wholes as mechanisms that can be reduced to their smallest components and then explained in terms of the latter; 2. The tendency to reduce spirit to matter, so that spirit becomes merely a contingent "epiphenomenon" of essentially material processes. In all these five domains, the New Age alternatives are called "holistic". The only common characteristic of these alternatives is that they systematically attempt—with varying degrees of success—to avoid and replace dualism and reductionism.

Holism, in this sense, pervades the New Age movement: from its concern with Holistic Health to its quest for unitive consciousness, and from ecological awareness to the idea of global "networking". In this chapter, we are con-

²² Smuts, *Holism and Evolution* (cf. Steyn, *Worldviews in Transition*, 123-124) Contrary to what one might expect, Smuts's book has been almost completely ignored by New Age authors.

²³ Cf. Hanegraaff, 'New Age en cultuurkritiek'; id., 'Verschijnsel New Age'.

cerned with holistic views of reality as such. While discussing the most important theories and speculations which have been developed, I will attempt to make a rough distinction between the main structural types of holism which underlie these theories. I will argue that holism can be conceived in abstract terms as: 1. based on the possibility of reducing all manifestations to one "ultimate source"; 2. based on the universal interrelatedness of everything in the universe; 3. based on a universal dialectic between complementary polarities; 4. based on the analogy of the whole of reality, or of significant subsystems, with organisms. I will not address the philosophical question to what extent these types can be combined with each other in principle; it suffices that, in the work of specific New Age thinkers, they are sometimes combined, although one type usually dominates quite strongly. The first two types, finally, are undoubtedly the most important in a New Age context. They will be treated in separate sections, while the others will be discussed more briefly.

A. The Ultimate Source of Manifestation

One of the most pervasive assumptions to be found in the New Age movement is that all reality is ultimately derived from one Ultimate Source. The great diversity of phenomena found in the world of manifestation must, at some deep level, be linked together by virtue of a common Origin. This One Source of all being thus guarantees the ultimate wholeness of reality. The capitals are appropriate, because the Source is inevitably regarded as, or immediately associated with, God. A typical New Age statement of "Ultimate Source Holism" is the following passage from George Trevelyan:

Behind all outwardly manifested form is a timeless realm of absolute consciousness. It is the great Oneness underlying all the diversity, all the myriad forms of nature. It may be called God, or may be deemed beyond all naming—and therefore, as in the East, be called THAT. If one is of agnostic turn of mind, one can refer to it as 'creative intelligence'. But from it derive all archetypal ideas which manifest in the phenomenal world. For that world issues ultimately from spirit, and its forms might be conceived as frozen spirit. The quality of Being permeates everything, suffuses everything. Divinity is therefore inherent everywhere.²⁴

Rupert Sheldrake, in his first book, cautiously presents the idea of an ultimate source as an hypothesis:

If this transcendent conscious being were the source of the universe and of everything within it, all created things would in some sense participate in its nature. The more or less limited 'wholeness' of organisms at all levels of complexity could then be seen as a reflection of the transcendent unity on which they depended, and from which they were ultimately derived.²⁵

²⁴ VAA 5.

²⁵ NSL 210. Some other examples of the same idea: ToP 233; CV 39; S 188-189; RBNA 29-30.

Although it may not be immediately apparent, such statements contain an inner ambivalence which considerably complicates the character of "Ultimate Source Holism". We note that Trevelyan's quotation, with its clear pantheistic tendencies, also states that the Source resides in a "timeless" sphere. Sheldrake speaks of creation "participating in" and "reflecting" a source which is, nevertheless, transcendent. In other words, both transcendence and immanence are affirmed to varying degrees. As a guideline for analyzing their relation in New Age holism of the present type, I again refer to Lovejoy. The central argument of his *Great Chain of Being* is summed up as follows:

The most noteworthy consequence of the persistent influence of Platonism was ... that throughout the greater part of its history Western religion, in its more philosophic forms, has had two Gods ... The two were, indeed, identified as one being with two aspects. But the ideas corresponding to the 'aspects' were ideas of two antithetic kinds of being. The one was the Absolute of otherworldliness—self-sufficient, out of time, alien to the categories of ordinary human thought and experience, needing no world of lesser beings to supplement or enhance his own eternal self-contained perfection. The other was a God who emphatically was not self-sufficient nor, in any philosophical sense, 'absolute': one whose essential nature required the existence of other beings, and not of one kind of these only, but of all kinds which could find a place in the descending scale of the possibilities of reality—a God whose prime attribute was generativeness, whose manifestation was to be found in the diversity of creatures and therefore in the temporal order and the manifold spectacle of nature's processes.²⁶

This paradox of God as the self-sufficient Absolute and as the generative source of Being, combined in one and the same tradition, led to a pervasive ambiguity about ultimate values.

If the good for man was the contemplation or the imitation of God, this required, on the one hand, a transcendence and suppression of the merely 'natural' interests and desires, a withdrawal of the soul from 'the world' the better to prepare it for the beatific vision of the divine perfection; and it required, on the other hand, a piety towards the God of things as they are, an adoring delight in the sensible universe in all its variety, an endeavor on man's part to know and understand it ever more fully, and a conscious participation in the divine activity of creation.²⁷

In other words, the pervasive duality between otherworldliness and this-world-liness is parallelled by a duality between two conceptions of Ultimate Reality/God as either radically transcendent or immanent in creation. Lovejoy's study documents the uneasy marriage of these two contradictory strains in Western intellectual and religious history. From our perspective, it is extremely interesting to note that substantial and essential parts of Lovejoy's book (first published in 1936) read as if he had the New Age movement specifically in mind.

²⁶ Lovejoy, Great Chain, 315.

²⁷ Lovejoy, Great Chain, 316.

The similarities are so close and numerous that we can only conclude that Platonism, with its attendant problems, apparently extends its influence into the heart of the New Age movement. In Part Three of this study we will explore the historical background of this phenomenon. At this point we are interested in the ambivalent coexistence of otherworldly and this-worldly elements, epitomized by the concentration on a Transcendent Absolute or a Generative Source.

Given the this-worldly rather than otherworldy orientation of New Age thinking, it is to be expected that the conception of God as a "generative source" will be more common than its self-contained alternative. And this expectation is indeed confirmed by the sources. Particularly clear examples are the "creation myths" found in various New Age sources, all of which are actually myths of emanation from one Original Source²⁸. They describe how an original absolute Oneness gave birth to the richness and diversity of creation. This process is generally presented as a *positive* event, not as a fall from perfection. Although these mythical stories differ in detail, they usually follow a similar basic pattern²⁹. A comparatively sophisticated, but representative and extremely influential version, is given by the channeled entity Seth, who refers to God as "All That Is" and explains his purpose in creating the world:

The purpose is, quite simply, being as opposed to nonbeing. I am telling you what I know, and there is much I do not know. ... Now-and this will seem like a contradiction in terms—there is nonbeing. It is a state, not of nothingness, but a state in which probabilities and possibilities are known and anticipated but blocked from expression. Dimly, through what you would call history, hardly remembered, there was such a state. It was a state of agony in which the powers of creativity and existence were known, but the ways to produce them were not known. This is the lesson All That Is had to learn, and that could not be taught. This is the agony from which creativity originally was drawn, and its reflection is still seen. ... All That Is retains memory of that state, and it serves as a constant impetus in your terms-toward renewed creativity. ... the agony itself served as an impetus, strong enough so that All That Is initiated within Itself the means to be. ... The first state of agonized search for expression may have represented the birth throes of All That Is as we know It. ... Desire, wish, and expectation rule all actions and are the basis for all realities. Within All That Is, therefore, the wish, desire, and expectation of creativity existed before all other actuality. The strength and vitality of these desires and expectations then became in your terms so insup-

²⁸ TiR 306-308; RG 3ff; OL 145; S 206-209; R 79; SD 31-32. See also chapter eleven, section 2, under "Cosmogonic Myths".

²⁹ Usually, God is posited as the primary unitive reality, and manifestation starts with the emergence of a duality in the original oneness (RG 3; S 190-191: cf. R 79; SD 31-32); sometimes, alternatively, God himself must first be "born" out of a primary Ground (TiR 306-307; SM 266: 'birth throes of All That Is as we know It'). In all cases, once the original unity has become a duality, the basis for further pluralization is given and creation unfolds in a kind of self-generating process.

portable that All That Is was driven to find the means to produce them. ... At first, in your terms, all of probable reality existed as nebulous dreams within the consciousness of All That Is. Later, the unspecific nature of these 'dreams' grew more particular and vivid. The dreams became recognizable one from the other until they drew the conscious notice of All That Is. And with curiosity and yearning, All That Is paid more attention to Its own dreams. It then purposely gave them more and more detail, and yearned toward this diversity and grew to love that which was not yet separate from itself. It gave consciousness and imagination to personalities while they still were but within Its dreams. They also yearned to be actual. ... All That Is saw, then, an infinity of probable, conscious individuals, and foresaw all possible developments, but they were locked within It until It found the means. This was in your terms a primary cosmic dilemma ...

The means, then, came to It. It must release the creatures and probabilities from Its dream. To do so would give them actuality. However, it also meant 'losing' a portion of Its own consciousness, for it was in that portion that they were held in bondage. All That Is had to let go. ... With love and longing It let go that portion of Itself, and they were free. The psychic energy exploded in a flash of creation. ... It, of Itself and from that state, has given life to infinities of possibilities. From its agony, It found the way to burst forth in freedom, through expression, and in so doing gave existence to individualized consciousness. Therefore is It rightfully jubilant. Yet all individuals remember their source, and now dream of All That Is as All That Is once dreamed of them. And they yearn toward that immense source ... and yearn to set It free and give It actuality through their own creations. ³⁰

The extremely ambivalent character of this last sentence once more reflects the inner paradoxality of Lovejoy's "two Gods". It is difficult to imagine a more explicit example of God as the "generative source" of reality than the theology/cosmology of *The Seth Material*. Still, the intuitive longing to "return to the source" is also given its due, even though such a return would obviously mean the reversal and frustration of the creative process, in the name of an otherworldly rejection of the world of manifestation. This illustrates how difficult it is to dispel otherworldly sentiments even from a strongly and consistently this-worldly doctrine like Seth's, which celebrates reality as an ongoing feast of cosmic creativity.

The principle of a Generative Source generally leads to the conception of a hierarchical cosmos constituted by levels of spirituality, inhabited by intelligent beings on corresponding levels of spiritual development. Such a view of the cosmos is indeed extremely common in New Age thought³¹. All intelligent entities—discussed in detail in the next chapter—are engaged in a process of spiritual evolution which will, presumably, ultimately lead them back to the Ultimate Source. Again we encounter the ambivalence analyzed by Lovejoy: individual intelligences emanate from the Ultimate Source in a "downward" (or "outward") process of creative generation, so that these intelligences can

³⁰ SM 264-268.

³¹ ECSU 60; WW 216-217; WWD 124; ENF 82; PR 73; RR 201-208; R 54-67; OtC 35ff; RBNA 29-30; VAA 6-7; SoS 97.

start on the "upward" (or "inward") journey back to the source which transcends creation. Many New Age authors, especially the representatives of thisworldliness in its weakest—and therefore most ambivalent—varieties, such as George Trevelyan, do not appear to perceive any problem, and are able to affirm the splendour of creation and the need to transcend it in the same breath. Others, especially those of a stronger this-worldly orientation, appear to have noticed the ambiguity. Their favoured solution is to affirm that the possibilities for future evolution are infinite. Seth, again, is a clear example of such a consistently this-worldly view. If the purpose is "being as opposed to nonbeing", then there can be no question of an ultimate re-absorption of individuality into the One Source: 'There is nothing more deadly than nirvana. ... it offers you the annihilation of your personality, in a bliss that destroys the integrity of your being. Run from such bliss!'32 and 'You are not fated to dissolve into All That Is. ... All That Is is the creator of individuality, not the means of its destruction'33. Instead, Seth offers the prospect of an infinite process of creative expansion: 'I offer no hope for the lazy, for they will not find eternal rest ... You will discover the multidimensional love and energy that gives consciousness to all things. This will not lead you to want to rest upon the proverbial blessed bosom. It will instead inspire you to take a better hand in the job of creation'34. The great goal of existence is for human beings to become fully conscious "co-creators with God". This is a theme found throughout our New Age corpus, and it is linked immediately to what may well be regarded as the second pervasive theme of New Age thinking in addition to the theme of holism, i.e. the idea of "creating our own reality" (see chapter eight, section 3B).

As we will see, the conviction that we are, somehow, the creators of our own reality is no less pervasive in the New Age literature than the theme of holism. Like the latter, it takes different forms in different contexts and cannot be considered as denoting any single, clearly circumscribed theory. Both "holism" and "creating our own reality" are catchwords or -sentences referring to very deep convictions or longings which are far more basic than any explicit formulation. Below (chapter seven), much more will be said about this second great New Age theme. At this point, however, we are more interested in its relevance to "Ultimate Source Holism". It is clear that Seth sees human beings as active participants in the creative energy which gave birth to the universe, and this same conviction is reflected throughout the New Age literature³⁵. While *All That Is* is also referred to as "Primary Energy Gestalt", indi-

³² NPR 163 (footnote).

³³ SS 412. This view is rather commonly shared in the New Age corpus (see for instance TiR 308-309; EiG 12), although the tendency rejected by Seth is not completely absent.

³⁴ SS 460.

³⁵ For instance ENF 168; GW 100.

vidual beings are referred to as "Energy Essence Personalities". Our very being therefore consists of creative energy. It is, in effect, only through us that All That Is is able to create manifested realities. Seth tells us that although we may be unaware of it, we are constantly creating our reality as naturally as we breath. The nature of our reality is a direct reflection of our conscious and unconscious beliefs. Because most of us hold limiting and restricting beliefs about the world, the universe confirms these convictions. If we nevertheless change our beliefs, we will find that reality changes with it. Actually, there are no limits to the realities we can imagine and "make real" if only we believe they are possible. Thus the many-leveled cosmos emanating from the generative source of All That Is is actually constituted of realities created by individual "entities" participating in the universal creative energy. The levels of reality reflect the extent to which they have become aware of their own creative potential. Human beings live in their own self-created dreams, and the apparent stability of "physical reality" is conditioned only by the intersubjective consensus of many individuals believing in a similar reality³⁶. Seth's worldview is thus a perfect example of the way in which, as noted above, ideas about the ultimately illusionary character of reality are accommodated to a basically this-worldly perspective. The traditional Oriental view of "maya" implies that the illusion of this world must be dispelled in order to reach the ultimate "Real" beyond. In Seth's strongly contrasting views, the recognition that reality is a self-created illusion serves as an impetus to create ever better realities: not to flee from illusion altogether. God's creation exists as an incredibly rich and dazzling kaleidoscope of "imaginary worlds". These worlds are there to be enjoyed to the fullest, and to be made ever more beautiful and diverse; they are not to be dispelled in the name of some bleak otherworldly Absolute. This central message of the Seth material has been of enormous influence in the New Age movement. We find his worldview mirrored in many later authors³⁷, although seldom developed with the intellectual rigor which characterizes Seth's formulations. Evidence of Seth's consistency is his insistence on the infinity of God's creative expansion. Not only is such infiniteness necessary, as we saw, in order to avoid the image of God as an other-worldly final term of individual evolution; it is also a necessary implication of the very nature of creativity: 'Ultimately a completed or finished God, or All That Is, would end up smothering His creation. For perfection presupposes that point beyond which development is impossi-

³⁶ On a higher level not accessible to normal consciousness, individuals participating in the "same" reality are believed to be in permanent telepathic contact. They reach a consensus about their shared reality by emphasizing all the similarities between their respective realities while ignoring the differences. Intersubjective reality is thus to be seen as a telepathically mediated compromise (SM 202; SS 457-459).

³⁷ His influence is particularly strong in the work of Shakti Gawain, Chris Griscom, Louise L. Hay, Shirley MacLaine, Sanaya Roman and probably Michael Talbot.

ble, and creativity at an end.'38 In Seth's Romantic cosmology, which is based on the supremacy of the Creative Imagination, there is no room for a perfect, self-sufficient, and therefore otherworldly Absolute.

Special attention has been given to Seth's view of reality because it is paradigmatic of Generative Source-holism in its most highly-developed New Age form. We find here the essential picture of a hierarchical cosmos emanating from a generative source (a traditional Platonic concept) combined with a quite modern emphasis (reminiscent of Science Fiction) on the infinity of multidimensional, creatively expanding worlds which are, furthermore, created by the imagination of their inhabitants (participating in the divine creativity) on the basis of their conscious and unconscious beliefs. These are absolutely basic tenets for large and fundamental sectors of the New Age movement. Seth's pivotal role in the development of New Age thinking has not yet been sufficiently recognized by scholarship. However, in the context of "revelations" as discussed in chapter one, the Seth messages must be regarded as a fundamental revelatory source for the New Age movement. It is hardly an exaggeration to regard Jane Roberts as the Muhammad of New Age religion, and Seth as its angel Gabriel. Without their metaphysical teamwork, the face of the New Age movement of the 1980s would not have developed as it did.

While the "Generative Source" variety of "Ultimate Source Holism" is far more typical of New Age thinking than the "Self-sufficient Absolute" variety, the role of the latter should not be underestimated. However, it is seldom presented explicitly in the sources. The most important exception is, again, A Course in Miracles, which was singled out above as the only example of strong otherworldliness in our New Age corpus. The importance of the idea of a "self-sufficient Absolute" in a New Age context lies primarily in the way it tends to recur as loose references in very different, sometimes surprising and even logically incompatible contexts. In order to better understand this phenomenon, I refer again to A.O. Lovejoy's work. Lovejoy introduces the concept of "metaphysical pathos", prominent examples of which are the "eternalistic" and "monistic or pantheistic" pathos. Both are exemplified in Shelley's lines quoted by Lovejoy:

The One remains, the many change and pass, Heaven's light forever shines, earth's shadows fly

Commenting on the peculiar 'aesthetic pleasure which the bare abstract idea of immutability gives us', Lovejoy comments dryly:

It is not self-evident that remaining forever unchanged should be regarded as an

³⁸ SS 340.

excellence; yet through the associations and the half-formed images which the mere conception of changelessness arouses ... a philosophy which tells us that at the heart of things there is a reality wherein is no variableness nor shadow that is cast by turning, is sure to find its response in our emotional natures, at all events in certain phases of individual or group experience.³⁹

The same is true of the varieties of monistic or pantheistic pathos, with an obvious relevance for New Age holism:

That it should afford so many people a peculiar satisfaction to say that All is One is, as William James once remarked, a rather puzzling thing. What is there more beautiful or more venerable about the numeral *one* than about any other number? But psychologically the force of the monistic pathos is in some degree intelligible when one considers the nature of the implicit responses which talk about oneness produces. ... again, when a monistic philosophy declares, or suggests, that one is oneself a part of the universal Oneness, a whole complex of obscure emotional responses is released.⁴⁰

If we accept the frequent allusions to "self-sufficient Absolutes" in New Age sources as examples of the instinctive emotional appeal of metaphysical pathos, this has important implications for our analysis. The point is that there is a difference in conceptual status between an explicitly formulated worldview on the one hand, and expressions of metaphysical pathos on the other⁴¹. The former generates more or less consciously-held convictions about the nature of reality, expressed as propositions; the latter signals the existence of deep-seated and essentially pre-reflective wishes and longings. Although holistic worldviews in general are usually defended by people susceptible to a corresponding kind of metaphysical pathos, the two categories should not be confused. If, in many New Age sources, we find examples of eternalistic or monistic pathos expressed in the terminology of self-sufficient Absolutes, then the prereflective and emotional character of these utterances precludes the automatic inference that the authors therefore believe in a worldview based on such an Absolute. On the contrary, the susceptibility of authors to eternalistic or monistic pathos may equally well lead them, in the process of reflection, to develop a "generative", or indeed any other kind of holistic worldview. And this, as we have seen, is precisely what we find in the great majority of New Age sources. Eternalistic and monistic pathos is prominently present; but it surprisingly seldom gives rise to otherworldly-oriented worldviews according to which peace will be found only in the pure One. Real otherworldliness remains very much restricted to the emotional sphere, and almost never survives the transition to theoretical speculation.

