

Chapter 6: Complementarity

In Chapter 4, I described different interpretations of the mandala of Figure 4–1, and in Chapter 5, I presented different transformations of that mandala. These interpretations and transformations could be considered as competing with each other and then one might ask which of them is the best one. “The best one” could mean “the closest to reality”, or if one applies either/or logic, it could even mean that the best is correct and the other incorrect.

Although I cannot exclude the possibility that one or more of the interpretations and transformations may be incorrect, I want to propose that they can be looked upon as being complementary to each other. This means: they offer different perspectives of reality and therefore complement each other. Thus, together they offer a richer and more comprehensive understanding of reality than any one alone.

Invoking complementarity does not mean that all interpretations and transformations are necessarily equally realistic. It is possible that one interpretation or one transformation offers a more comprehensive or more adequate perspective than another one. But this does not necessarily mean that therefore the more limited perspective is useless. Although more limited, it could still present an aspect of reality that is not contained in the more comprehensive perspective. For example, the conceptual mandalas present perspectives that appear rather limited compared to immensely rich Tibetan mandalas (see, e.g., Leidy and Thurman 1998). Nonetheless, the conceptual mandalas highlight aspects of the post/modern world that are not contained in the Tibetan mandalas, and therefore the conceptual mandalas are useful in our culture. Furthermore, they are particularly useful for people whose comprehension is predominantly at an intellectual level.

Complementary interpretations and transformations can be just different or even contradictory. For many people in our culture that emphasizes so much either/or logic, it is difficult to imagine how contradictory interpretations or transformations can complement each other. But this has been demonstrated in physics and other sciences (see, for example, Sattler 1986, Fischer 1987, Rutishauser and Isler 2001). It is well known that according to quantum physics, light can be seen as both a particle and wave phenomenon depending on the experimental set up that is used for its observation. Thus, the old question of whether light is either a particle or wave phenomenon has been superseded by complementarity. Note that the old question was not answered. It cannot be answered because in this case it is an inappropriate question that is based

on either/or logic. The logic had to be changed to a both/and logic, a logic of complementarity. This logic superseded the logic of the old question and gave rise to other questions that could be answered, questions such as under which experimental set up light appears as a particle phenomenon and under which set up it appears as a wave phenomenon.

In this book I do not use the notion of complementarity in the specific sense that is ascribed to it in quantum physics. I use "complementarity" in a much broader sense in terms of both/and logic. Complementarity in quantum physics is only a special case of this much broader concept of complementarity that allows us to see even contradictory statements as complementing each other.

An Analogy

The following analogy may help to envisage how contrasting and even contradictory theories, views, or ideas can complement each other. Imagine a mountain that is steep on one side and gently sloping on its opposite side. Now look at the steep side of the mountain and you will conclude that this is a steep mountain. Then look at the opposite side of the same mountain and you will conclude that this is not a steep mountain. Thus you have come to contradictory conclusions and both of them are correct to some extent because depending on your perspective, the mountain is steep or not. The two perspectives complement each other. Together they give us a more complete picture of the mountain than only one alone. Yet in science, in society, and everyday life, we often want to exclude the opposite view and thus we deprive ourselves of a more complete picture.

Complementarity is so distasteful to many people that they try everything to eliminate it. For example, with regard to the mountain analogy, they would argue that if we take an aerial view of the mountain, we can see both sides at the same time and thus there is no need for complementarity. Similarly in science, we can come up with a more comprehensive theory that comprises more limited contrasting or contradictory theories. The goal then is to devise a theory of everything that encompasses all perspectives. But the question is whether such a goal can ever be reached. Even if physicists will produce a well corroborated unification of the four major forces, this will not be a theory of everything as I already pointed out because such a theory will not include the subtle force or fifth force(s) (see, for example, Tiller 1997). Furthermore, such a unified theory is only a theory of physics; it does not include emergent properties of living systems. And as a scientific theory it excludes the interior perspectives that

Wilber so cogently emphasized. Therefore, even in the case of a compelling unification of the four major forces of physics, there are still many other perspectives that complement what is often called a “theory of everything”. Wilber’s (2001) “Theory of Everything” is much more encompassing, but as I am trying to point out in this book, even this theory does not include all perspectives.