³⁹ Lovejoy, Great Chain, 12.

⁴⁰ Lovejoy, Great Chain, 13.

⁴¹ I have elsewhere defined this same distinction in terms of "latent mental dispositions" versus "explicit views of life", in a study of the nature of gnostic views of life (Hanegraaff, 'Dynamic Typological Approach').

B. Universal Interrelatedness

First of all, the difference between this second category of holism and the former must be precisely defined. It is not the case, of course, that universal interrelatedness is absent from "Ultimate Source Holism". On the contrary: everything in the universe is related to everything else by virtue of the fact that everything participates in, or emerges from, the same Source. This situation can be envisaged as a pyramid hierarchy with the Source at the top and the increasing diversity of manifestation "fanning out" from that One Center or, alternatively, with the Source at the center and manifestation radiating to all sides like the rays of the sun. Universal Interrelatedness as understood in this chapter is characterized, however, by the absence of a Source or other ontologically privileged Center. The appropriate picture is one of a network in which every point is connected to every other point but in which no point has a privileged status. A traditional parallel, which brings out the religious appeal of Universal Interrelatedness, is the image of God conceived as a sphere whose center is everywhere and circumference nowhere⁴². An important result of the absence of a Source with privileged ontological status is that Universal Interrelatedness tends to be of an unambiguously monistic character⁴³. In this kind of holism, questions about the ultimate origin of the universe usually receive less attention than questions focused on its present nature and constitution. It is perhaps not surprising, given this more practical interest, that the foundations of holism in the sense of "universal interrelatedness" are almost exclusively found in the domain of New Age Science. However, it must be emphasized that the ideas developed in this domain, in various degrees of popularization or simplification, are widely influential throughout the New Age movement as a whole. Furthermore, the idea of holism in the sense of "universal interrelatedness" also recurs in contexts other than the "nature of reality", for instance in ecological or social theories of a New Age orientation.

Parallellism and Bootstrap Philosophy

In the first of his two influential books, *The Tao of Physics*, Fritjof Capra argues that there are significant parallels between modern physics—especially quantum mechanics—and Oriental mysticism. Capra's central thesis is that 'a consistent view of the world is beginning to emerge from modern physics which

⁴² This formulation, associated with thinkers like N. Cusanus, among others, originated in a Hermeticist tract of the late 12th century called the *Liber viginti quatuor philosophorum* (Faivre, 'Ancient and Medieval Sources', 31).

⁴³ This kind of monism is, of course, different from the otherworldly monism encountered in the previous chapter, according to which only the transcendent Source is real and the rest is illusion. In the case of Universal Interrelatedness, which is generally this-worldly, the monistic character derives from the tendency to accept only one ontological substance in the universe.

is harmonious with ancient Eastern wisdom'44. A similar concern underlies several other books which enjoy some popularity in the New Age⁴⁵, but there is no doubt that Capra is the recognized champion of popular New Age "parallelism"46. It is not my intention to enter into the debate about the validity of this genre as such, or the merits (or lack of them) of Capra's particular contribution⁴⁷. The important point for us is that Capra's type of physics-mysticism parallellism, whether valid or not, has unquestionably become one of the cherished beliefs of the New Age movement. 48 This adaptation of parallellism tends to produce "pop" versions of what is in itself already an example of "popular science", exemplified most typically by assertions to the effect that "modern science proves mysticism". It can be demonstrated that Capra himself, at least in the Tao of Physics, is more cautious. His claim is that Oriental mysticism provides a consistent and relevant philosophical background to the theories of contemporary science⁴⁹; and he emphasizes that the parallels strictly apply only to the level of verbal formulations⁵⁰. Therefore the ultimate reality experienced by mystics cannot simply be identified with the quantum field of modern physics⁵¹; although, of course, the similarity is quite suggestive. Rather than in adducing "proof" for mysticism, the importance of the parallels lies in their implicit criticism of current non-holistic (dualistic and reductionistic) assumptions about the nature of reality. The suggestion of the *Tao of* Physics is that Oriental philosophical worldviews are able to make sense of the data of quantum physics, by assimilating them within a consistently holistic framework. The reigning western scientific paradigm is not able to do so, because its very presuppositions are directly refuted by the evidence of advanced physics.

Here, we are less interested in the credentials of parallellism than in the intrinsic nature of the worldview defended by Capra. His version of holism has

⁴⁴ ToP 12.

⁴⁵ For instance MNP which, other than Capra's book, favours the so-called "many-worlds hypothesis" in quantum mechanics. Zukav's *Dancing Wu-Li Masters*, as I argued, is not really a parallellist book at all. LeShan's *Medium, the Mystic, and the Physicist* is concerned with the paranormal rather than with mysticism.

⁴⁶ As pointed out by Sal Restivo in his important study of the subject, parallelism as such is by no means restricted to the New Age context. Rather, it is 'a recurring strategy in intellectual conflict' to be found already in the Renaissance and in Weimar Germany (Restivo, *Social Relations*, 91ff).

⁴⁷ See Restivo, Social Relations; Chowdhury, 'Holisme en Parallellisme'; Clifton & Regehr, 'Toward a Sound Perspective'; Wilber, 'Introduction: Of Shadows and Symbols', in: QQ; and Capra's response to his critics in 'Tao of Physics Revisited: A Conversation with Renée Weber' (in: HP)

⁴⁸ See for instance DL 323-329; AE 128.

⁴⁹ ToP 30, 54.

⁵⁰ ToP 52.

⁵¹ ToP 233. It seems that Capra later changed his mind and came to believe in the actual identity of the realities disclosed by mystical experience and by physical research (ToPR 218-220).

two significant features. The first of these is the unity and universal interrelation of all phenomena, which leads to the view of the universe as an *interconnected web of relations*. The second is the *intrinsically dynamic* nature of this universe⁵². The argumentation of the *Tao of Physics* culminates in a defense of the so-called *Bootstrap theory* in physics, which is presented as a perfect exemplification of this kind of holism. Bootstrap theory was created by the physicist Geoffrey Chew as a philosophical framework to account for the research results of quantum mechanics. Interestingly, a close similarity has been demonstrated to Leibniz' Monadology; Chew's quarrel with the corpuscularian metaphysics of classical physics may well be regarded as a re-enactment of the historical dispute between Leibniz and Newton⁵³. Capra describes the essence of the bootstrap philosophy as follows:

According to this bootstrap philosophy, nature cannot be reduced to fundamental entities, like fundamental building blocks of matter, but has to be understood entirely through self-consistency. All of physics has to follow uniquely from the requirement that its components be consistent with one another and with themselves. This idea constitutes a radical departure from the traditional spirit of basic research in physics which had always been bent on finding the fundamental constituents of matter. At the same time it is the culmination of the conception of the material world as an interconnected web of relations that emerged from quantum theory. The bootstrap philosophy not only abandons the idea of fundamental building blocks of matter, but accepts no fundamental entities whatsoever—no fundamental constants, laws, or equations. The universe is seen as a dynamic web of interrelated events. None of the properties of any part of this web is fundamental; they all follow from the properties of the other parts, and the overall consistency of their interrelations determines the structure of the entire web.⁵⁴

There should be no mistake about the radical implications of this view. Even more clearly than in Capra's description, the full meaning of "overall consistency" is brought out in the following observations, from an academic study of Chew's philosophy, about the nature of hadrons (i.e., strongly interacting particles constituting the atomic nucleus):

...the model of the hadrons is very peculiar. Hadron x is composite. Its constituents are y and z. But both y and z are also composite. Among their constituents is x. Thus each hadron is constituted by other hadrons, which it in turn constitutes. This network is possibly infinite in extent. Moreover, on this view, each single hadron can be, and probably is, individual, with its individuation being given by its precise mirroring of the total situation of all other hadrons, particularly those which immediately determine it. ... In other words, each particle helps to generate other particles, which in turn generate it. In this circular and violently nonlinear situation, it is possible to imagine that no free, or arbitrary, variables appear and that the only self-consistent set of particles is the one found in nature.⁵⁵

⁵² ToP 30; cf. TP 87.

⁵³ Cf. Gale, 'Chew's Monadology', 339-348.

⁵⁴ TP 92-93. Cf. ToP 316-317.

⁵⁵ Gale, 'Chew's Monadology', 345-346.

This is exactly the conclusion drawn by Capra:

the whole set of hadrons generates itself in this way or pulls itself up, so to say, by its 'bootstraps'. The idea, then, is that this extremely complex bootstrap mechanism is self-determining, that is, that there is only one way in which it can be achieved. In other words, there is only one possible self-consistent set of hadrons—the one found in nature.⁵⁶

What we have, then, is a view of physical reality based on universal interrelatedness in its most radical sense. At the subatomic level, everything in the universe quite literally participates in everything else. Of course, such a view raises many questions. A problem not adressed by Capra is how one should deal with the seemingly unavoidable conclusion of an absolute determinism. Another problem is the fact that bootstrap holism deals exclusively with physical realities, and would appear to leave no room for the spiritual. It is not clear, moreover, how interrelatedness at the ultimate subatomic level—however total—could be relevant to the macroscopic level of human life in the phenomenal world. These problems did occur to Capra, and have resulted in an interesting change of direction between the *Tao of Physics* and his second fundamental contribution to New Age literature, *The Turning Point*.

Capra has described this change in his autobiographical volume *Uncommon* Wisdom. In The Tao of Physics he saw the new physics as 'the ideal model for new concepts and approaches in other disciplines' 57. A casual remark from the systems theorist Gregory Bateson, communicated to Capra by a common friend, made him realize that this thinking contained a 'major flaw'. Bateson had said jokingly: 'Capra? The man is crazy! He thinks we are all electrons'. Reflecting on this remark, Capra came to realize that 'by presenting the new physics as a model for a new medicine, new psychology, or new social science, I had fallen into the very Cartesian trap that I wanted scientists to avoid'58. Presenting physics as a model for other domains implied that physical phenomena were the primary reality and the basis of everything else. In other words: the bootstrap holism of the *Tao of Physics*, taken by itself, amounted to a species of materialist reductionism. This shocking realization led Capra to develop, over the course of several years, a new approach which 'no longer presented the new physics as a model for other sciences but rather as an important special case of a much more general framework, the framework of systems theorv'59.

Capra appears to be confident about the success of this reorientation, the final result of which is *The Turning Point*. Before discussing the systems view devel-

⁵⁶ ToP 327-328.

⁵⁷ UW 73.

⁵⁸ UW 74.

⁵⁹ UW 74.

oped in that book, however, it seems relevant to call attention to another chapter of *Uncommon Wisdom*, which sheds additional light on the problem of reductionism. In the context of his research for the chapter about economics in *The Turning Point*, Capra visited the economist E.F. Schumacher, well-known for his book *Small is Beautiful*. After explaining his new systems approach, which he believed to be in fundamental accord with Schumacher's views, Capra expected a positive response. However, Schumacher strongly disagreed. The core of his argument was that science cannot solve the problems of our time because it cannot entertain the qualitative notion of higher and lower levels of being. Both bootstrap physics and the systems view accept only one fundamental level of reality and are therefore ultimately reductionist.

In the long discussion that followed Schumacher expressed his belief in a fundamental hierarchical order consisting of four characteristic elements—mineral, plant, animal, and human—with four characteristic elements—matter, life, consciousness, and self-awareness—which are manifest in such a way that each level possesses not only its own characteristic element but also those of all lower levels. This, of course, was the ancient idea of the Great Chain of Being, which Schumacher presented in modern language and with considerable subtlety. However, he maintained that the four elements are irreducible mysteries that cannot be explained, and that the differences between them represent fundamental jumps in the vertical dimension, 'ontological discontinuities', as he put it. 'This is why physics cannot have any philosophical impact', he repeated. 'It cannot deal with the whole; it deals only with the lowest level'.

This was indeed a fundamental difference in our views of reality. Although I agreed that physics was limited to a particular level of phenomena, I did not see the differences between various levels as absolute. I argued that these levels are essentially levels of complexity which are not separate but are all interconnected and interdependent.⁶⁰

The Capra-Schumacher discussion exemplifies a fundamental rift in New Age thinking between two contradictory views of reality: a monistic and a hierarchical one. The dividing issue is whether the former can manage to avoid reductionism. It is significant, in this context, that Capra explicitly rejects Schumacher's view of the different levels as "irreducible" mysteries, apparently not realizing that this literally implies a belief in reductionism. It will be useful to keep this problematic in mind in the following discussions of systems thinking and the holographic paradigm. We will return to this issue at the end of this chapter, in discussing the debate initiated by Ken Wilber.

Systems Thinking

General Systems Theory emerged from Cybernetics as an attempt to correct the failings of positivism. Making no fundamental distinction between such apparently different domains as nature, social reality or the products of engi-

⁶⁰ UW 228-229.

neering, its basic analytical concept in all these areas is the "system", defined as a whole that is more than the sum of its constituent parts. Instead of explaining systems in terms of mechanical interactions between discrete units it emphasizes overall patterns of relationship. Of particular importance is the fact that "mechanical" descriptions of systems in terms of matter and energy exchange are replaced by descriptions based on the fundamental concept of information. Leading proponents of systems theory⁶¹ have claimed that the shift to a system-oriented society constitutes a revolution which actually brings in a "New Age": the "postindustrial" System Age which is based on the interlocking global networks of information technology⁶². Nevertheless, our first observation must be that what might technically be called the "holism" of General Systems Theory has no specific relation to the New Age movement. As a result of the information revolution of the 1980s, the holistic idea of a global information network has actually become a reality. Some New Age proponents, notably Marilyn Ferguson, have interpreted this as a sign of the emergence of a planetary New Age. Those more specific systems approaches which have achieved popularity in the New Age movement are, however, by no means fully representative of the phenomenon of systems thinking as such. It is significant in this respect that Capra, in the crucial chapter of the Turning Point about "The Systems View of Life", mentions the founding fathers of General Systems Theory only casually. Although he sometimes refers to Laszlo in a footnote, none of the founders is even mentioned in the text. Capra's Systems theory turns out to be a personal blend of the ideas of only two thinkers: Gregory Bateson and Ilya Prigogine⁶³.

Bateson (1904-1980), sometime husband of Margaret Mead, is an extremely original but enigmatic thinker. During the last years of his life, which he spent at the Human Potential center Esalen, he seems to have become a sort of cult guru of the alternative movement⁶⁴. It is perhaps regrettable that he allowed this to happen. Bateson has been labeled a New Age thinker because of his association with Esalen, but there is little doubt that few of his admirers understood his ideas⁶⁵. Bateson's daughter recalls her father's irritation:

A great many people, recognizing that Gregory was critical of certain kinds of

⁶¹ See in particular Von Bertalanffy, General Systems Theory; Laszlo, Introduction to Systems Philosophy; id., Systems View of the World; Ackoff, Redesigning the Future.

⁶² Schuurman, Technische overmacht, 24.

⁶³ UW 215.

⁶⁴ UW 75.

⁶⁵ Cf. UW 79: 'Even the few people who *thought* they understood him, *he* did not think understood him. Very, very few people, he thought, understood him' (quotation of R.D. Laing). Bochinger ("New Age", 417-418) provides an incorrect presentation of Bateson's position vis à vis New Age on the basis of superficial analogies between Bateson's interdisciplinary interests and the various domains of New Age speculation.

materialism, wished him to be a spokesman for an opposite faction, a faction advocating the kind of attention they found comfortable to things excluded by atomistic materialism: God, spirits, ESP, "the ghosts of old forgotten creeds". Gregory was always in the difficult position of saying to his scientific colleagues that they were failing to attend to critically important matters, because of methodological and epistemological premises central to Western science for centuries, and then turning around and saying to his most devoted followers, when they believed they were speaking about these same critically important matters, that the way they were talking was nonsense⁶⁶.

Whether Capra belonged to this last group is difficult to decide with certainty. Capra's own memories of his encounters with Bateson, in spite of his own assertions to the contrary, hardly convey the impression of substantial intellectual discussions in which Bateson accepted Capra as a serious partner⁶⁷. To ascertain whether Capra fully and correctly understood Bateson's thinking would require a detailed comparative analysis beyond the scope of this study. My impression is that the differences between the two outweigh their points of agreement. Capra remains very much the physicist who tries to overcome the Cartesian split by finding a way to include the dimension of consciousness in an essentially material universe. Bateson, as an anthropologist and biologist, was primarily interested, as he put it, in "living things". He actually mistrusted physicists⁶⁸. Capra seems to have been fascinated by Bateson primarily for two reasons. First, the overall monistic and holistic quality of Bateson's systems thinking seemed congenial to his own bootstrap philosophy. Second, and more importantly, Bateson appeared to have found a way out of the Cartesian dilemma. His definition of *Mind* permitted a completely new perspective on the problem of "Mind and Nature", demonstrating that they formed "a necessary unity"69. However, it seems that Capra disregarded at least two other important aspects of Bateson's thinking. First, while the concept of Mind is central to his work, Bateson consistently refused to discuss consciousness. This, he said, was 'the great untouched question, the next big challenge'70. Compared to Bateson himself, who shrank from "rushing in"⁷¹ to this domain, Capra often appears over-confident in proposing solutions on the basis of Bateson's own premises. Secondly, Capra all but ignores Bateson's fundamental distinc-

⁶⁶ Bateson & Bateson, *Angels Fear*, 6. Compare the attack on a whole range of New Age concerns in *Angels Fear*, chapter 5. Nevertheless, both Bateson himself and his daughter appear to have permitted the publication of their work in the series "Bantam New Age Books".

⁶⁷ See UW 75ff.

⁶⁸ UW 76.

⁶⁹ See subtitle of Bateson, Mind and Nature.

⁷⁰ UW 88. Cf. Bateson, *Mind and Nature*, 137. Bateson would finally adress the problem of consciousness in *Angels Fear* which, however, appeared posthumously in 1987, i.e., five years after the publication of *The Turning Point*.

⁷¹ Cf. Bateson & Bateson, Angels Fear, 1.

tion between the two "worlds" of creatura and pleroma (terms Bateson borrowed from C.G. Jung) which may be described as corresponding roughly to "mind" and "substance" Capra himself quotes a passage from Mind and Nature in which Bateson, in his characteristic style, emphasizes that his work is restricted to the former realm: 'In my life I have put the descriptions of sticks and stones and billiard balls and galaxies in one box ... and have left them alone. In the other box, I put living things: crabs, people, problems of beauty...'73. Bateson's theories applied to the creatura: the realm of "living things" which is the realm of mind. This would suggest that Bateson's systems view of Mind does not adress the realm of physics qua physics. Capra, however, does not seem to have accepted that message.

This much about Bateson's contribution. Biochemist Ilya Prigogine (the winner of a 1977 Nobel prize for his work on the thermodynamics of nonequilibrium systems) will be discussed in section three of this chapter, on evolutionary perspectives. In making use of Prigogine's ideas (mediated to him through Erich Jantsch) Capra found himself on far more familiar ground, and there is no reason to doubt that his presentation is basically correct.

In the *Turning Point*, Capra points out that the new systems view covers all domains of reality (not just physics and mysticism) and that its implementation will therefore lead to a new kind of society.

The new vision of reality ... is based on awareness of the essential interrelatedness and interdependence of all phenomena—physical, biological, psychological, social, and cultural. It transcends current disciplinary and conceptual boundaries and will be pursued in new institutions. At present there is no well-established framework, either conceptual or institutional, that would accomodate the formulation of the new paradigm, but the outlines of such a framework are already being shaped by many individuals, communities, and networks that are developing new ways of thinking and organizing themselves according to new principles.

In this situation it would seem that a bootstrap approach, similar to the one that contemporary physics has developed, may be most fruitful. This will mean gradually formulating a network of interlocking concepts and models and, at the same time, developing the corresponding social organizations. None of the theories and models will be any more fundamental than the others, and all of them will have to be mutually consistent. They will go beyond the conventional disciplinary distinctions, using whatever language becomes appropriate to describe different aspects of the multileveled, interrelated fabric of reality. Similarly, none of the new social institutions will be superior to or more important than any of the others, and all of them will have to be aware of one another and communicate and cooperate with one another.⁷⁴

⁷² See Bateson's fundamental article 'Form, Substance, and Difference', in: *Steps*, 456. Note that it is a simplification to conclude that the "hard sciences" deal with the pleroma and the "sciences of the mind" with the creatura.

⁷³ UW 76.

⁷⁴ TP 265.

Although this account is obviously closely modeled on Chew's bootstrap physics, the latter is now seen as just a special case of the general systems view of life, which is described by Capra as follows:

The systems view looks at the world in terms of relationships and integration. Systems are integrated wholes whose properties cannot be reduced to those of smaller units. Instead of concentrating on basic building blocks or basic substances, the systems approach emphasizes basic principles of organization.⁷⁵

Although natural systems are the most obvious examples (Capra mentions organisms in general, cells, and the human brain), the same aspects of wholeness are exhibited by social systems (such as anthills, beehives or human families) and by ecosystems. The two basic characteristics of wholeness which were already emphasized in the *Tao of Physics*—interrelatedness and dynamic quality—are equally fundamental to the systems approach:

All these natural systems are wholes whose specific structures arise from the interactions and interdependence of their parts. ... Systemic properties are destroyed when a system is dissected, either physically or theoretically, into isolated elements. Although we can discern individual parts in any system, the nature of the whole is always different from the mere sum of its parts.

Another important aspect of systems is their intrinsically dynamic nature. Their forms are not rigid structures but are flexible yet stable manifestations of underlying processes. ... Systems thinking is process thinking; form becomes associated with process, interrelation with interaction, and opposites are unified through oscillation.⁷⁶

Capra relies heavily on the concept of "self-organization" as used by the school of Prigogine and advocated by Erich Jantsch. Although living systems are most clearly exemplified by organisms, some modern cybernetic machines also display organismic properties so that the distinction between machine and organisms becomes 'quite subtle'⁷⁷. The real distinction is not between natural organisms and human constructions, but between those systems that display the characteristics of "self-organization" and those that do not. The former, whether organic or not, can be regarded as "living systems". This is a crucial move which has wide-ranging implications, as we will see. Whether something is *living* or not now depends on whether it satisfies a set of formal criteria for self-organization. The most important of these are the following. 1. While a machine (for instance a clockwork) is an essentially closed system which does not need to interact with the environment in order to function, living systems

⁷⁵ TP 266.

⁷⁶ TP 266-267.

⁷⁷ TP 268.

⁷⁸ See for instance TP 271 about Prigogine's favorite experiment with certain chemical systems displaying the characteristics of self-organization (the so-called "chemical clocks"). Capra notes that whether or not one regards these chemical reactions as living organisms is 'ultimately, a matter of convention'.

are open systems. In order to stay alive they need to maintain a continuous exchange of matter and energy with the environment. 2. This exchange process (metabolism) keeps the system in a permanent state of nonequilibrium. Systems in equilibrium, in contrast, are dead systems. 3. Nevertheless, living systems display a high degree of stability. This is not the static kind of stability displayed by systems in equilibrium but, rather, a dynamic stability. 4. Living systems are capable of self-renewal: they can repair damage, adapt to changing circumstances, and many have even developed a method of "super-repair" in order to deal with death. This, of course, is what we refer to as sexual reproduction in the organic world.

The radical implications of these criteria for the definition of "living systems" become apparent as soon as we realize that, for instance, social organizations such as cities, or abstract systems such as "the economy"⁷⁹, must now be regarded as "living". This appears to be quite acceptable to Prigogine, Jantsch, Capra and others thinking along similar lines⁸⁰. Following Capra's association of Prigogine with Bateson, we have to draw an even more radical conclusion: cities, economies etc. are not only living, they also possess "mind".

The crucial step in Capra's development of a systems view of life came when he realized that the Prigoginian criteria for self-organization (life) were extremely similar to Bateson's criteria for Mind, as described in the latter's book *Mind and Nature*⁸¹. Bateson himself confirmed to Capra that 'Mind is the essence of being alive'⁸². By combining the systems approaches of Prigogine and Bateson, Capra tells us, 'everything fell into place'⁸³. Whether or not Capra is right in his conclusion that these two sets of criteria are structurally similar need not concern us here: we are interested in Capra's interpretation of Bateson rather than in Bateson's philosophy as such. Bateson's criteria are extremely formal and abstract and cannot be understood without a comprehensive discussion of his complete philosophy. Significantly, Capra himself makes no attempt to compare both sets of criteria, or to furnish proof for his statement that they are similar or identical⁸⁴. He does not even reproduce or summarize Bateson's criteria, but jumps directly to his conclusion:

Gregory Bateson proposed to define mind as a systems phenomenon characteris-

⁷⁹ TP 392: 'According to the systems view, an economy, like any living system, will be healthy if it is in a state of dynamic balance ...'.

⁸⁰ Cf. OC 196-203; SOU 71-72; BQ 112-115.

⁸¹ Bateson, *Mind and Nature*, ch. 4 'Criteria of Mental Process'. For Capra's description of his discovery, see UW 87-89, 215.

⁸² UW 88.

⁸³ UW 216. Erich Jantsch, who is mentioned by Capra in this connection, is most probably the one who originally proposed this connection. In *The Self-Organizing Universe* he explicitly connects the Prigoginian principle of self-organization with Bateson's concept of Mind (SOU 162-165).

⁸⁴ Neither does Jantsch (SOU 162).

tic of living organisms, societies, and ecosystems, and he listed a set of criteria which systems have to satisfy for mind to occur. Any system that satisfies those criteria will be able to process information and develop the phenomena we associate with mind—thinking, learning, memory, for example. In Bateson's view, mind is a necessary and inevitable consequence of a certain complexity which begins long before organisms develop a brain and a higher nervous system.

Bateson's criteria for mind turn out to be closely related to those characteristics of self-organizing systems which I have listed above as the critical differences between machines and living organisms. Indeed, mind is an essential property of living systems said, "Mind is the essence of being alive". From the systems point of view, life is not a substance or a force, and mind is not an entity interacting with matter. Both life and mind are manifestations of the same set of systemic properties, a set of processes that represent the dynamics of self-organization. This new concept will be of tremendous value in our attempts to overcome the Cartesian division. The description of mind as a pattern of organization, or a set of dynamic relationships, is related to the description of matter in modern physics. Mind and matter no longer appear to belong to two fundamentally separate categories, as Descartes believed, but can be seen to represent merely different aspects of the same universal process. 86

Having included the dimension of Mind in a general systems view of life, Capra has now laid the foundation for a holistic worldview based on "universal interrelatedness", which covers a much wider spectrum of phenomena than the earlier model based on the bootstrap philosophy in physics⁸⁷. The connection between "living" systems, on the one hand, and the whole of reality, on the other, is made with reference to the concept of "stratified order":

The tendency of living systems to form multileveled structures whose levels differ in their complexity is all-pervasive throughout nature and has to be seen as a basic principle of self-organization. At each level of complexity we encounter systems that are integrated, self-organizing wholes consisting of smaller parts and, at the same time, acting as parts of larger wholes⁸⁸.

This notion of "systems within systems" can be extended at libitum in the direction of the infinitely small and the infinitely large⁸⁹. Capra emphasizes

⁸⁵ Note that Capra covers up the essential move from organisms in the normal sense of the word to "living systems" in the Prigoginian sense. In fact, he has discussed the difference between organisms and "classical" (i.e., non-cybernetic) machines on TP 268-269, after which he moves on to a separate discussion of the differences between self-organizing and other systems.

⁸⁶ TP 290. Compare these last sentences with my observations about Bateson's distinction between *pleroma* and *creatura*. Capra appears to use Bateson's systems view as a means to unite both domains, which had been kept carefully separated by Bateson himself. Accordingly, Bateson talked about the unification of Mind and Nature, which both belong to the order of "living things". Capra, in contrast, speaks of a unification of Mind and *Matter*, which is something completely different.

⁸⁷ One is left with the question of whether Capra believes it covers *all* phenomena. Where do non-living systems (for instance, clocks) fit in?

⁸⁸ TP 280.

⁸⁹ It is interesting to compare this with very similar ideas found in the Ramala messages (RR 28-29, 147-148).

especially Lovelock's "Gaia-hypothesis" according to which the earth itself is to be seen as a living organism, i.e. as a living system containing smaller living systems. But, of course, there is no reason to stop at that level, and Capra indeed takes the systems holism of universal interrelatedness to its logical conclusion:

In the stratified order of nature, individual human minds are embedded in the larger minds of social and ecological systems, and these are integrated into the planetary mental system—the mind of Gaia— which in turn must participate in some kind of universal or cosmic mind. The conceptual framework of the new systems approach is in no way restricted by associating this cosmic mind with the traditional idea of God. In the words of Jantsch, "God is not the creator, but the mind of the universe". In this view the deity is, of course, neither male nor female, nor manifest in any personal form, but represents nothing less than the self-organizing dynamics of the entire cosmos⁹⁰.

There is no compelling reason to object to the labeling of this theology as "pantheistic" in the full monistic sense of the word, as long as it is fully realized that Mind (God) is *not* seen as a "substance" but as an abstract pattern of relationship. This, at least, was Bateson's view⁹¹. Whether Capra does full justice to the latter remains doubtful. Notice that, in any case, there is no suggestion that God is conceived as an "ultimate source" of reality. God is completely immanent in the universe: he is its very dynamics of self-organization or, in Bateson's terms, "the pattern that connects".

The Holographic Paradigm

Perhaps the most widespread New Age vision of the nature of reality is inspired by a technique called holography. The hologram is regarded as a perfect model for understanding the nature of reality and the role of consciousness in perceiving that reality. Holography is originally a technique for making three-dimensional representations of objects. Laserlight is reflected onto a photographic plate from two sources: one source consists of light reflected directly by the object itself, the other consists of light reflected from the object to the plate by way of a mirror. The interference of these two beams on the photographic plate produces a pattern of apparently meaningless swirls, the so-called "holographic blur". This blur has no similarity whatsoever to the object. However, when a laser beam is shined through this photographic film, a three-

⁹⁰ TP 292. Bateson himself similarly associates the universal Mind with "God" ('Form, Substance, and Difference', 461).

⁹¹ There is reason to suspect that Capra blurs the distinction between traditional panpsychism and Bateson's system view. At the end of the chapter, Teilhard de Chardin is presented as in essential accord with Capra's systems view (TP 304). Bateson, however, expressly objected to an interpretation of his philosophy as a Teilhardian panpsychism which even ascribes a mental character or potentiality to atoms. Bateson, in contrast, saw the mental as 'a function only of complex relationship' ('Comment on part V', 465 footnote).

dimensional image of the original object appears behind it. This technique has two characteristics which have fired the imagination of New Age scientists and New Age believers generally. Firstly, holography suggests that it is possible to convert objects into frequency patterns, and frequency patterns back into objects⁹². The object is implicitly present in the seemingly chaotic frequency pattern. The latter apparently possesses a hidden order which can be regarded as the "deep structure" underlying the object in its manifested form. Secondly, there is not a simple one-to-one relationship between the object and the blur, so that each part of the blur would contain the information needed to reconstitute the corresponding part of the object. Instead, if the film is cut into pieces each fragment appears to contain all the information needed to reconstitute the complete object (although the smaller the fragment, the vaguer the image). In other words: the whole is present in each of the parts. This property of the hologram is difficult to reconcile with commonsense assumptions about the continuum of absolute space associated with the Cartesian/Newtonian worldview. It does, however, evoke associations with ancient prescientific and/or mystical worldviews⁹³. The most famous example in New Age circles, which is quoted or referred to throughout its literature, is the Buddhist Avatamsaka Sutra:

In the heaven of Indra, there is said to be a network of pearls, so arranged that if you look at one you see all the others reflected in it. In the same way each object in the world is not merely itself but involves every other object and in fact is everything else. 'In every particle of dust, there are present Buddhas without number¹⁹⁴.

The parallellist implication is clear: modern science has apparently rediscovered a truth which was already known to the ancient mystics⁹⁵.

According to defenders of the so-called holographic paradigm, reality is structured on holographic principles (or at least according to principles for which

⁹² Of course, it is only an illusionary *image* of a real object that is reconstituted. This aspect, as we will see, tends to be ignored by adherents of the holographic paradigm.

⁹³ The traditional view of the macrocosmos reflected in the microcosmos is mentioned remarkably seldom in connection with the holographic paradigm. Leibniz's monadology, in contrast, is mentioned several times (WIO 207; HP:euu 91; HP:npr 13; PH 188; ToP 329-330). The last passage recalls a suggestion by Joseph Needham that Leibniz may actually have been influenced by the *Avatamsaka Sutra* (see text).

⁹⁴ This is the fragment as rendered by Capra in ToP 328, from C. Eliot, *Japanese Buddhism*, 109-110. Ferguson (AC 202) leaves out the last sentence and misquotes the end of the preceding one ('everything else') as 'in every other object'. Jean Houston (PH 188) gives a wildly imaginative version which she presents as her own translation. Other sources in which the same fragment is referred to or quoted include HU 290-291, RW 137, HP:cr 25.

⁹⁵ Reading the fascinating introductory essays to the German translation of the Avatamsaka Sutra, Doi, *Kegon Sutra*, which emphasize the "philosophy of interpenetration" as the central theme of the Sutra, it is almost impossible not to be impressed by the force of the similarities. The quotation about Indra's heaven is certainly representative of its context.

the hologram furnishes a striking model). The paradigm is formulated with reference to the theories developed in their respective fields by the neuroscientist Karl Pribram and the theoretical physicist David Bohm.

Karl Pribram is regarded as one of the leading authorities in his field. Although most of his work is highly technical and deals with localized brain functions, his popularity in New Age circles rests on his theory that the brain stores memory according to holographic principles. This means that each memory fragment is distributed over the whole of the brain so that each part of the brain, reversely, contains the information of the whole. Moreover, a similar principle is said to be at work in the way the visual centers process information. Pribram's conviction that the brain works by holographic principles is not just based upon superficial analogies. The inventor of holography, Dennis Gabor, used a type of mathematical calculus known as Fourier transforms, and the brain seems to be using these same Fourier transforms to analyze frequencies and convert them into visual images⁹⁶. To Pribram, this similarity suggested that perceived reality might be of an order similar to the holographic image: an ultimately illusionary spectre created by the brain out of a domain of pure frequency. This is how Marilyn Ferguson presents Pribram's "holographic supertheory" in her influential Aquarian Conspiracy: "...our brains mathematically construct 'hard' reality by interpreting frequencies from a dimension transcending time and space. The brain is a hologram, interpreting a holographic universe'97. Michael Talbot formulates the same idea even more provocatively:

The question that began to bother [Pribram] was, if the picture of reality in our brains is not a picture at all but a hologram, what is it a hologram of? ... Which is the true reality, the seemingly objective world experienced by the observer/photographer or the blur of interference patterns recorded by the camera/brain? Pribram realized that if the holographic brain model was taken to its logical conclusions, it opened the door on the possibility that objective reality—the world of coffee cups, mountain vistas, elm trees, and table lamps—might not even exist, or at least not exist in the way we believe it exists. Was it possible, he wondered, that what the mystics had been saying for centuries was true, reality was maya, an illusion, and what was out there was really a vast, resonating symphony of wave forms, a "frequency domain" that was transformed into the world as we know it only after it entered our senses?98

⁹⁶ HU 27-28.

⁹⁷ AC 198.

⁹⁸ HU 31. Nobody seems to notice, rather surprisingly, that the holographic model "if taken to its logical conclusions" does *not* imply that the holographic blur is the "true" reality. The true reality in actual holography is the original object. This object is transformed into frequencies, and these frequencies are then re-converted into an illusionary image. Surely the model taken to its logical conclusion would imply that our reality is an image of another, essentially similar although more "true" reality. The frequency domain would then function only as a medium of

For the New Age audience, to pose the question is to answer it. Again we encounter the picture of the world as an illusion, but again without the traditional corollary of ascetic otherworldliness. The frequency domain is often associated directly with unitive reality as experienced in mystical states (an association which again evokes the suspicion of reductionism⁹⁹). However, the typical conclusion drawn by New Age thinkers is that as human beings our goal is not to take permanent residence in that amorphous realm, but that the "wholeness" of that realm should be the guiding model and inspiration for living our lives in everyday reality. Our world is described as fragmented and broken, and therefore "out of phase" with the wholeness in which it is ultimately grounded. Our goal must be to restore the world to wholeness. This recurring theme evokes the obvious question how one is to picture a world that exhibits the complete "wholeness" reigning in the frequency domain, and vet can be distinguished from the latter. One person fully convinced of the possibility of such a world is the other major thinker associated with the holographic paradigm, David Bohm.

Bohm has been elaborating his theory of the implicate order for several decades ¹⁰⁰, and at his death in 1993 his philosophy of nature still remained very much a "work in progress". It must be said from the outset that, in the present context, it will be impossible to do justice to the subtleties of Bohm's work and the development of his views over the years. While his colleagues in physics have largely reacted to his philosophical and spiritual excursions with suspicion and ridicule, Bohm has been recognized as an important and original thinker by philosophers and theologians interested in science and society. This has provoked a flood of commentaries and discussions, only a part of which can be associated with the New Age movement ¹⁰¹. In this study, I have to restrict myself to a quite general characterization of Bohm's main ideas.

Bohm's philosophical work can be characterized as a result of the convergence of two very different systems of thought. Firstly, there is Bohm's work in theoretical physics which, from the very beginning, appears to have been inspired by an underlying intuition of the wholeness of the universe¹⁰². Since his youth, Bohm never accepted the distinction between natural science and

translation between both realities. If the New Age interpretation were correct we would be forced, in the case of actual holograms, to regard both the image and its original as equally illusionary. This demonstrates that the holographic worldview is not actually derived from holography; rather, the latter is used as a convenient argument to defend an already existing intuition.