Let us return to the mountain analogy. Even an aerial view that seems very encompassing like a theory of everything misses many perspectives. For example, it does not give us much information, if any, on a hidden gorge; it does not tell us anything about caves, and so on. Therefore, many other perspectives are needed to give us a more encompassing picture of the mountain.

The Complementarity of Maps

It is well known, or let us say it should be well known, that a map is not the territory it represents. The territory is always much more than the map. Therefore, a map is a simplification of the territory. Wilber is keenly aware that in this sense his map of the Kosmos is also a simplification. The question is whether we can get a map that simplifies less than other maps and is more encompassing than other maps, perhaps so comprehensive that it becomes all encompassing?

Obviously there are maps that are more accurate than other maps and there are also maps that are more encompassing than other maps. But I doubt that we can have a map that can function as a theory of everything. It seems that even the most encompassing maps do not, and probably cannot, include all perspectives. Therefore, we need a diversity of maps that present the diversity of perspectives. Let me illustrate this by maps of North America. We can have many different kinds of maps such as geographical, geological, mineralogical, meteorological, ethnographic, and political maps. Each of these and still other maps presents a different perspective of North America. And these perspectives complement each other. Together they give us a more complete picture of this continent than any one map alone.

Wilber's Map and the Mandala

Wilber's AQAL map is one map that he interpreted in one way. He first presented it in “Sex, Ecology, Spirituality” (1995) and then subsequently introduced more or less simplified versions of this map: he changed the number of levels, emphasized waves instead of levels, elaborated on states and types. But basically the map did not change.

It remained an evolutionary, hierarchical four-quadrant map with stages, states, lines, and types. Sometimes he combined the two exterior quadrants into one that represents science and then referred to the Big Three. This again is no fundamental departure from the basic idea of his map. Since there is such a basic idea underlying all the versions of his map, one could say that his map is static, at least with regard to this basic idea.

In contrast, the mandala of this book is highly dynamic. It is not just one map, but many maps, each of which presents a different perspective of reality. First, even the simple mandala of Figure 4–1 has many different interpretations, and each of these interpretations can be seen as a different map, that is, a different perspective. Second, the mandala comprises all of its transformations and each transformation is a different map, a different perspective. Consequently, the mandala comprises a multitude of maps and these maps complement each other in many ways. The following sections highlight some of the complementarities of the mandala.

Antagonism and Complementarity

In our culture the outer and inner circles of the mandala, that is, mechanism and holism, are often antagonistic to each other. Mechanists often reject holism as fantasy and holists often feel so superior to mechanists that mechanism is altogether condemned as the enemy. However, mechanism offers a limited perspective of reality. I think that holism presents a much more encompassing perspective, but nonetheless it is only a perspective, not absolute truth. Absolute truth cannot be captured in concepts because concepts always fragment the wholeness of reality. Even wholeness is a concept.

Since both mechanism and holism are different perspectives of reality, they complement each other. Together they provide a more complete picture of reality than only one alone. Let me illustrate this through medicine. Mainstream medicine tends to be mechanistic, whereas alternative medicine is more or less holistic. Mechanistic medicine is a failure in many ways: often it cannot cure diseases such as cancer; many treatments have negative side effects; and patients often feel that they are treated as a mechanism, a machine, and not as a human being. Nonetheless, mechanistic medicine is successful in the treatment of certain diseases such as bacterial infections, bone fractures, and serious injuries in accidents. Holistic medicine can cure a wide variety of diseases, often without negative side effects, but, as mechanistic medicine, it is not always successful. Sometimes diseases that cannot be healed by holistic medicine can be cured by mechanistic medicine and vice versa. Thus, mechanistic and holistic

medicine complement each other. Often holistic medicine is referred to as complementary medicine because it complements mechanistic medicine. However, mechanistic medicine is also complementary because it complements holistic medicine. The problem in modern medicine is that mainstream medicine and governments suppress to a great extent holistic medicine. Consequently, there is an enormous imbalance between mechanistic and holistic medicine. The problem of modern health care could be solved to a great extent if holistic medicine would be fully recognized and accepted in medicare so that every individual could decide for himself or herself whether (s)he prefers to be treated by a holistic or mechanistic practitioner. Since holistic treatments are generally much less expensive than mechanistic ones, enormous amounts of money could be saved through a full recognition of holistic medicine. Furthermore, since holistic medicine places much more emphasis on prevention than mechanistic medicine, far fewer people would get sick and this again would enormously reduce the cost of health care.