⁹⁹ Pribram himself, making no distinction between the paranormal and mysticism, seems to endorse the view that the implicate order (see below) 'has ... apparently been explored experientially by mystics, psychics and others delving into paranormal phenomena' (HP:f 34).

¹⁰⁰ For Bohm's development, see Temple, 'David Bohm'; Bohm, 'Hidden Variables'.

¹⁰¹ See the literature quoted in chapter three, under Bohm.

¹⁰² SOC 3.

philosophy of nature, and it seems that his early physical theories already anticipated what was later to become the philosophy of the implicate order¹⁰³. Secondly, there is his fascination with the Indian thinker Jiddu Krishnamurti. Bohm discovered Krishnamurti's work in 1959, and met him in person in 1961¹⁰⁴. Their discussions, which have been recorded on videotape and published in book-form, give important sidelights on Bohm's philosophical work¹⁰⁵. The acquaintance with Krishnamurti seems to have stimulated Bohm to explore connections between his physical theories and larger question of human nature and culture¹⁰⁶. Ever since, his governing theme has been the problem of "Fragmentation and wholeness", as formulated in his most important book:

The title of this chapter is 'Fragmentation and wholeness'. It is especially important to consider this question today, for fragmentation is now very widespread, not only throughout society, but also in each individual; and this is leading to a kind of general confusion of the mind, which creates an endless series of problems and interferes with our clarity of perception so seriously as to prevent us from being able to solve most of them¹⁰⁷.

What I am proposing here is that man's general way of thinking of the totality, i.e. his general world view, is crucial for overall order of the human mind itself. If he thinks of the totality as constituted of independent fragments, then that is how his mind will tend to operate, but if he can include everything coherently and harmoniously in an overall whole that is undivided, unbroken, and without a border (for every border is a division or break) then his mind will tend to move in a similar way, and from this will flow an orderly action within the whole. ¹⁰⁸

Bohm believes that fragmentation in society results from an incorrect way of thinking, which is out of touch with the wholeness of existence. In order to restore wholeness to the world, humanity must learn to think in a completely new way. This need for a radical restructuring of the mind is the central theme of Krishnamurti. As a physicist, Bohm's special interest is in developing a philosophical view of reality—a Naturphilosophie—which both legitimates and reflects radical holistic thinking. A comprehensive worldview which legitimates holistic thinking by providing it with a solid conceptual framework is necessary as an alternative to the mechanistic worldview based on classical physics. Bohm repeatedly expresses his amazement at the fact that his colleagues are able to continue thinking in terms of a mechanistic and reduc-

¹⁰³ Bohm, 'Hidden Variables', 113; SOC 3: 'I was never able to see any inherent separation between science and philosophy. Indeed, in earlier times, science was called *natural philosophy* and this corresponded perfectly with the way I saw the whole field'.

¹⁰⁴ Temple, 'David Bohm', 363.

¹⁰⁵ Krishnamurti & Bohm, Ending of Time; id., Future of Humanity.

¹⁰⁶ Bohm's ventures beyond physics started with two essays written in 1968 (Temple, 'David Bohm', 363-364) which deal, interestingly, with creativity and art.

¹⁰⁷ WIO 1. Readers familiar with Krishnamurti's work will immediately recognize the influence of the latter's characteristic style.

¹⁰⁸ WIO xi.

tionistic worldview, even though this worldview is explicitly falsified by the very theories they professionally know to be correct¹⁰⁹. A new holistic "paradigm" or worldview is needed to replace the outdated fragmentary one. In contrast to some other holistic thinkers, however, Bohm is acutely aware that the world will not be restored to wholeness if we simply replace one theory for another. A theory can only successfully legitimate holistic thinking, and promote wholeness in society, if its very nature reflects a consistently holistic outlook and if that nature is correctly understood by those who use it. Now, even the most holistic theory necessarily introduces distinctions (conceptual, terminological, etc.). If we see these as reflecting reality as it "really" is, then we are in fact affirming that fragmentation is real. Therefore, the only consistently holistic way of looking at theories is to consider them not as descriptions of reality but as transitory "forms of insight" into a reality which transcends any explicit theory.

... a theory is primarily a form of *insight*, i.e. a way of looking at the world, and not a form of *knowledge* of how the world is. ... all theories are insights, which are neither true nor false but, rather, clear in certain domains, and unclear when extended beyond those domains. ... So, instead of supposing that older theories are falsified at a certain point in time, we merely say that man is continually developing new forms of insight, which are clear up to a point and then tend to become unclear. In this activity, there is evidently no reason to suppose that there is or will be a final form of insight (corresponding to absolute truth) or even a steady series of approximations to this. Rather, in the nature of the case, one may expect the unending development of new forms of insight (which will, however, assimilate certain key features of the older forms as simplifications, in the way that relativity theory does with Newtonian theory). 110

If theories are merely forms of insight, the validity of which rests on the extent to which they "clarify" reality, then we cannot simply point to the "facts" for confirmation of how reality is. Rather, 'the factual knowledge that we obtain will evidently be shaped and formed by our theories'¹¹¹. Bohm regards it as a crucial mistake to 'confuse the forms and shapes induced in our perceptions by theoretical insight with a reality independent of our thought and our way of looking'¹¹². Pointing to the "fact" of fragmentation in the world, therefore, does not disprove the axiom of the wholeness of reality:

...some might say: 'Fragmentation of cities, religions, political systems, conflict in the form of wars, general violence, fratricide, etc., are the reality. Wholeness is an ideal, toward which we should perhaps strive.' But this is not what is being said here. Rather, what should be said is that wholeness is what is real, and that fragmentation is the response of this whole to man's action, guided by illusory

¹⁰⁹ For instance HP:euu 53-54.

¹¹⁰ WIO 4-5.

¹¹¹ WIO 5.

¹¹² WIO 6.

perception, which is shaped by fragmentary thought. In other words, it is just because reality is whole that man, with his fragmentary approach, will inevitably be answered with a corresponding fragmentary response. So what is needed is for man to give attention to his habit of fragmentary thought, to be aware of it, and thus bring it to an end. Man's approach to reality may then be whole, and so the response will be whole. For this to happen, however, it is crucial that man be aware of the activity of his thought as such; i.e. as a form of insight, a way of looking, rather than as a 'true copy of reality as it is'.¹¹³

This is important for a correct understanding of Bohm's theory of the implicate order. The theory is based on the a priori assumption of the wholeness of reality. This assumption is regarded as justified for at least two reasons. Firstly, the two competing "big theories" in modern physics (relativity and quantum mechanics), are said to share, each in their own manner, a rejection of the "fragmenting" tendencies implicit in Newtonian physics and a corresponding tendency toward wholeness¹¹⁴. Secondly, the assumption that reality is fragmented and that therefore fragmentation is "natural" is perceived as having negative consequences in society, while the assumption that reality is whole is expected to have a healthy influence. Bohm's theory is, moreover, to be understood not as a fixed doctrine but as a form of "insight" that tries to attain a clearer perspective on the relation between the "nonmanifest" realm of subatomic reality, on the one hand, and the "manifest" realm of our macroscopic world, on the other. Bohm's constant revisions and refinements of the theory should therefore be seen as attempts to attain progressively clearer levels of "insight". Bohm evidently did not foresee an end to this process. He did claim, however, that his theories were at least a great deal more adequate than those still based on Newtonian presuppositions, and that their general acceptance would stimulate a movement towards wholeness in society. Finally, it may be added that Bohm's philosophy of nature has its direct counterpart in his strictly physical theory known as the "causal interpretation of quantum theory" which includes a theory of so-called "hidden variables" 115.

According to Bohm, the key feature of holography, which makes it a useful analogy to his theory of the implicate order, is the remarkable fact that the form and structure of the original object are *enfolded* within each region of the photographic record, and can in turn be *unfolded* from each region. Bohm's proposal is that a new kind of order is involved here: one which is strongly different from the mechanical order. This is the implicate order:

¹¹³ WIO 7. The statement that man can be "aware" of the fragmentary nature of his thought and thus "bring it to an end" is again typical Krishnamurtian jargon.

¹¹⁴ WIO 172-176.

³¹⁵ See WIO chapter 4, which is technical and, because of the frequent use of formulae, inaccessible to the lay reader. Cf mmc 140-141 about the different reactions of scientists to the philosophical exposition of the implicate order theory, on the one hand, and the scientific one, on the other.

In terms of the implicate order one may say that everything is enfolded into everything. This contrasts with the explicate order now dominant in physics in which things are *unfolded* in the sense that each thing lies only in its own particular region of space (and time) and outside the regions belonging to other things. 116

The limitation of the holographic analogy lies in the fact that a hologram is static. Reality is dynamic, and Bohm therefore refers to his concept of "ultimate reality" as the *holomovement* (or, sometimes, as the "flux"):

Our basic proposal [is] that what is is the holomovement, and that everything is to be explained in terms of forms derived from this holomovement. Though the full set of laws governing its totality is unknown (and, indeed, probably unknowable) nevertheless these laws are assumed to be such that from them may be abstracted relatively autonomous or independent sub-totalities of movement (e.g., fields, particles, etc.) having a certain recurrence and stability of their basic patterns of order and measure. Such sub-totalities may then be investigated, each in its own right, without our having first to know the full laws of the holomovement. This implies, of course, that we are not to regard what we find in such investigations as having an absolute and final validity, but rather we have always to be ready to discover the limits of independence of any relatively autonomous structure of law, and from this to go on to look for new laws that may refer to yet larger relatively autonomous domains of this kind.¹¹⁷

It appears contradictory to speak of the holomovement as containing "parts". If each part contains the whole, a distinction between parts and whole becomes logically impossible. This holomovement, which is obviously of a dimensionality inconceivable to us (at least at present, and probably in principle¹¹⁸), contains the whole of our reality in "enfolded" (implicit) form. The domain of experience investigated by classical (mechanistic) physics is a particular subtotality "unfolded" (explicated) from this whole. Thus, we get the fundamental picture of an *implicate order* (a frequency domain in the holomovement) from which is unfolded an *explicate order* (our world¹¹⁹). The mechanistic fallacy consists in the assumption that this explicate order, which consists of separate and independently existing interacting entities, is the basic reality. Mechanistic science starts with the parts and tries to explain wholes in terms of these parts and their interactions. Scientific research in terms of the implicate order, in contrast, begins with the undivided wholeness of the universe and defines its task as deriving parts through abstraction from the whole¹²⁰. Newtonian

¹¹⁶ WIO 177.

¹¹⁷ WIO 178.

¹¹⁸ Cf. WIO 189: the dimensionality of the holomovement is 'effectively infinite'.

¹¹⁹ Our world may be no more than a comparatively insignificant pattern of excitation within an immense sea of energy. Bohm repeatedly refers to the Big Bang as no more than a 'little ripple' (cf. WIO 192).

¹²⁰ WIO 179. An electron, for instance, must be understood through 'a total set of enfolded ensembles, which are generally not localized in space. At any given moment one of these may be unfolded and therefore localized, but in the next moment, this one enfolds to be replaced by

physics remains roughly appropriate for dealing with the explicate order, but its limitations are now clearly defined. The laws of the holomovement (referred to as holonomy) which, among other things, provide for the relative stability of the explicate order, are not mechanical. Rather, they 'will be in a first approximation those of the quantum theory, while more accurately they will go beyond even these, in ways that are at present only vaguely discernible' 121. The process of unfoldment of our world from the implicate order apparently takes place not in a random or chaotic but in an orderly fashion, resulting as it does in the relative stability and permanence of explicate reality. There must be a force of necessity behind this process, but the laws defining this necessity are unknown to us.

An understanding of its origin would take us to a deeper, more comprehensive and more inward level of relative autonomy which, however, would also have its implicate and explicate orders and a correspondingly deeper and more inward force of necessity that would bring about their transformation into each other 122.

However, following the publication of Wholeness and the Implicate Order, Bohm has not been able to resist the temptation to explore the logical possibility that the implicate order is itself organized by a deeper order which, in turn, is organized by an even deeper one, and so on ad infinitum. In Bohm's later work, the comparative simplicity and elegance of the original implicate/explicate scheme is progressively obscured by a proliferation of additional orders: the super-implicate, super super-implicate and so on 123. The situation becomes even more complicated by the introduction, in Science, Order, and Creativity, of the not very clear concept of a "generative order", which appears to have resulted from the attempt to account for the domains of art and creativity 124. The details of these later developments are of minor concern here. The New Age audience has retained not much more from it than the general picture of "infinite dimensions".

More important are Bohm's views about the possibility of an ultimate order or ground of being which might be associated with "God". Bohm repeatedly alludes to an ultimate "ground" beyond the holomovement, from which spring both matter and mind, and which he associates with absolute "intelligence". This notion of intelligence is derived from Krishnamurti and, like the latter, Bohm is extremely cautious about associating it with God. An example of this is the following fragment from an interview with Renée Weber:

the one that follows. The notion of continuity of existence is approximated by that of very rapid recurrence of similar forms, changing in a simple and regular way ... Of course, more fundamentally, the particle is only an abstraction that is manifest to our senses' (WIO 183).

¹²¹ WIO 181.

¹²² WIO 195-196.

¹²³ Cf. isio 33; SOC 182-184.

¹²⁴ SOC 151ff.

We're not saying that any of this is another word for God. I would put it another way: people had insight in the past about a form of intelligence that had organized the universe and they personalized it and called it God. A similar insight can prevail today without personalizing it and without calling it a personal God. WEBER: Still, it's a kind of super-intelligence and you've said elsewhere that that is benevolent and compassionate, not neutral.

BOHM: Well, we can propose that. 125

Although Bohm seems a bit embarrassed about Weber's reminder, it is true that the description of the ultimate Ground as a compassionate intelligence appears repeatedly in his later work, as for instance in this passage: 'When I see the immense order of the universe (and especially the brain of man), I cannot escape feeling that this ground enfolds a supreme intelligence. Although it is not quite so evident, I would say also that this intelligence is permeated with compassion and love' 126. Bohm is aware that this belief (which emerged from his discussions with Krishnamurti) cannot be justified on physical or even philosophical grounds. However, as it became increasingly clear during the 1980s that the scientific community was not prepared to take his philosophy of nature seriously anyway, one gets the impression that Bohm has come to care less about justifying to the skeptics.

The combination of Pribram's and Bohm's holographic theories leads to the picture of a universe in which the whole is "implicated" in each part, and which is interpreted by a brain functionally modeled on that same universe. The basic reality is pictured as a non-localized "frequency domain" characterized by unbroken, dynamic wholeness. Reality as we perceive it is "read out" of this domain by our brains (Pribram) or "unfolds" from it on the basis of unknown holonomic laws. Beyond even the holomovement may be an ultimate "ground" characterized by intelligence, compassion and love. It might be argued that the picture of many "orders" unfolding from an ultimate "Ground" is closer to "Ultimate Source Holism" than to "Universal Interrelatedness". However, Bohm claims that his series of "orders" represents levels of abstractions instead of a hierarchy with levels of graded ontological status¹²⁷. Bohm's orders are not higher or lower, but merely different. The quality of the "Ground" permeates all being, although most people are unaware of it. It is not an Ultimate Reality beyond our world, but should rather be seen as a "state of mind" accessible in this world. Bohm claims that such an awareness of the Ground is not a privileged kind of "mystical" experience, but rather a state of being "open"

¹²⁵ isio 39-40.

¹²⁶ Bohm, 'Hidden Variables', 124. Cf. UM 148-149.

¹²⁷ HP:pm 191-194. In spite of Bohm's rejection of hierarchical schemes, his introduction of an ultimate Ground produces a sufficient amount of ambivalence to permit his follower F. David Peat to describe Bohm's Ground entirely as a "generative source" (see S 185-213: ch. 'The Creative Source'). Peat speaks of a 'limitless series of levels' (S 187), but also accepts the idea of an "order of orders", beyond which is the Ground (S 188).

to the real depth of *ordinary* reality¹²⁸. In the context of Bohm's (and Krishnamurti's) philosophy, such a state of "awareness" is not a merely subjective experience, but a state in which one is receptive to the objective reality of the Ground. A further problem is the relation between the brain's process of "constructing reality" out of the frequency domain (Pribram) and the physical process of "unfoldment" out of the holomovement (Bohm). Are these two ultimately one? Pribram's view, as we saw, clearly implies that the world is "maya"; reading Bohm's work, however, one is not quite sure.

As is usual with the popular reception of philosophical worldviews, the conceptual complications of the holographic paradigm hardly bother the larger New Age audience. While intellectuals like Pribram, Bohm and others were still grappling with the logical implications of their ideas, the New Age population had already taken possession of them. To Marilyn Ferguson, the holographic paradigm heralds the end of the alienation occasioned by the Cartesian split: 'we are indeed participants in reality, observers who affect what we observe'129. Like Michael Talbot, she is particularly interested in the holographic paradigm as legitimating the paranormal. Matthew Fox incorporates the holographic theory into an enthusiastic vision of cosmic spirituality culminating in the assertion that 'to explore the cosmos is to explore God' 130. Jean Houston asserts that 'If the hologrammatic-Buddhist-monadic-Cabalistic theory¹³¹ is true, then you are literally ubiquitous throughout the universe and are being sent out as an interference pattern through the flow emulsion of the ether ... to all possible places in the matrix of space-time, 132. To Chris Griscom, the holographic paradigm means the collapse of the three-dimensional spacetime continuum, and of all the conventional distinctions associated with it (such as subjective-objective, mind-matter, inner-outer, man-God, past-future). Griscom's enthusiastic combination of the holographic perspective with Seth's teachings about a multidimensional reality is typical for New Age perspectives 133.

The major transformation of reality comes from the realization of our intrinsic participation in all that is. When we experience the power of synergistic relationships in which energy (thoughts, emotions, patterned pulsations) translates

¹²⁸ HP:pm 196, 198. It is interesting to compare this with Capra's discussions with R.D. Laing. Capra tends to put mystical experience in a class apart, while Laing defends a view more like Krishnamurti (UW 142-143).

¹²⁹ AC 198.

¹³⁰ OB 69-70.

¹³¹ Note that the worldviews of the holographic paradigm, the Avatamsaka Sutra, Leibniz's monadology, and also Jorge Luis Borges's story about the Cabalistic symbol of the "Aleph", are all regarded as synonymous.

¹³² PH 190.

¹³³ Some other examples: PR 193-194; DL 310; GW 311; ECMM 270-273; RW 118-119.

into matter—crystallizations that create the actual experience of form (health, disease, catastrophe, ecstasy)—the true hologram begins to emerge. 134

The reality of the multidimensional self is manifested through the hologram. We do not "reach" the hologram; we are the hologram. What happens is that we become fixated at different spots on the hologram, and we lose our understanding that there's something across the circle. We have no idea that we're connected to something across the circle, just as we have no idea that we can pull a string and tap the unconscious. We don't realize that we are in a fluid medium. We might call that the body, the universe; let us learn to call that the hologram.

In the hologram, we can recognize that we are here right now, and yet we have also lived many lives. We can experience and access the energy of those lifetimes, and that's the experiential aspect of the hologram. It is what the hologram really represents to us. It is not something out there to be tamed; it is simply that the more we become conscious of the hologram, the more we become God. ...

We can understand the connection to the God force, rather than having that perception, that concept that God is separate out there, or that anything else out there is separate. At the Institute [the Light Institute in Galisteo], we create a threshold for people to begin accessing the hologram, to recognize that anything they see or experience is part of themselves. ¹³⁵

Finally, it must be noted that the holographic model clearly has its own "metaphysical pathos". This particular kind seems extremely similar to the metaphysical pathos responsible for the appeal of science fiction literature, as may be illustrated by the following burst of enthusiasm:

The self is a meeting place of eternity and time, the holographic mind in the evolutionary body. Each nervous system tells the story of Bethlehem. The encoded information of the cosmos is incarnate in every historical body. A human being is a gateway to the beyond. When the question of self is placed in the context of the mystical-scientific view of the cosmic-evolutionary self the vistas and possible adventures of self-love are staggering. How much can we learn from ourselves? How much of the encoded information that resides in our bodies and minds can be recovered and brought into awareness? What can we know of happenings in distant galaxies and of animal wisdom by tuning into our own nervous systems? Can we slip out of the prison of time and space and travel into the beyond which is the source from which all things flow? Can we travel backwards and forwards in time? Once we see that the self is not merely a captive to the phenomenal world, not a mere prisoner of this time and space, of this body, the possibilities become endless. The adventure of self-knowledge takes us to the edges of every unknown.

How far can we travel? Who knows. We are at the beginning of a new age of discovery. The marriage of science and mysticism will open new possibilities and release potentialities we can scarcely imagine. ¹³⁶

Having discussed the holographic paradigm, I briefly call attention to the ambivalent position of Seth's worldview. Chris Griscom, as we saw, appears to

¹³⁴ TI 211.

¹³⁵ ENF 148-149.

¹³⁶ HP:cht 117-118 (Sam Keen, 'Self-Love and the Cosmic Connection').

have no difficulty combining Seth's metaphysics, discussed in the context of "Ultimate Source Holism", with the holographic paradigm which is an example of "Universal Interconnectedness". Indeed, it may be argued that Seth has managed to accomplish a convergence of both types: although everything springs from an ultimate creative Source, it is equally true that every single consciousness is actually the creative source responsible for its own realities. This view will be discussed in more detail below. At this point I only call attention to the similarities between Seth's multidimensional holism and the holographic paradigm. Reality "as it really is" exists, according to Seth, outside time and space. It must therefore be pictured as a radical singularity containing the potential for all creation. All realities in all dimensions are relatively illusionary creations "read out" of this singularity, which seems similar to the holographic frequency domain. Each single human mind is the central locus or center of this process of reality-creation, and therefore its very own center of the universe, so to speak. This image evokes the familiar catchphrase that the human brain is "a hologram interpreting a holographic universe", and indeed each mind must on these premises be pictured as containing all the information of the whole. Taking Seth's vision to its logical conclusion, Chris Griscom and many other "holographic" New Age thinkers ultimately go beyond Seth in discarding the concept of an ultimate, creative "God" source altogether and making each individual mind the center of the universe:

There is, within all that movement of the eternal pulsation with all the ever-changing, ever-creating patterns that are going on, a center. Our multidimensional soul has that center; it is enlightenment. What we mean by enlightenment is our capacity to receive, to see the latticework. Just as everything about us is interwoven in all of these interdimensional realities, the center of the latticework is multidimensional and it's integral¹³⁷.

This center or source is often called "God" in Griscom's books; but, rather than meaning that we all participate in or spring from one ultimate divine force, she seems to mean that we are that source in a far more literal way. We create the universe. It is true that, if we fully realize that, we also see that "we" are all one; but this "one source" (of divine energy, etc.) seems to have no independent ontological reality, let alone authority. Although Griscom often uses words like "God" or "divine", God in any traditional sense (as a reality which is somehow greater than man, and transcends or precedes man) is strangely absent in her writings. It is only man himself (and the world) that is greater than he himself normally realizes. Seth's metaphysics was an example of a multidimensional universe governed by "universal interconnectedness", but which still sprang from an ultimate creative source. When that Source is discarded by later writers, only radical holographic interconnectedness remains.

¹³⁷ ENF 74.

C. Other Meanings of Holism

As noted earlier, "Ultimate Source Holism" and "Universal Interrelatedness" are by far the most important types of New Age holism. Two other varieties may be discussed more briefly.

There exists a rather pronounced tendency in New Age thinking to describe the holistic nature of reality in terms of a dynamic harmony of opposites. Dualistic conceptions based upon the opposition of separate, mutually exclusive opposites are replaced by the concept of a creative tension between complementary poles which together constitute a dynamic whole. The principle of complementarity is asserted to be at work on all levels of reality. It provides the foundation for both explaining the workings of nature and a nondualistic ethics (to which more attention will be given in chapter ten). Janet and Stewart Farrar express the idea very clearly:

The Theory of Polarity maintains that all activity, all manifestation, arises from (and is inconceivable without) the interaction of pairs and complementary opposites—positive and negative, light and dark, content and form, male and female, and so on; and that this polarity is not a conflict between 'good' and 'evil', but a creative tension like that between the positive and negative terminals of an electric battery. Good and evil only arise with the constructive or destructive application of that polarity's output (again, as with the uses to which a battery may be put). 138

Fritjof Capra maintains that his systems view of reality is in fundamental accord with the yin-yang polarity expounded by the *I Ching*. Capra, like the Farrars, sees the male-female distinction as a prominent example 139. However, he warns against a "patriarchal" interpretation according to which yang/masculine is pictured as active and yin/feminine as passive. According to Capra, ancient Chinese thought did not entertain the idea of passivity as understood by us. Both the masculine and the feminine pole are active, but yin corresponds to 'responsive, consolidating, cooperative activity', and yang to 'aggressive, expanding, competitive activity. Yin action is conscious of the environment, yang action is conscious of the self.' Capra further associates these with two 'kinds of knowledge, or two modes of consciousness' 141: the intuitive and the rational. In all cases, the point is that a destructive imbalance occurs when we choose

¹³⁸ WW 107. Cf. DL 246-247.

¹³⁹ Cf. also Shakti Gawain: RG 3ff.

¹⁴⁰ TP 38

¹⁴¹ TP 38. Cf. the table of opposites on this page: Yin: feminine, contractive, conservative, responsive, cooperative, intuitive, synthesizing; Yang: masculine, expansive, demanding, aggressive, competitive, rational, analytic. Later in his book (TP 293) Capra mentions the well-known theory of the two brain hemispheres, which is extremely popular in the New Age movement and will be discussed in chapter eight, section 2B.

to concentrate on only one pole to the exclusion of the other. Healthy, natural states of being are the result of a creative tension between both poles, which hold each other in balance. Domination by only one pole produces static and rigid results, while the interaction between both poles leads to systems characterized by dynamic flexibility. The former constellation ultimately means death, the latter life. It is held that this principle applies to all aspects of reality: to the cosmos as a whole, as well as to ecology or individual health.

Like all other kinds of holism, this theory of polarity or complementarity is proposed as an alternative to dualism. Although "polarity-holism" has many dimensions, the association of the two poles with masculine and feminine appears to be particularly strong in the minds of New Age adherents. In terms of Jungian psychology (animus and anima), men are encouraged to discover their feminine, and women their masculine side; the goal is to achieve a healthy balance. It is a common New Age assumption that the dominant culture leads both men and women to repress and alienate their nondominant sexual pole, in order to conform to the sexual stereotypes of a dualistic society. The ideal of the "whole" person, on this premise, implies the harmonious integration of both poles. On the other hand, there also exists a rather different New Age tendency of emphasizing the need for women to rediscover their authentic femininity, and this has been followed somewhat later by a corresponding search among men¹⁴². Here, the premise is that the one-sided patriarchal orientation of western society (which is built on dualistic assumptions itself) has had negative effects on popular ideas of what is a "real" woman or a "real" man. Women are expected to be either submissive and supportive of male expectations or, more recently, to cultivate an attitude of aggressive assertiveness and independence which is itself modeled on masculine models. They are not encouraged to discover their authentically feminine "power" in their own terms. Men, in turn, are expected to conform to onesided "macho" stereotypes of masculinity, which are equally constricting. If the problem of dualism and patriarchy is approached from this angle, men and women, rather than cultivating their latent sexual polarity and striving for harmonious integration, should discover the real meaning of their dominant sex. While the former perspective logically tends towards the androgyne, the latter would produce "strong" women who experience their femininity as power instead of weakness, and men who do not need macho behavior to feel secure in their masculinity. We may summarize the distinction by saying that the first type asserts that holistic complementarity must be realized "within" each human being, while the second tries to realize it in society. The first view is most characteristic for what might be called "mainstream" New Age (i.e., the kind of approach exemplified most

¹⁴² Kelley, 'An Update', 149.

typically by Shirley MacLaine¹⁴³); the second is mainly found in the domain of women's spirituality (and its complementary offspring, men's spirituality) and neopaganism.

In the latter case, there is a direct connection with wider neopagan views of reality. *Wicca* is basically a fertility religion based upon a worldview constituted by sexual polarities. They are exemplified in particular by the female Goddess and her male partner, the Horned God. Neopagans in general tend to think of the universe as polarized between masculine and feminine energies, as exemplified by the above quotation from Janet and Stewart Farrar or the following from Starhawk:

The view of the All as an energy field polarized by two great forces, Female and Male, Goddess and God, which in their ultimate being are aspects of each other, is common to almost all traditions of the Craft. ... The Male and Female forces represent difference, yet they are not different, in essence: They are the same force flowing in opposite, but not opposed, directions. ... Each principle contains the other: Life breeds on death, feeds on death; death sustains life, makes possible evolution and new creation. They are part of a cycle, each dependent on the other.

Existence is sustained by the on-off pulse, the alternating current of the two forces in perfect balance. Unchecked, the life force is cancer; unbridled, the death force is war and genocide. Together, they hold each other in the harmony that sustains life, in the perfect orbit that can be seen in the changing cycle of the seasons, in the ecological balance of the natural world, and in the progression of human life from birth through fulfillment to decline and death—and then to rebirth. 144

This passage also exemplifies the neopagan emphasis on natural cycles of birth, death and rebirth. Women are naturally linked to the Goddess and share in her natural rhythms. The moon, with its three stages of waxing, fullness and waning is a prominent symbol of the "triple Goddess" who grows from young to mature to old, and then dies and is reborn again. Individual women may exemplify these three phases of the Goddess as Maiden, Mother and Crone. The same cyclical pattern can be seen in all of nature and is a reflection of the rhythms of the cosmos. Symbolic associations of this kind are responsible for the fact that neopaganism, in spite of all efforts towards inclusiveness, is and remains oriented primarily towards the feminine polarity. Witches like Z Budapest take this tendency towards its logical conclusion by claiming that witchcraft is synonymous with "women's mysteries", and therefore not the business of men. But, even in less extremist groups, the symbolism of the Horned God is inevitably somewhat less developed and his role in the neopagan worldview is less immediately obvious than that of the Goddess. The relation between

¹⁴³ Very characteristically, when Chris Griscom brings MacLaine into conscious contact with her "Higher Self", MacLaine perceives it as an 'almost androgynous' human being (DL 334-335). Another clear example is Shakti Gawain, for instance RG 24.

¹⁴⁴ SD 41. Starhawk later came to change her mind about polarity. See SD 8, 216-217.

the masculine and feminine pole in modern witchcraft recalls the image of the small sperm in relation to the large egg-cell: the masculine element is necessary for creation, but its role is very much limited to the single task of fertilization. Once it has fulfilled its role, the egg-cell can go on autonomously without further masculine assistance. Similarly, in Wicca, the masculine element represented by the God is necessary because of the polarized nature of reality; for the rest, it is the feminine element which dominates that reality¹⁴⁵.

Another variety of holism takes its inspiration from organic models. In itself, this connection is hardly surprising. We have seen that the New Age rejects mechanistic models and sees organicistic models as the natural alternative. We also saw that, in systems approaches, the notion of "organism" is subtly extended: the distinction between organisms and machines is replaced by a distinction between systems that do and systems that do not display the characteristics of self-organization. This criterion of self-organization is also central to the most prominent example of "organicistic holism" in the New Age movement, i.e., the so-called "Gaia-hypothesis".

The Gaia-hypothesis is tied to the name of the biochemist James Lovelock ¹⁴⁶. It claims that 'Life defines the material conditions needed for its survival and makes sure that they stay there' ¹⁴⁷. The earth, taken as a whole, is a complex system which functions according to the principles of self-organization. In that sense, it is not essentially different from an organism. Like an organism, the earth persists in a remarkably stable state of chemical and thermodynamic non-equilibrium, and is able to regulate the planetary environment in such a way that optimum conditions for life are maintained. The dynamic stability exhibited by the earth over long periods of time is impossible to explain on the usual premises of linear, mechanical causality. Lovelock et al. point out that 'If the temperature or humidity or salinity or acidity or any one of a number of other variables had strayed outside a narrow range of values for any length of

¹⁴⁵ Cf. Janet & Stewart Farrar: 'Every woman, if she can free herself from the conditioning imposed by the patriarchal stereotype, is a natural witch. Most men, unless they have a well-integrated and fully functioning Anima, have to work harder at it. Witches work primarily with the 'gifts of the Goddess'—the intuitive, psychic functions, the direct awareness, by sensitivity at all levels from bodily to spiritual, of the natural order of things. All this is a woman's immediate inheritance; on the whole, a man approaches it best via the woman (...). ... That is why Wicca is matriarchal, and the High Priestess is the leader of the coven—with the High Priest as her partner. They are essential to each other, and ultimately equal (...), but in the context of Wiccan workings and of their present incarnation, he is rather like the Prince Consort of a reigning Queen.' (WW 169)

¹⁴⁶ Lovelock first proposed the hypothesis together with Sidney Epton ('Quest for Gaia'). Later, he has collaborated with the microbiologist Lynn Margulis. The best-known exposition of the theory was, however, published under his name only (Lovelock, *Gaia*).

¹⁴⁷ Lovelock & Epton, 'Quest for Gaia', 304.

time, life would have been annihilated' ¹⁴⁸. The hypothesis that the earth functions as a living organism (with obvious implications for a holistic ecology) was named after the ancient Greek Goddess of the earth, Gaia.

In our New Age corpus, several interpretations of the Gaia hypothesis can be found. At a very moderate level, which is probably closest to Lovelock's intention, it is merely asserted that the functioning of the earth can be understood along the analogy with an organism, because both meet the criteria for selforganization. New Age sources almost never stay at this level, however; at the very least they use the Jantsch/Capra strategy of equating self-organization with Bateson's concept of mind to assert that earth therefore has "mind" 149. More usual for New Age thinking is a silent acceptation of the premise that each self-organizing system is an organism (which, as we saw, is misleading) and to conclude that earth therefore not only functions as a living organism, but actually is a living organism¹⁵⁰. Usually, an immediate further step is made, i.e., that this living organism possesses not just "mind" but consciousness, and even that it is intelligent. Connections are often made (most explicitly by Peter Russell) with Teilhard de Chardin's concept of the noosphere: the "thinking layer" of the earth comprised by the unified consciousness of humanity¹⁵¹. As a result of the global networks of information technology, a "planetary consciousness" is emerging: this signals a momentous evolutionary process in which Gaia becomes conscious of herself. Global society unified by information technology is described as a planetary nervous system, and the emerging unified consciousness of humanity as a "Global Brain" 152. However, in view of the ecological crisis, Peter Russell wonders whether humanity might now be in the process of actually frustrating these goals of evolution, exhibiting the characteristics of a "planetary cancer" rather than a global brain 153. It may well be that we have become parasites on the body of Gaia, and we should not be surprised if she finally takes steps to exterminate us. The present situation of the earth constitutes a test for humanity: 'If we do pass, we may move into our next evolutionary phase—our integration into a single being. If we fail, we will probably be discarded as an evolutionary blind alley, an experiment which for one reason or another did not quite work out. Humanity will be spontaneously aborted ...'154 Towards the end of his book, however, Russell shows himself optimistic about a good ending.

¹⁴⁸ Lovelock & Epton, 'Quest for Gaia', 304.

¹⁴⁹ SOU 164.

¹⁵⁰ TP 285; WW 128.

¹⁵¹ AE 83-84. Although Marilyn Ferguson's *The Aquarian Conspiracy* does not yet mention the Gaia hypothesis, she uses Teilhard de Chardin's work to convey essentially the same idea.

¹⁵² AE 77-79.

¹⁵³ AE 18-19, and passim.

¹⁵⁴ AE 207.

The idea that the earth is a conscious, living organism naturally evokes the question of whether the same applies to the other planets and heavenly bodies. When this happens, Gaia-speculation moves close to certain theosophical ideas which have profoundly influenced the New Age sensu stricto. David Spangler, George Trevelyan, and the Ramala books all closely follow the theosophist Alice Bailey in describing the sun and the planets as conscious, divine or semi-divine beings¹⁵⁵. Our solar system is an actual Body governed by the "Solar Logos", who lives in the sun and who is the entity we refer to when we talk of "God". However, the Solar Logos and his body-the Solar System—is in turn just a part of a larger galactic body which possesses a greater and more encompassing consciousness. This body is, again, part of yet another body and so on: apparently ad infinitum. This "chinese boxes" scheme appears to be open-ended in both directions. The earth, while being a part of the Solar Body, is itself the body of the "Earth Logos". Our own bodies, while being parts of the Earth body, in turn contain even smaller beings who experience our body as their "Solar Body". The very atoms of our body are quite literally minute Solar Systems inhabited by conscious beings, and so on ad infinitum again¹⁵⁶. As might be expected, the New Age sensu stricto has gratefully adopted Lovelock's Gaia hypothesis as scientific corroboration of its theosophical metaphysics¹⁵⁷. The theosophical Earth Logos is usually reinterpreted as female and identified with "the Goddess", and "Gaia" is used as an appropriate name to address her¹⁵⁸. Peter Russell, although apparently not directly influenced by theosophy or by the New Age sensu stricto, develops his Gaiaspeculation into a strikingly similar direction. Throughout his book the idea is developed that in order for a new level of evolution to emerge in any system, that system must have reached the threshold number of 1010 (ten billion) constituting units. Russell calculates that our galaxy, which contains some 10" stars, must therefore contain a sufficient number of 'potential Gaias' in order to make possible the eventual 'emergence of some galactic super-organism whose cells are awakened Gaias' 159 and which would possess an appropriate kind of super-consciousness¹⁶⁰. And, of course, having come that far, Russell does not stop here. Ultimately, the emergence of more than 10¹⁰ such superconscious Galactic Beings might result in the universe as a whole becoming a single Universal Super-Organism¹⁶¹, which Russell identifies with Brahman.

In sum, "Organicistic holism" of the above kind is based on either one of two

¹⁵⁵ RBNA 94-97; RR 28-33. Cf. Hanegraaff, 'Channeling-literatuur', 24-25; OR 33-34.

¹⁵⁶ RR 147-148.

¹⁵⁷ RS ch. 5.; OR 178-179; EiG 94-95, 187.

¹⁵⁸ We already noted the corresponding tendency towards divinization of the earth, and to some extent of the planets, in neopaganism. Cf. for instance HBWM 298; W 155.

¹³⁹ AE 214.

¹⁶⁰ AE 215: 'The Galaxy would become her equivalent of conscious'.