What we need then is a full recognition of the complementarity of mechanism and holism, the outer and inner circles of the mandala. And, in the spirit of complementarity we have to go even one step further: we have to recognize the complementarity of antagonism and complementarity. In one sense we can indeed see that mechanism and holism are antagonistic to each other. But we also have to see that they can profoundly complement each other. The problem is that antagonism receives so much attention and complementarity is widely ignored. Thus, the problem is again one of imbalance. For greater balance much more recognition and emphasis of complementarity is needed. In Chinese medicine sickness is understood as imbalance. From this perspective our society and many individuals are sick because of the severe imbalance between antagonism and complementarity. More recognition of complementarity leading to a better balance between antagonism and complementarity would indeed be very healing for society and its citizens.

Complementarity of Concept Pairs

Since the outer and inner circles—and indeed all circles—can be perceived as antagonistic or as complementary to each other, the same applies to the concept pairs. For example, competition and cooperation are often seen as antagonistic, but they can also complement each other. Similarly, rigidity and flexibility are often considered irreconcilable opposites. But if one considers, for example, rigid bones and flexible muscles, one can see clearly how the two complement each other and how the two

together allow an organism to function harmoniously, whereas rigidity alone would lead to brittleness and flexibility alone to collapse.

Other concept pairs that can be seen as antagonistic or complementary are included in the mandala transformation of Figure 5—3.

Hierarchy and Continuum

The relation between the outer and inner circles of the mandala—and indeed all circles—can be seen as strictly hierarchical or as a continuum. If it is strictly hierarchical, then the circles present different levels of the hierarchy and these levels are mutually exclusive. For example, the body is not the mind; and the mind is not just the body; the mind includes and transcends the body in a hierarchical perspective. On the other hand, from a continuum perspective, there is a continuum between the circles. Thus, body and mind are not mutually exclusive; they form a continuum so that the body can gradually include mind. For example, during evolution, mind as we know it in humans evolved gradually. There may have been periods in which this evolution toward mind was very much accelerated, but it seems unlikely that it happened overnight. Therefore, what may appear as a discontinuum in terms of longer time periods, may be a continuum in a more minute and detailed perspective.

Similarly, mechanism and holism may be seen as rather distinct from a larger perspective, but a closer look reveals that the two form a continuum. As I pointed out already with regard to medicine, mainstream medicine, although largely mechanistic, can incorporate holistic methods. Some medical doctors even practice both mechanistic and holistic medicine. On the other hand, some holistic practitioners may also employ more or less mechanistic methods. As a result we find a continuum between holistic and mechanistic medicine. Depending on how we define continuum in a more specific sense as explained in chapter 4, different complementarities can be envisaged.

Hierarchy and Network

Not only do we find that the strictly hierarchical and continuum views may complement each other, we can also see that the hierarchical perspective can be complemented by a network perspective. Instead of interpreting the mandala in a hierarchical fashion, we can see it as a network in which most or all of the concepts of the mandala relate to each other. This relation cuts across the levels of the hierarchy and interconnects them. The resulting network may be quite unlike a hierarchy. But one

can also order networks in a hierarchical fashion so that networks are nested within networks (Capra 1996: 35). For example, in an organism the organs form a network, then within each organ the tissues form a network, within each tissue the cells form a network, and so on. If one considers, however, that organs, tissues and cells are continuous, then the nested order disappears and we are left only with a network of structures and/or processes. Thus networks may or may not be compatible with hierarchical order. In any case, hierarchical and nonhierarchical networks complement each other.

Evolution and Involution

As I pointed out already in Chapter 3, according to Wilber and others evolution is the movement from the Many to the One and involution is the reverse. In terms of the mandala, this means that evolution is the movement from the periphery of the mandala toward its center and involution is the reverse. I gave examples of these processes in Chapter 3. Here I just want to stress that these two movements complement each other. Furthermore, temporal evolution and involution on the one hand and evolution/involution beyond time in the eternal present also complement each other.