¹⁶¹ AE 218.

different systems of thought or their combination. One kind of argument is based on the crucial move, discussed above, of describing organisms as self-organizing systems. This is the basis of Lovelock's Gaia hypothesis, which can then be extended to larger and larger, and also to smaller and smaller systems. The other argument derives its justification from the subjective persuasiveness, to certain people, of theosophical speculation. Both systems of thought may be combined in worldviews which attempt yet another marriage between metaphysics and science and which result, not surprisingly perhaps, in cosmic visions strongly reminiscent of Science Fiction¹⁶².

3. THE EVOLUTIONARY PERSPECTIVE

All forms of New Age thinking share at least two general assumptions about the nature of reality. The first of these, discussed in section 2 of this chapter, is that reality is an unbroken, unified whole. On the basis of this Holistic Assumption, as we saw, several types of worldviews can be developed. In the context of these worldviews, the apparent evidence for fragmentation and dualism of various kinds is explained as resulting essentially from the erroneous assumption that the necessarily limited perceptions accessible to normal consciousness and experience provide us with sufficient evidence to draw conclusions about the whole. The whole as such, it is implied, must necessarily be inaccessible to finite perceptions (although it can perhaps be experienced in supra-normal kinds of consciousness and experience). From an encompassing perspective which starts from the whole, apparent cases of fragmentation and dualism lose their absolute character and can be seen as only partial manifestations of an underlying wholeness. Although reality may appear as broken and fragmented from a limited perspective, a deeper harmony is revealed from a holistic point of view.

The second general New Age assumption is that reality is engaged in a process of evolution. While the Holistic Assumption tends to emphasize the unity of space, this Evolutionistic Assumption emphasizes processes in time. Below, we will discuss the paradox that the almost universal New Age belief in evolution goes hand in hand with an equally strong tendency to regard time as an illusion, and belief in its reality as a major source of fragmentation. In this section, I will concentrate on the various types of evolutionism present in New Age literature, in sofar as they apply to the "nature of reality".

Like holism, New Age evolutionism must not be seen primarily as a theory about reality. Just as specific holistic theories are developed in order to provide the prior vision of wholeness with a theoretical underpinning, theories of

¹⁶² Significantly, Peter Russell ends his book with a quotation from Olaf Stapledon's novel Starmaker.

evolution are formulated to account for the prior feeling that present reality cannot be finished, complete or perfect and that the future must hold the promise of successive improvements (particularly in the sense of a progressive movement towards greater and greater wholeness). Both holism and evolutionism begin as visions which, eventually, give rise to a multitude of theories. Several of them are formulated with specific reference to "the nature of reality", but evolutionism as such pervades the New Age movement as a whole and will therefore be encountered again and again in different parts of this study.

Before discussing examples of evolutionism found in the New Age corpus, I propose a general analytic framework. Notice that this is not a summary of New Age forms of evolutionism, but an etic construct proposed as an ordering principle with respect to the latter. Evolution may be pictured as taking place either in a closed or in an open system. Possible examples of closed systems are the earthly biosphere, the solar system or even our universe as a whole: all can be pictured as self-sufficient units constituted in such a way as to permit evolutionary processes to occur within their boundaries. A distinction can be made between different levels of such processes: natural evolution, or evolution from life to consciousness, or evolution of consciousness itself. In all cases, the possible scope of evolution within a closed system is limited by the intrinsic boundaries of the system concerned. As an alternative, it can be assumed that systems—including the earth or the universe as a whole—are open systems which are themselves evolving. In this case there is no prescribed boundary and consequently no necessary limit or predestined outcome of their evolution. In this case, it is almost impossible to avoid speculating about where the evolutionary dynamics themselves come from. Postulating that the universe itself is part of a more encompassing system provides no solution, because any such super-system necessarily reintroduces the idea of an ultimate limit, and so on ad infinitum. Paradoxes of space-time infinity seem to be unavoidable once evolution is pictured as open.

While the distinction between closed and open systems concerns the possible scope of evolution (either finite or infinite), we must also distinguish different types of evolution. First, we may think of evolution as being part of a cyclical process. The beginning of such a cycle is classically pictured as the appearance of some kind of duality in a primeval singularity. The result is a "downward" process of emanation (or "involution"). When emanation and manifestation reaches a natural limit, the direction is reversed and a process of "evolution" back to unity begins. If such a cycle would simply mean a regression back to exactly the same state from which all has sprung, the process would be devoid of meaning and the term "evolution" would seem to be inappropriate. In spite of occasional references to the cosmic cycles of Hinduism as an

ultimately meaningless "divine play", the Nietzschean vision of an 'ewige Wiederkehr des Gleichen' is atypical of New Age literature. In the context of both closed and open systems, however, the cyclical process as a whole may also be described in more genuinely evolutionary terms. In this case, the whole achieves a "higher" level of integration at the completion of the cycle. This higher level may be the end of the process or it may be the beginning of a new cycle. The result can be pictured as an evolutionary spiral, the number of cycles of which may be anything between one and infinite (in open systems).

Other types of evolution are linear. The theoretical option of "blind" linear evolution resulting from random causal processes (the Darwinian theory) is generally rejected in the New Age movement. This is done not only because random evolution forecloses ultimate meaning; radical contingency is also considered as scientifically falsified on the basis of evidence such as provided by Lovelock. Because of its wholesale rejection by New Age believers, it is superfluous to discuss here the forms which blind linear evolution would assume either in closed or in open systems. Teleological evolution, in contrast, assumes that the linear process moves towards some goal which is implicitly present from the beginning. The dynamics of evolution is based on the natural, builtin tendency of systems or parts of systems to realize or attain their telos. Because the telos defines the possible limit of evolution, the teleological option presupposes a closed system. A third type of linear evolution, which may be labeled open-ended or creative, differs from both former types. There is no final telos, but neither is evolution random and blind. Evolution is governed by a built-in tendency of self-organization. As a result of the dynamics of selforganization, each system strives towards ever-increasing complexity and expansion. This "purposiveness" of self-organization ensures that evolution is not random: it naturally moves from chaos to ever-increasing order. This order, however, may reach infinite levels of complexity and the precise results to which evolution will lead are unpredictable. The goal is not some final, complete state; rather, the meaning and end of evolution lies in the very creativity of evolution itself. The essence of this type is caught in Seth's words: 'Ultimately a completed or finished God, or All That Is, would end up smothering His creation. For perfection presupposes that point beyond which development is impossible, and creativity at an end.'163.

This neat framework becomes slightly more complicated once we recognize the additional possibility of a *teleological spiral*. A spiral is, after all, a line which describes circles, and any line may be imagined to be either infinite or finite. If the line has any end at all, and if it is not based on random processes, then, after a finite number of "cycles", there must be some *telos* 164. Allow-

¹⁶³ SS 340.

ing for this addition, and leaving out the possibilities which do not appear in New Age sources, we get the following diagram:

Closed System Open System
Teleological spiral Open-ended Spiral

Linear Teleological linearity Open-ended/Creative linearity

Cyclical

Having distinguished these categories of evolutionism, it is hard to miss their significance in relation to the categories of holism discussed in section 2 of this chapter. Evolutionism of the "teleological spiral" type is naturally linked to "ultimate source holism": the source of all manifestation is also the telos of evolution within the system generated by the source. We will see that the same context is still presupposed (not entirely consistently) in the open-ended variety. Evolutionism of the "open-ended/creative linearity" type, in contrast, has found a very characteristic expression in the philosophy of self-organization developed in the context of systems theory (i.e., a prominent kind of "universal interrelatedness") which, however, also appears to have room for teleologic varieties. But these general affinities lead us only to a certain point. The holographic paradigm of Pribram/Bohm, influential though it may be, has remarkably little to say about evolution¹⁶⁵. Seth, on the other hand, not only manages—as we have seen—to combine elements of "ultimate source holism" with its logical alternative "universal interrelatedness", he even succeeds in giving an evolutionary turn to the otherwise static holographic paradigm. In Seth's case, we again have to do with a variation of "open-ended/creative linearity", but now combined with the belief in an Ultimate Source. So, a strict analogy between types of holism, on the one hand, and types of evolutionism, on the other, cannot be demonstrated; but general affinities certainly exist.

Examples of the teleological spiral—naturally bound up with the hierarchical universe of "Ultimate Source Holism"—are easy to find in New Age literature. In the discussion of the latter, notice was taken of the tendency to describe the universe as a learning environment, in which separate units of consciousness have emerged from the divine source and are now on their way to becoming conscious co-creators with God (the option of re-absorption into God being rather seldom). A characteristic statement comes from George Trevelyan:

...man has been called 'the experiment of God'. The world of matter, ruled by gravity, is the setting necessary for this experience of separation and exercise of

¹⁶⁴ The presence of a *telos* in evolution does not automatically imply that it will ever be realized. The process may be frustrated and cut off for some reason. As we saw above, Peter Russell for instance believes that such a thing might happen in the case of the evolution of Gaia.

¹⁶⁵ Robert John Russell has criticized Bohm for neglecting time and evolution in 'Physics of David Bohm', 147-148. In a response, Bohm accepts this criticism as valid, adding that he is exploring a possible combination of his theory with Prigogine's work on irreversibility (Bohm, 'Response', 219). I would consider the possibility of such a combination highly implausible.

free will. Only by separation from the divine and from the realms of light can man discover his freedom. And his spiritual guides must undoubtedly watch with some anxiety what man does with his self-consciousness and the freedom that attends it. He must prove himself worthy of the gift conferred upon him. The divine purpose seems to be that man should have the opportunity of growing into a companion and co-creator with God. To date, however, he has tragically abused the trust reposed in him¹⁶⁶.

The universe itself—the learning environment—is mostly assumed to have emerged in an analogous way. Edgar Cayce, for example, describes the emanation of both the material universe and conscious souls; as soon as he has sufficiently accounted for the former, however, he concentrates on the latter in the rest of his discussion¹⁶⁷. This is rather characteristic of "Ultimate Source Holism" in general, which is primarily interested in the spiritual dimension. Extended discussions of *natural* evolution are mostly restricted to the domains of New Age Science and the New Paradigm, where not the teleological spiral but the paradigm of self-organization dominates. If authors representative of "Ultimate Source Holism" do not simply take the material universe for granted, they mostly describe it as the creation of its own inhabitants: individual souls, as sparks of the great Creative Source, create realities as a mirror for their own development. This view, largely derived from Seth, has been discussed above and will be returned to again.

The status of the open-ended spiral variety is more difficult to assess. The idea as such fits easily within the perimeters of New Age evolutionism, for the simple reason that it combines two convictions that are popular in themselves: the idea of "cycles of learning" and the idea of infinite possibilities for development. It must also be noted that the very notion, encountered in the Trevelyan passage quoted above, that completion of the evolutionary spiral makes us into "co-creators" with God, implies that the creative process does not stop at reunion with the Source. Typically, no final end is mentioned at all. An openended spiral of evolution seems to be implied by theosophically-oriented holism of the New Age *sensu stricto* variety, such as the Ramala doctrine of infinite universes within universes. David Spangler, representing the same tradition, puts it like this:

The whole solar system, from the physical level on up to the cosmically oriented levels of awareness of the Solar Logos, is like a womb in which seeds of consciousness develop and unfold into a full flowering of that unobstructed awareness and creativity that is the God-life and cosmic consciousness inherent within all creation. At that point, these consciousnesses, full-fledged beings of radiant creative Divinity, go forth as graduates of this solar system into the infinite universe beyond to become, in turn, educators for the life-streams following after

¹⁶⁶ VAA 34-35.

¹⁶⁷ TiR 306-308.

them and seeds for still greater manifestations of God-life yet to unfold from the potentials within Divine Mind¹⁶⁸.

Anticipating the discussion in Part Three of this study, we can already conclude that a large part of the New Age movement seeks to combine the "closed world" of traditional cosmologies with the "infinite universe" revealed by the Copernican revolution¹⁶⁹. Basic models of evolution are derived from the former, but their scope is widened to the magnitude of the latter.

The linear types of evolutionism popular in the New Age corpus are more resolutely modern, and tend to place the evolution of consciousness within the wider context of natural evolution. Roughly speaking, the cyclical types discussed above start with a spiritual worldview and give only a limited amount of attention to the natural world within that context. The linear types, in contrast, start from nature and describe consciousness as an "emergent property" of nature. The main source of these views is the complex theory of self-organization developed by Ilya Prigogine and popularized in particular by Erich Jantsch and Marilyn Ferguson.

Ilya Prigogine is far more difficult to fit into a holistic framework than might be expected. At the core of his scientific oeuvre is the conviction that classical science, which emphasized "being", is now superseded by a new paradigm which emphasizes "becoming" Accordingly, he is extremely critical of the belief in eternal laws and cosmic harmony. Instead, he emphasizes the primacy of time, change, contingency, and the unpredictability of the future 171:

[The] feeling of confidence in the "reason" of nature has been shattered our vision of nature is undergoing a radical change towards the multiple, the temporal, and the complex. ... We were seeking general, all-embracing schemes that could be expressed in terms of eternal laws, but we have found time, events, evolving particles. We were also searching for symmetry, and here also we were surprised, since we discovered symmetry-breaking processes on all levels, from elementary particles up to biology and ecology¹⁷².

The closing sentences of *Order out of Chaos* leave no doubt about the basic orientation of his worldview:

The ideas to which we have devoted much space in this book—the ideas of instability, of fluctuation—diffuse into the social sciences. We know now that societies are immensely complex systems involving a potentially enormous number of bifurcations exemplified by the variety of cultures that have evolved in the relatively short span of human history. We know that such systems are highly sen-

¹⁶⁸ RBNA 95-96.

¹⁶⁹ Cf. Koyré, From the Closed World.

¹⁷⁰ Prigogine, From Being to Becoming.

¹⁷¹ Cf. also his rejection of "Grand Unified Theories" (rn 192; OC 21, 47).

¹⁷² OC 292.

sitive to fluctuations. This leads both to hope and a threat: hope, since even small fluctuations may grow and change the overall structure. As a result, individual activity is not doomed to insignificance. On the other hand, this is also a threat, since in our universe the security of stable, permanent rules seems gone forever. We are living in a dangerous and uncertain world that inspires no blind confidence, but perhaps only the same feeling of qualified hope that some Talmudic texts appear to have attributed to the God of Genesis: "Twenty-six attempts preceded the present genesis, all of which were destined to fail. The world of man has arisen out of the chaotic heart of the preceding debris; he too is exposed to the risk of failure, and the return to nothing. "Let's hope it works" [Halway Sheyaamod] exclaimed God as he created the World, and this hope, which has accompanied all the subsequent history of the world and mankind, has emphasized right from the outset that this history is branded with the mark of radical uncertainty" 173.

This quotation illustrates not only why New Age thinkers are fascinated with Prigogine, but also why they usually follow him only up to a certain point. The fascination derives from the excitement that comes with the vision of an infinite and open evolutionary future in which man may once more play a meaningful role. The idea that small fluctuations, including those resulting from human activity, may drive evolution as a whole over critical thresholds into unforeseeable new evolutionary directions, appeals to deep-seated New Age concerns. One of these is the hope for an Age of Aquarius. It will be seen later that Prigogine's theories can be used to defend the possibility of a sudden evolutionary transformation of society. In general, the theory is attractive because it promotes man from the role of a passive object to that of an active agent in the processes of nature, and suggests that even the smallest part—the individual—can influence the whole. The disconcerting aspect of his thinking is that the process of self-organization is neither causal nor teleological. It therefore includes the possibility of failure at any moment. The reaction of Renée Weber, in an interview with Prigogine, is characteristic of New Age thinking:

If the universe is something that is creating itself as it goes along, it is as if you are pulling the rug out from under us. The picture generates a sense of insecurity as well as excitement. We don't know what the universe is going to do until it does it. There are no archetypes, no gods, no platonic ideas, no eternal laws, no immanence in anything, no implicate order. That seems bleak and austere 174.

While the popularity of Prigogine in the New Age movement rests on the "excitement" generated by his evolutionary vision, the "insecurity" that comes with it has been played down and obscured by the interpretations of his fol-

¹⁷³ OC 313. The quotation is from Neher, 'Vision du temps', 179.

¹⁷⁴ rn 195. Prigogine gives a double answer. Firstly, it is not his business to describe the universe as he would *like* it to be, but as it is. Secondly, the alternative of a closed and deterministic world may be even more unattractive, because it leaves no room for human freedom.

lowers. This is illustrated very clearly by the work of Erich Jantsch.

Jantsch explains how the Prigoginian paradigm differs both from Newtonian dynamics and from thermodynamics¹⁷⁵. Newtonian dynamics is mechanical and treats time as reversible (for example, in mathematical descriptions of the movement of planets around the sun it makes no difference if the direction of time is reversed). The second law of thermodynamics¹⁷⁶ undermined Newtonian reversibility by demonstrating the existence of an "arrow of time": the universe moves towards increasing entropy (dissipation of usable energy) in a process that is basically irreversible. Classical thermodynamics thus demonstrated that historical (i.e., irreversible) time is a necessary part of physics, but it also led to the pessimistic conclusion that the universe was inevitably "running down". The progressive loss of available energy would ultimately result in universal "heat death". Prigogine's theory of dissipative structures, while based on thermodynamics, demonstrates an alternative possibility. In open systems that are far from equilibrium—for instance, organic systems—new and higher levels of increased complexity may arise suddenly and spontaneously. While classical thermodynamics implied that time inevitably moves in the direction of increasing chaos, Prigogine's theory maintains that it is precisely from chaos that new orders of higher complexity may emerge. It therefore opens the possibility for an optimistic reformulation of thermodynamics, which ascribes to the universe the ability to develop ever higher and more complex orders. Prigogine calls such orders dissipative structures, i.e., dynamic (=far from equilibrium) systems, which are not closed but open and therefore maintain constaint energy exchange with the environment (=dissipation). The logical contrast to a dissipative structure is a machine, for instance a clockwork machine, which is closed and static. Such structures are subject to the Second Law of Thermodynamics: they run down over time and cannot repair themselves, let alone evolve to new levels of complexity. Dissipative structures can do all these things. Living organisms are obvious examples; but dissipative structures do not need to be organisms in the traditional sense. As noted in section 2B of this chapter, the essential distinction in systems thinking of this type is not between organisms and anorganic material structures, but between systems that display the characteristics of self-organization and systems that do not. Whether or not the former (including human artefacts) can be called "living" is regarded as no more than a matter of convention. In this way, Prigogine, Jantsch and others attempt to explain the evolution of both living organ-

¹⁷⁵ SOU ch. 1.

¹⁷⁶ The first law of thermodynamics states that the total energy in an isolated system is conserved. The second law states that the amount of *available* energy decreases over time. This implies, among other things, the impossibility of perpetual motion machines, and can be relabeled as the "law of increasing disorder" (Murphy, 'Time, Thermodynamics, and Theology', 360, 363-364).

isms and, for example, social systems in terms of the same basic mechanisms. Erich Jantsch, in the bewildering mixture of scientific theory and visionary enthusiasm that is The Self-Organizing Universe, goes far beyond Prigogine by covertly reintroducing a range of teleological elements. An explicit defense of teleological evolution would bring Jantsch into headlong collision with the very core of Prigoginian theory. So it is not surprising that his apparent belief in a higher evolutionary purpose is expressed by means of frequent suggestive remarks rather than by explicit argument. Some examples of covert teleology are his description of the evolution of the universe as a process of "unfoldment"177; his mention of a "directedness" of evolution which might be recognized post hoc178; or, especially, his speculations about the "meaning" of evolution. At one level, evolution and "metaevolution" (i.e., the evolution of the evolutionary mechanisms and principles themselves¹⁷⁹) generates its own meaning, in the sense that the meaning of evolution lies in the intrinsic value of creative expansion. On another level, meaning has to do with evolutionary "self-transcendence" culminating in the development of "Mind". Jantsch comes very close to an explicit teleological statement towards the end of the book: 'In self-transcendence ... the chord of consciousness becomes richer. In the infinite, it falls together with the divine. The divine, however, becomes manifest neither in personal nor any other form, but in the total evolutionary dynamics of a multilevel reality' 180. An explicit teleological statement (reminiscent of Teilhard de Chardin's Omega Point) is avoided only by the words "in the infinite" (which however have the effect of obscuring completely what may be meant by the divine "becoming manifest"). The latent affinity with a linear teleological evolutionism, like that of Teilhard¹⁸¹, is further confirmed by Jantsch' statement that primitive forms of "consciousness" must be attributed even to simple chemical structures and single cells¹⁸². This is another way of saying that the tendency towards mind/consciousness is built into evolution from the very beginning. It then becomes almost impossible to distinguish Jantsch' views from an explicit linear-teleological evolutionism as expressed, for example, by Willis Harman:

Consider [the] kind of explanation which speaks of some sort of teleological "pull" in the evolutionary process, of evolution toward increased awareness, complexi-

¹⁷⁷ SOU 75.

¹⁷⁸ SOU 8.

¹⁷⁹ SOU 8.

¹⁸⁰ SOU 308.

¹⁸¹ Note that neither Prigogine nor Jantsch refer to Teilhard at all.

¹⁸² SOU 40: 'If consciousness is defined as the degree of autonomy a system gains in the dynamic relations with its environment, even the simplest autopoietic systems such as chemical dissipative structures have a primitive form of consciousness'. If that is done, Jantsch's conclusion may well be correct. However, he does not explain why we should define consciousness in that way to begin with.

ty, freedom—in short, of evolution going somewhere (not in a predetermined sense, but in the sense of preferred direction). In that kind of evolutionary explanation the organism developed two eyes because at some deep level of inner understanding it wanted to see better! 183

In spite of the logical open-endedness of Prigoginian evolutionism, the attraction of teleological models has, on the whole, been too strong for his New Age followers. Prigogine's 'dangerous and uncertain world' has been transformed, with reference to his own theories, into a world of inevitable progress towards a superconsciousness of cosmic dimensions. In this connection, we may also think of Marilyn Ferguson's Aquarian Conspiracy, which not only freely combines such radically different theories as those of Prigogine and Bohm¹⁸⁴, but also very frequently quotes Teilhard de Chardin. Although Teilhard is not discussed in detail, a strong presumption is created that it is his evolutionary vision which inspires more recent theories. Something similar is suggested also by Fritjof Capra¹⁸⁵ and Peter Russell¹⁸⁶. Teilhard's role in the New Age movement is, however, ambivalent. His direct influence, in terms of specific theories, is much less than has sometimes been suggested¹⁸⁷. Compared with thinkers such as Bohm and Prigogine he must definitely be considered a minor source. However, several central aspects of his thought (e.g., evolution towards Omega Point; the idea of the noosphere; the "inwardness" of matter) have their direct counterparts in New Age speculation. As a result, his name is often evoked to lend added support to ideas to which he is linked only by analogy. The peculiar combination of logical open-endedness and a suggestion of teleological directedness is often found in New Age sources. Seth has already been mentioned as an obvious example. Although there are no reasons to suppose any direct connections, Seth's and Jantsch's views of evolution are surprisingly similar. Central to both is the conviction that the meaning of evolution lies in the inherent value of creativity. The universe exists in order to unfold into ever more magnificent creations. Unlimited creativity is the beginning, the means, and the "end" of evolution; human consciousness is destined to play a crucial role in that process. It appears to be irresistible, even for a professional scientist such as Jantsch, to associate the very dynamics of creativity with

¹⁸³ GMC 55.

¹⁸⁴ It is interesting to compare the attitude of both scientists to each other's work. Bohm is interested in Prigogine and tries to incorporate his theory in his own work (SOC 137-141; David Bohm, 'Response', 219). Prigogine, from his side, shows less interest: '...I have not understood him exactly. My feeling when I hear or read him is that his is a rather conservative view, in the sense that he very much emphasizes enfolding and unfolding. To my mind enfolding and unfolding is exactly as conservative as his point of view on hidden variables. ... In spite of his great originality, and of many things which I admire in Bohm's views, I still feel he is trying to come back to a classical transparancy of nature'.

¹⁸⁵ TP 304.

¹⁸⁶ Esp. AE 83-84.

¹⁸⁷ For example by Sudbrack, Neue Religiosität.

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"God". God (or *All-That-Is*) is pure creative energy; and human beings, as cocreators with God, partake in that divinity. Evolution is the process of God's infinite expansion.

4. Some Additional Issues

In this chapter, I have discussed the views about reality explicitly described or implicitly presupposed in our New Age corpus. The chapter's comparative lengthiness was predictable given the fact that it not only had to provide a sufficiently comprehensive context for the next chapters to draw on, but also because reflection on the "nature of reality" is a comparatively sophisticated intellectual enterprise. Even so, the scope and purpose of this study does not permit a really exhaustive treatment of the philosophical worldviews involved. It was necessary to pass over many interesting aspects and details. Some of these will be "filled in" in the course of the next chapters; others are marginal to the understanding of New Age religion and will be ignored, although they would be important for an in-depth interpretation of specific thinkers and their work. An obvious example is David Bohm's philosophy of nature, which would require a book-length critical monograph combining expertise in both philosophy and physics. Of more immediate importance are a number of general philosophical issues related to, or implicit in, the theories discussed above. This chapter will be rounded off with a brief survey of the most important ones.

The Transcendence of Space-Time

The "Quest for Eternity" has sometimes been highlighted as the central preoccupation underlying a wide variety of modern "irrational" movements, from Romanticism to the New Religions¹⁸⁸. The analysis of our corpus strongly confirms that in the New Age movement "time"—or, more specifically, the *belief* in time—is generally regarded as an unfortunate, limiting condition. Our textual corpus is full of suggestions that time is something to be transcended¹⁸⁹. Less prominently, but still with remarkable frequency, we find the belief that

¹⁸⁸ Raschke, Interruption of Eternity. This study has many interesting insights to offer. The guiding definition of "gnosticism" is, however, extremely problematic: 'Over against the historicist mentality ... can be posed the theme of revolt against history, a quest for metahistorical meaning which can be classified generally as "Gnosticism" (24). This definition of "gnosticism" remains unsupported by any arguments and must be regarded as yet another source of confusion about this already seriously devaluated term'.

¹⁸⁹ CiM:T 5, *passim*; WIO 210-212; SOC 108-109, 197-199; ToP 197; AS 38; PR 193-194; PH 82-83; GW 199-220; S 227-237; RR 38; WR 13, 37, 226-227; ECMM 63; SM 163; SS 339-340; OtC 115, 218; RBNA 99-100; MNP 97; BQ 172; HU 197-228; SoC 98, 123; UfE 60-62; HP:cht 112; SoS 35.

the transcendence of time is to be complemented by a transcendence of space¹⁹⁰. In the context of "Ultimate Source Holism", the wish to transcend the space-time continuum is directly connected to the longing for a "self-sufficient Absolute", and many references to time/space-transcendence can be attributed to the attendant "eternalistic pathos". In holographic theories, the wish to transcend time and space is given a theoretical underpinning by presenting the whole space-time continuum as "unfolding" from an implicate order beyond time and space. In the context of Seth's holographic worldview, this radical non-dimensionality is referred to as 'the spacious present'. It is important to realize that the meaning of space-time transcendence is different in both contexts just mentioned. In the first, otherworldly-oriented context, the wish to leave space-time behind seems to reflect quite simply the wish to find eternal peace and rest. In the holographic context, however, it is not eternal rest but eternal creativity that is sought. The "spacious present" functions not as a resting place, but as an archimedean point from which multidimensional realities can be created: 'In one respect, the body and physical objects go flying out in all directions from the inner core of the whole self' 191. Starting from the premise that all multidimensional realities are created by conscious souls. it is indeed only logical to infer that those souls themselves must transcend the dimensions of space and time (time being the fourth dimension, as the post-Einstein generation has duly learned, if not from popular science books then from science fiction). Furthermore, if realities are created on the basis of our beliefs, then we are not actually constricted by the limitations of space and time, but only by the limitations of our beliefs. Expansion of consciousness means transcending those limitations and envisioning the possibility of other worlds, including higher worlds of more than four dimensions. The human mind is pictured as having the ability, at least in principle, of travelling between dimensions and realities at will, from the archimedean point of the "spacious present" beyond all creation. For illustration, I refer once more to the quotations about the popular reception of the holographic idea, at the end of chapter six section 2B. Shirley MacLaine, a strong representative of these views, emphasizes Seth's "spacious present" in her own words: 'I was learning to recognize the invisible dimension where there are no measurements possible. In fact, it is the dimension of no-height, no-width, no-breadth, and no-mass, and as a matter of further fact, no-time. It is the dimension of the spirit' 192.

From this perspective of the spirit, time and space are regarded as meaningful illusions. The soul makes use of these categories to demarcate the play-

¹⁹⁰ CiM:T 361, *passim*; euu 49; ToP 197; TI 136; AS 38; OL 213; ECMM 63; SM 127, 136-137; OtC 115; RBNA 99-100; MNP 80-82; HU 229ff; SoC ch. 4. In most cases, space is just mentioned routinely in connection with time.

¹⁹¹ SM 136.

¹⁹² DL 309.

grounds it creates for furthering its own growth and expansion: 'The whole construction is like an educational play in which you are the producers as well as the actors. There is a play within a play within a play. There is no end to the 'within' of things. The dreamer dreams, and the dreamer within the dream dreams. But the dreams are not meaningless, and the actions within them are significant' 193. We will return to this in the discussion of reincarnation. It seems clear that, on these premises, "evolution", as a process in time, can only have a limited significance: it exists to the extent that it is believed in. But, of course, this raises the question of what is the point of this whole dazzling play with illusions. If the soul is beyond time, then it seems contradictory to say that it can "evolve" by playing out its dreams. Nevertheless, this seems to be implied. Although the soul has literally "nowhere to go", it is still pictured as in a dynamic process of becoming a conscious co-creator with All That Is. Seth is very aware of this paradox, but attributes our failure to grasp it to our limited understanding: 'Everything happens at once, and yet there is no beginning and end to it in your terms, so it is not completed in your terms at any given point. Your idea of development and growth ... implies a one-line march toward perfection, so it would be difficult for you to imagine the kind of order that pervades' 194. The paradox, in other words, is a result of category confusion: the order of multidimensional reality just cannot be grasped by a merely fourdimensional logic. All attempts to solve the contradiction are therefore futile and bound to fail. This seems to be a perfectly satisfying answer to New Age authors and their readership, and we should therefore accept it on the level of emic belief.

But, even if representatives of the holographic paradigm are able to give an emically convincing account of evolution "out of time", we are still left with the incompatibility of the holographic paradigm as such and the competing paradigm of self-organization. For Prigogine historical time is primary, and any sort of "illusionism" is alien to his thinking. In the process of adaptation of Prigogine's views to general New Age concerns, however, what happens is that the exciting vision of infinite evolutionary possibilities is emphasized at the expense of Prigogine's historism. To the extent that the latter is played down or ignored, the artificial impression can be created that Prigoginian self-organization, on the one hand, and holographic evolutionism of a Sethian kind (both of them being of the open-ended/creative variety), on the other, are in basic agreement. This is a very significant fact. If historical realism cannot survive even in theories of evolution, then we must conclude that the New Age aversion to historical time is deep-seated indeed.

¹⁹³ SM 302-303.

¹⁹⁴ SS 339-340.

Mind and Matter

The only thing, as was noted above (beginning of chapter six, section 2), which unites the different expressions of New Age holism is a common opposition to non-holistic views associated with the "old culture". This is particularly clear in the case of views about the relation between mind and matter. All New Age authors unanimously reject Cartesian dualism, but beyond that agreement confusion reigns. Although the harmonizing and syncretistic, rather than polemic, spirit of most New Age literature tends not to emphasize differences of opinion, on the understanding that "basically we are all talking about the same thing", in fact the alternatives to Cartesian dualism cover the whole gamut of theoretical options. I will briefly characterize the main positions found in our New Age corpus and comment on some problems related to them.

David Bohm attempts to transcend dualism by describing mind and matter as explicate orders which seem separate from the perspective of manifest reality, but are one at a deeper implicate level. The basic unification of matter and mind takes place, therefore, at a level which cannot be reduced to either of them. An "ultimate reality" which is neither matter nor mind but encompasses both as enfolded potential is, of course, not easy to assimilate within a philosophy based on the evidence of physics. However, in the course of his intellectual development, Bohm has been increasingly concerned with securing a place for "meaning" within the seemingly impersonal framework of his philosophy. To describe meaning simply as something which is attributed by human beings to (aspects of) reality seems to have been unacceptable to him from the outset. Meaning, rather, must be inherent in the very structure of reality. This realist rather than nominalist perspective has led him to extended speculations on "matter as a meaning field" and the concept of "soma-significance"195: 'The notion of soma-significance implies that soma (or the physical) and its significance (which is mental) are not in any sense separately existent, but rather that they are two aspects of one over-all reality. By an aspect we mean a view or a way of looking. ...there is only one flow, and a change of meaning is a change in that flow. Therefore any change of meaning is a change of soma, and any change of soma is a change of meaning'196. Bohm's speculations in this domain are a relatively obscure part of his philosophy. They take him further beyond physics than ever, and many of his discussions are characterized by a lack of specificity which relies heavily on "intuitive" understanding on the part of his audience. Unlike his theory of the implicate order, Bohm's ideas about meaning and soma-significance seem to have been adopt-

¹⁹⁵ Cf. the double interview with Bohm and Sheldrake, mmf; the notion of "soma-significance" dominates UM, and is discussed in a number of contributions in Pylkkänen, Search for Meaning. The theme of "meaning" is also a central concern for Bohm's epigone Peat, in S. Cf. further Jantsch' final chapter with the title "Meaning".

¹⁹⁶ UM 73 & 76.

ed only by his immediate followers (such as Peat and Talbot) without significantly influencing New Age thinking generally. They tend to be mentioned from time to time, however, quite generally, as yet another confirmation from a famous physicist that Cartesian dualism is bancrupt.

Only a thorough philosophical analysis of Bohm's complete oeuvre could determine the question of whether his approach to the mind-matter problem succesfully avoids materialist reductionism. Suspicions to the contrary have been voiced even from within the New Age movement, and these will be examined below. Here, it must be noted that materialist reductionism is indeed a strong temptation for New Age holism. Any movement which combines the search for a monistic alternative to mind-matter dualism with a high regard for modern science will easily develop a form of materialistic monism. However, if such a movement also explicitly rejects reductionistic materialism and exalts spirit, then it obviously has a problem. To escape from the dilemma, it must claim either that science as such must be transformed so as to encompass aspects of reality normally associated with the spiritual, or it must demonstrate that the existence of a spiritual dimension is confirmed by advanced science¹⁹⁷. Critics will object that the former option leads to bad science, and the latter to bad spirituality. Defenders will reply that traditional notions of both science and spirituality have been too limited all along and that the convergence of both domains will lift both to an entirely new level. From such a perspective, mind and matter would turn out to be superseded and ultimately meaningless notions. This suggestion is what we actually find, not only in the work of David Bohm, but in many other representatives of New Age science as well¹⁹⁸. For our purposes, the main thing to note is their pervasive belief that the mindmatter problem can be solved in this way. If we look at the specific theoretical defenses of the belief, however, it is quite possible to argue that, in several central cases, what is presented as a solution to Cartesian dualism in fact amounts to either materialist or spiritual reductionism¹⁹⁹. A definitive judg-

¹⁹⁷ Cf. Shirley MacLaine: 'If and when science does get to establishing the Source, it will be acknowledging spirituality as a physical reality' (OL 325).

¹⁹⁸ An often-quoted example is the essential role of the observer in quantum physics, which seems to imply that mental and physical processes are aspects of one process. Frequently, however, this is—consciously or not—given an idealistic turn. This happens rather subtly in the case of Fritjof Capra (TP 93: 'The fact that all the properties of particles are determined by principles closely related to the methods of observation would mean that the basic structures of the material world are determined, ultimately, by the way we look at this world; that the observed patterns of matter are reflections of patterns of mind'), and quite unsubtly in the case of Henry Reed (ECMM 114: 'Atomic physics discovered that it is just not possible to look at an atom without the atom's feeling an impact of the scientist's observation'). Both authors have in common that they describe a one-way movement from a mental agent to a material object and not the reverse, which suggests that the mental aspect is primary. This seems difficult to reconcile with the logic of Capra's theories.

¹⁹⁹ I have already mentioned several examples, such as Capra's early bootstrap holism (crit-

ment would require a detailed philosophical criticism, which is beyond the scope and competence of this study. Given that, we are left with the problem that it is extremely difficult to decide how to characterize the authors in question. Should we characterize them according to their beliefs or according to their actual philosophical and scientific achievements? Suppose that the suspicion of materialist reductionism turns out to be justified: would it then be right to say that such authors *believe* in a materialistic universe (but without realizing that they do) or, rather, that they only describe such a universe (but without realizing its implications)? Both could be plausibly defended. I do not intend to take a final stand on this issue, but it is an important one to mention.

A closely related position sees mind as an "emergent property" of material processes. This view is connected to evolutionary perspectives of the self-organization variety, either combined with (krypto)teleological elements or not²⁰⁰. Again, there is good reason to suspect covert or less covert reductionism; and the above comments apply equally to this category. In this connection, it is not superfluous to mention the popularity, in some quarters, of the "anthropic cosmological principle"²⁰¹. This theory argues that there is a parallelism between the form of the human psyche and the form of the cosmos, such that 'neither could be supposed to be significantly different without supposing the other to be significantly different as well'²⁰². On these premises, the answer to the question "why does the universe exhibit the features it does exhibit?" would be: "because we are here" ²⁰³. In other words, human consciousness is regarded not as the explanandum but as the explanans of cosmic evolution. The so-called "final version" of this anthropic principle, a science fiction-like argument developed by John D. Barrow and Frank J. Tipler²⁰⁴ under the inspiration of Teilhard de Chardin, is fully congruent with the more extremist kinds of New Age science²⁰⁵.

If the mind-matter problem is approached from a primary interest not in matter (as is the case in the former categories, which are generally the products

icized by E.F. Schumacher); his interpretation of Gregory Bateson; and the Prigoginian description of "living systems". Below, the case of the holographic paradigm will be discussed in connection with Ken Wilber's criticism.

²⁰⁰ Strictly speaking, the notion of "emergent property" belongs only to the theory of self-organization. Elsewhere, "unfolding property" might be more appropriate. However, the actual assimilation of teleological elements in Prigoginian self-organization renders such fine distinctions rather pointless.

²⁰¹ For an excellent discussion see Hallberg, 'Anthropic Cosmological Principle'.

²⁰² Hallberg, 'Anthropic Cosmological Principle', 139.

²⁰³ Hallberg, 'Anthropic Cosmological Principle', 141.

²⁰⁴ Barrow & Tipler, Anthropic Cosmological Principle.

²⁰⁵ Cf. BQ 184-187.

of scientists or scientifically trained thinkers) but in mind, the result is usually a version of "illusionism" ²⁰⁶. Only mind is real, and whatever seems essentially different from mind is "maya". A perfect example is the following statement by Stanislav Grof, related by Fritjof Capra:

[My metaphysical system] is based on the concept of a Universal Mind, or Cosmic Consciousness, which is the creative force behind the cosmic design. All the phenomena we experience are understood as experiments in consciousness performed by the Universal Mind in an infinitely ingenious creative play. The problems and baffling paradoxes associated with human existence are seen as intricately contrived deceptions invented by the Universal Mind and built into the cosmic game; and the ultimate meaning of human existence is to experience fully all the states of mind associated with this fascinating adventure in consciousness; to be an intelligent actor and playmate in the cosmic game. In this framework, consciousness is not something that can be derived from or explained in terms of something else. It is a primal fact of existence out of which everything else arises. This, very briefly, would be my credo²⁰⁷.

We note in passing that the physicist Capra quotes this statement approvingly, and apparently regards Grof's worldview as compatible with his own. In general, this idealist solution to the mind-matter problem is less problematical than the preceding one, for at least two reasons. First, it does not have to justify itself to scientific research, because whatever science may find, still belongs to the sphere of maya. And if science were to provide a physical description of Universal Mind that would be inconsequential: the point is that the believer simply does not need such support in order to believe in it. Secondly, while the overt explanation of mind in material terms is rejected as reductionism, the reverse explanation of matter in spiritual terms is not usually perceived as reductionistic. While scientifically-based monism, in the New Age context, is always in the difficult (if not impossible) position of having to avoid the scylla and charybdis of dualism and reductionism, spiritual monism can be just itself.

Finally, we must note the prominence in New Age literature of certain ambivalent terms which are used to good effect in order to suggest the unity of mind and matter. One example is Pribram/Bohm's "frequency domain": a domain of universal "unbroken wholeness" or dynamic flux from which all reality unfolds, but which is also described as the domain of the spirit. Mystical experience, on this premise, results from "tuning in" to this frequency domain²⁰⁸. While

²⁰⁶ Gregory Bateson's theory is an exception; but he defines "mind" completely differently. Bateson (who was trained as a biologist and anthropologist) has proposed an extremely original solution to the mind-matter problem which would merit extended discussion here if it could be regarded as belonging to the New Age movement. However, as we saw, Bateson's influence in the New Age is limited to secondary interpretations of his work à la Capra.

²⁰⁷ UW 150.

²⁰⁸ Pribram himself confirms this (HP:f 34).

this might quite conceivably lead to a sceptical argument (the mystic thinks (s)he experiences God, but in fact experiences only physical frequencies), New Age authors characteristically see it as proof that mystical experience is not illusory but "real".

The most widespread example of such ambivalent terminology, however, is "energy". For examples of the way energy is described as both physical and spiritual there is no better source than Shirley MacLaine. See for instance the following conversation with her spiritual mentor David:

"But do you really believe the soul is a *physical* force?" "Yes, exactly. But it is a significantly different *kind* of force from the physical atomic and molecular forces that comprise the body. It is a subatomic force, the intelligent energy that organizes life. It is part of every cell, it is part of DNA, it is in us, and of us, and the whole of it—everywhere—is what we call 'God"²⁰⁹.

The implications for human "co-creatorship" are obvious:

We are literally made up of God energy, therefore we can create whatever we want in life because we are each co-creating with the energy of God—the energy that makes the universe itself. ... If the pattern of that energy has order, and balance, and grace (which science claims it does), if it has meaning in terms of all life, what is to distinguish it from what the New Age calls God?²¹⁰

Nothing, finally, summarizes the basic idea better than David's remark: 'Maybe the God-force is really scientific'²¹¹. It would be superficial, in a New Age context, to attempt to make a strict separation between the mind-matter problem and the problem of religion vs. science. If the essence of mind or spirit (terms which are used interchangeably) is divine energy, as is commonly asserted, then naturally scientific or philosophical "proof" for the reality of mind/spirit amounts to a legitimation of religion. Therefore it is commonly asserted in New Age sources that between science and religion there need be no conflict, and that a healing of the split between both is urgently needed. The argument usually reflects some variety of parallelism²¹². The hidden premise is, of course, that the religion in question must be of the "right" kind, just as the science in question must be of the "right" kind. Sometimes this is made explicit: 'There appears ... to be no conflict between a mature science and a mature religion'²¹³ and 'the only real battle is between genuine science and bogus science, and between genuine religion and bogus religion ... and the only worth-

²⁰⁹ OL 326.

²¹⁰ GW 100-101.

²¹¹ OL 240. Cf. OL 325: 'If and when science does get to establishing the Source, it will be acknowledging spirituality as a physical reality'.

²¹² For instance OB 10, EW passim; DL 323-329; GW 95-108; S 1-2, passim; SD 202-203; MNP 161.

²¹³ GMC 102.

while battle is between genuine and bogus, not between science and religion'²¹⁴. The problem is, of course, who decides what is "mature or immature", "genuine or bogus".

The Wilber Controversy

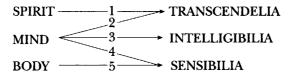
Sometimes the wished-for convergence of science and religion is put in the more general context of the conflict between the natural sciences and the humanities. In Prigogine & Stengers' Order out of Chaos this is even the central theme; the original French title La Nouvelle Alliance reflects the ambition of the authors to reunite the "two cultures" on the basis of a common recognition of historical time. However, we saw that it is exactly Prigogine's focus on history which has not been followed by his New Age admirers, so this part of his efforts must remain marginal to our present concerns. A far more crucial concern with the demarcation between different kinds of "science" is reflected in the vehement criticism of the holographic paradigm and of science-mysticism parallelism which has been voiced by Ken Wilber in several publications. Wilber's criticism is important because it is almost the only example of an intellectual controversy within the New Age movement, and because it illustrates a central problem area which has repeatedly been referred to above. Very briefly, Wilber argues that natural science has no competence to speak about spirituality. As an alternative to the monism of New Age science, which he claims cannot but result in reductionism, he proposes a hierarchical vision in which the higher levels encompass the lower but the lower cannot understand the higher. Wilber's sophisticated criticism, only the barest outlines of which can be presented here, seems to be similar to what E.F. Schumacher had in mind in his rejection of Capra's views (see above).

Wilber argues that the holographic paradigm is 'shot through with profound category errors' ²¹⁵. It fails to distinguish between fundamental levels in reality, the most important of which are the material, the mental and the transcendent realms²¹⁶. Each of these corresponds to a specific mode of attaining knowledge, the terminology for which Wilber borrows from Bonaventura: the eye of flesh, the eye of reason and the eye of contemplation. Each level, furthermore, refers to a specific object domain, which he refers to as *sensibilia*, *intelligibilia* and *transcendelia*. The possible epistemological relationships resulting from this are presented in the following diagram:

²¹⁴ QQ:ss 21.

²¹⁵ EtE:pmhp 126.

²¹⁶ In other publications, Wilber has made finer distinctions within each level.



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Mode #5 represents 'simple sensorimotor cognition ... the presymbolic grasp of the presymbolic world'²¹⁷, and mode #1 represents what Wilber calls "gnosis": 'the transsymbolic grasp of the transsymbolic world, spirit's direct knowledge of spirit, the immediate intuition of transcendelia'²¹⁸. The experience in these two modes is completely valid as knowledge, but it does not produce *theoretical* knowledge. This is done only in mode 2, 3 and 4:

Whereas the *data* in *any* realm is itself immediate and direct (by definition), the *pointing* by *mental* data to *other* data (sensory, mental, or transcendental) is a mediate or intermediate process—it is a *mapping*, *modeling*, or *matching* procedure. And this mapping procedure—the use of mental data (symbols and concepts) to explain or map *other* data (sensory, mental, or transcendental)—simply results in what is known as theoretical knowledge²¹⁹.

Most sciences proceed by producing theoretical knowledge, but in principle a science based on *direct* (unmediated) knowledge is possible. Logically, this can only be the knowledge of mode #1. The word "science" is appropriate in this mode as in modes 2-4, to the extent that all are based not on dogmatic formulation but on valid procedures of data accumulation and verification. Such a procedure, as explained by Wilber, must consist of the three steps of "injunction, apprehension and confirmation" Wilber's complete argument thus results in a distinction between the following categories:

Mode #4 results in "empirical-analytic or monological (monologue) sciences". As examples, Wilber mentions physics, chemistry, biology, astronomy and geology.

Mode #3 results in "mental-phenomenological, rational, hermeneutical, semiotic, or dialogical (dialogue) sciences". Examples: 'linguistics, mathematics, experimental phenomenology, introspective and interpersonal psychology, historic-hermeneutics, logic, interpretive sociology, communicative philosophy'²²¹.

Mode #2 results in "mandalic sciences": 'the attempt by the mind to arrange or categorize, however inadequately, the data of transcendelia ... this would include mental cartographies of the transmental realms, rational "plausibility arguments" for spirit; verbal discussions of Godhead; and so on'222.

²¹⁷ EtE:pp 67.

²¹⁸ EtE:pp 67.

²¹⁹ EtE:pp 67.

²²⁰ See EtE:ete.

²²¹ EtE:pp 72.

²²² EtE:pp 72.

Mode #1 results in "noumenological or gnostic sciences": 'the methodologies and injunctions for the *direct* apprehension of transcendelia as transcendelia; direct and intuitive apprehension of spirit, noumenon, *dharmakaya*'²²³.

Duly taking notice of the complicating factor of mathematics and logic in mode #3, we may conclude that the distinction between mode #4 and #3 largely corresponds to the traditional distinction between the Natural Sciences and the Humanities. Wilber's criticism of the holographic paradigm reflects an acute awareness of this distinction. Mode #2 largely corresponds to the transpersonal perspective which emerged in psychology, as was seen in chapter two, from the desire for a non-reductionistic account of mystical and related kinds of experience. Mode #1 is simply mystical practice, as distinguished from theory. According to Wilber, mysticism, as traditionally taught, is subject to the same epistemological structure as all valid science (i.e. "injunction, illumination, and confirmation").

It will be clear that, from a perspective that distinguishes between fundamental ontological and epistemological levels, the attempt to describe all reality in terms of one fundamental reality modeled on physics must be hopelessly reductionistic. Physicalist reductionism is therefore Wilber's basic objection to the holographic paradigm and to the parallellist enterprise:

...the new physics has simply discovered the one-dimensional interpenetration of its own level (nonsentient mass/energy). While this is an important discovery, it cannot be equated with the extraordinary phenomenon of multidimensional interpenetration described by the mystics. ... To put it crudely, the study of physics is on the first floor, describing the interactions of its elements; the mystics are on the sixth floor describing the interactions of all six floors. ... Further, physics and mysticism are not two different approaches to the same reality. They are different approaches to two quite different levels of reality, the latter of which transcends but includes the former. ... In the rush to marry physics and mysticism, using the shotgun of generalization, we tend to forget that quantum reality has almost no bearing whatsoever in the actual world of macroscopic processes. ... But it is precisely in the ordinary realm of rocks and trees that the mystic sees his mutual interpenetration of all matter. His basic oneness of the universe does not "start at the atomic level". When the mystic looks at a bird on wing over a cascading stream and says, "They are perfectly one", he does not mean that if we got a super microscope out and examined the situation we would see bird and stream exchanging mesons in a unitary fashion. ... Ask almost any physicist if the connections between, say, a macroscopic tree and river are as intense and unitary as those between subatomic particles, and he will say no. The mystic will say yes. That is a fundamental issue and shows, in fact, that the physicist and the mystic aren't even talking about the same world²²⁴.

David Bohm's implicate order, according to Wilber, is very interesting but should not be seen as a transcendent reality. Rather, it "subscends" matter, and

²²³ EtE:pp 72-73.

²²⁴ EtE:pmhp 135-137.

is simply 'the unitary deep structure (holoarchy) or level-1'²²⁵. As for Pribram's holographic brain: Wilber has no doubt that memory is holographically stored, but denies that this has any spiritual implications:

...it is said that a shift to a "perception of the holographic blur" would produce transcendent states. ... By the account of the theory itself, I do not see that it would or could result in anything but an experience of one's own memory storage bin, properly blurred and without benefit of linear read-out. How one could jump from a blur of one's own memory to a crystal clear consciousness that transcends mind, body, self, and world is not made clear at all²²⁶.

Popular ideas about the holographic "frequency domain" are similarly criticized:

The transform of "things" into "frequencies" is not a transform of space/time into "no space, no time", but a transform of space/time objects into space/time frequencies. Frequency does not mean "no space, no time"; it means cycles/second or space per time. To read the mathematics otherwise is more than a quantum leap; it is a leap of faith²²⁷.

The common belief that the new holistic theories reintroduce notions of freedom and creativity, and refute the determinism of earlier classical science, is equally groundless:

...even with its little bit of Heisenberg indeterminacy, the physical universe is much more deterministic than even level-2, biological beings. Any good physicist can tell you where Jupiter will be located a decade from now, barring disaster, but no biologist can tell you where a dog will move two minutes from now.

It's a reflex thing to do—finally, after decades of saying the physical universe is deterministic and therefore human choice is an illusion, you find a little indeterminacy in the physical realm and you go nuts. ... You get so excited you forget you have just pulled the reductionist feat of the century: God is that big electron in the sky. The intentions are good, but the philosophy is so detrimental²²⁸.

Wilber acknowledges that some of the founders of New Age holism have subsequently moved to a more sophisticated view, but is afraid that these necessarily more complicated views will never succeed in reversing the tide of 'pop mysticism and the new physics or holographic craze'²²⁹. Wilber's own alternative for a new paradigm would not only have to include all levels, modes of knowing and correlative methodologies, but also a 'social evolutionary stance, a social policy geared to help human beings evolve through the stage-levels of existence'²³⁰. It should be noted that, in Wilber's view, the only ultimate real-

²²⁵ EtE:pmhp 139.

²²⁶ EtE:pmhp 148.

²²⁷ EtE: pmph 149.

²²⁸ EtE:nap 169-170.

²²⁹ EtE:nap 163.

²³⁰ EtE:nap 196.

ity is universal spirit, and all lower levels are ultimately illusionary in relation to this final mystery²³¹. Therefore his opposition to popular New Age holism can still be fitted into the general duality between science-based monism on the one hand, and idealistic "illusionism" on the other. What distinguishes Wilber is his carefully argued and psychologically sophisticated account of how the different levels of "illusion" emerge from the ultimate reality of "Mindonly", and what dynamics govern their relations to each other.

Quantum Questions (ed. Ken Wilber) is a compilation of "mystical" writings from a number of famous physicists (Heisenberg, Schroedinger, Einstein, De Broglie, Jeans, Planck, Pauli and Eddington). Wilber's aim in making this compilation is to demonstrate that these physicists all came to embrace mysticism while nevertheless rejecting physics-mysticism parallelism. According to Wilber, they almost unanimously declared that modern physics offers no positive support for mysticism or any sort of transcendentalism. They did this, moreover, not out of ignorance about mysticism; quite the contrary, their writings are 'positively loaded with references' to mystics and idealistic philosophers. Their rejection of parallelism derives from an acute awareness that in their research they were looking 'at nothing but a set of highly abstract differential equations—not at "reality" itself, but at mathematical symbols of reality'233. Why, then, did they become mystics? The answer is that the new discoveries forced physicists to be aware of the limitations of physics. In Wilber's words:

...both the old and the new physics were dealing with shadow-symbols, but the new physics was forced to be aware of that fact—forced to be aware that it was dealing with shadows and illusions, not reality. ... Schroedinger drives the point home: "Please note that the very recent advance [of quantum and relativistic physics] does not lie in the world of physics itself having acquired this shadowy character; it had ever since Democritus of Abdera and even before, but we were not aware of it; we thought we were dealing with the world itself". And Sir James Jeans summarizes it perfectly ...: "... from the broad philosophical standpoint, the outstanding achievement of twentieth-century physics is ... the general recognition that we are not yet in contact with ultimate reality. We are still imprisoned in our cave, with our backs to the light, and can only watch the shadows on the wall". ... To put it in a nutshell: according to this view, physics deals with shadows; to go beyond shadows is to go beyond physics; to go beyond physics is to

²³¹ This position is developed theoretically in all Wilber's books, and sometimes expressed aphoristically in statements like EtE:nap 167: 'All things are not ultimately made of subatomic particles; all things, including subatomic particles, are ultimately made of God'. Cf. the preface to AP (xi): 'There follows, then, the story of the Atman-project. It is a sharing of what I have seen; it is a small offering of what I have remembered; it is also the zen dust which you should shake from your sandals; and it is finally a lie in the face of that Mystery which only alone is'.

²³² QO:ss 6.

²³³ QQ:ss 8.

head toward the meta-physical or mystical—and *that* is why so many of our pioneering physicists were mystics²³⁴.

Wilber's rejection of popular holism seems complete, and is unusually well-argued. It is all the more significant because it comes not from an "outsider" but from within the broad sphere of New Age thinking, and because it clearly formulates the fundamental differences between the two main types of speculation about "the nature of reality" which we have encountered again and again: a monistic type inspired by modern natural science and a hierarchical and idealistic type (the first starting from a primary interest in "matter" but concerned with saving the spiritual dimension; the second starting from "spirit" and forced to explain the apparent existence of "matter").

If we screen our New Age corpus, finally, for argued responses to Wilber's criticism by defenders of the holographic paradigm and parallelism, the result is rather disappointing. Only Capra and Bohm have taken the trouble to give some kind of response, but both restrict themselves to rather impromptu observations which fail to address the fundamental philosophical problems raised by Wilber. Bohm feels that Wilber incorrectly emphasizes transcendence at the expense of immanence, but does not appear to have read Wilber himself, or to be particularly interested²³⁵. Capra treats the matter more seriously and argues that, contrary to what Wilber believes, mystics do not perceive interconnectedness and interpenetration in the ordinary realm: their mode of perception is non-ordinary and because the perceived can no longer be regarded as separate from the perceiver, it follows that the reality perceived by mystics is also nonordinary. Physicists, by employing sophisticated instruments, also perceive a "non-ordinary" reality. The mystic and the physicist do not perceive the same elements, however, but their perceptions do mirror each other because both are based on interrelatedness. Capra then evades the real debate by saying that he is simply studying the overlap between physics and mysticism, but that there is much more to both sides²³⁶. In his observations about hierarchical models, later on in the interview, he suggests that Wilber treats the concept of levels somewhat too seriously. For the rest, he disposes of Wilber by simply agreeing with almost everything he says while refusing to draw his conclusions²³⁷. We can only conclude that neither Bohm nor Capra is interested in polemics, the former probably because he is too engrossed in his own theory, the latter because of an apparently deep-seated inclination towards harmony.

²³⁴ QO:ss 9-10.

²³⁵ HP:pm 188

²³⁶ HP:ToPR 233.

²³⁷ See esp. HP:ToPR 237-238.