Art and Science

Art and science also complement each other. This complementarity is related to that of subjectivity and objectivity as well as interiority and exteriority. Wilber emphasizes these complementary dimensions in his AQAL map. Other related complements are intuition and thought as well as feeling/emotion and thought.

Unfortunately, in our society it is often assumed that science leads us to the truth and art is for amusement. As a result, enormous amounts of money are spent for science and relatively little for art. This creates an enormous imbalance. As I have mentioned already, according to Chinese thinking, imbalance means sickness. Wilber's four-quadrant map and the Big Three have great merit in emphasizing that art, culture, and science are equally important dimensions.

Yin and Yang

Yin and Yang are characteristically complementary to each other. Originally Yang referred to the sunny side of a mountain and Yin to the shady side. Obviously, these two sides cannot be separated; they belong together like the two sides of a coin. In Chinese thought many other complementary polar opposites are seen as manifestations of Yin and Yang. Besides light and darkness, other examples are hot and cold, dry and wet, hard and soft, outside and inside, full and empty, fast and slow, male and female, heaven and earth, fire and water. In addition to these complements, Yin and Yang can be seen as a general symbol of all complementary polar opposites, including positive and negative, love and hate, good and evil, the One and the Many.

According to Daoism, ultimate reality, the unnamable, manifests itself in polar opposites. Like the positive and negative pole of an electrical current, these two poles cannot be separated; they can only exist together, and thus they complement each other.

Holonic Kosmos and Holistic Kosmos

Wilber's view of the Kosmos is holonic, that is, it is composed of holons. Although the holons are integrated into a holarchy, in a sense it is still a fragmented Kosmos, fragmented into holons and levels of the holarchy. This view of the Kosmos needs to be complemented with a still more integral view.

Wilber uses "holonic" as a synonym to "holistic" because he thinks that "the only way you get a holism is via a holarchy" (Wilber 2000b: 25). However, as I pointed out in Chapter 1, there is a holism that is not hierarchical, a holism that emphasizes continuity, unity, undivided wholeness. In this sense, we can refer to a holistic Kosmos that is not hierarchical, but a continuum, a unity, undivided wholeness. Such a view and experience of the Kosmos complements the holonic view.

The self-referential dynamic mandala of this book that represents the fluid Kosmos allows us—even invites us—to shift our perspectives of Kosmos. Among the many perspectives two major perspectives are those of the holonic Kosmos and the holistic Kosmos, holistic in terms of undivided wholeness.

Although Wilber insists that the Kosmos is holonic, he emphasizes perspectivism: "the world of manifestation is the world of perspectives" (Wilber 2006: 288). Even more strongly: "there are no perceptions, only perspectives" (Wilber 2006: 255). However, as

far as the basic holonic structure of AQAL is concerned, Wilber does not tolerate other complementary perspectives. The manifest Kosmos simply is holonic according to Wilber. In contrast to this tenet, I have tried to show throughout this book that there are indeed other perspectives.

McFarlane's Mathematical Mandala and the Mandala of this Book

McFarlane (2004: <http://www.integralscience.org/sphere.html>) devised a mathematical mandala of extraordinary elegance, comprehensiveness and integration. He developed it in three stages. In the first stage, manifest reality (form) is represented by a line and the unmanifest or formless by a point outside the line. Since this point represents the formless or infinity, he calls it the point at infinity. In the second stage, the duality of the line and the point at infinity, that is, the duality of the manifest and unmanifest, or form and emptiness, is overcome by a circular version of the mandala. Now the point at infinity, although retaining its uniqueness, is integrated into a circle. In the third stage, the circle is transformed into a sphere. The halves and quadrants of the sphere represent different dimensions of reality, namely, interior/exterior, gross/subtle, and individual/collective. Additional dimensions can be added, which transcends the four quadrants. Furthermore, the mandala can be interpreted in terms of a hierarchy, interpenetrating levels (Yin-Yang), and a continuum, which provides a richness that is beyond Wilber's AQAL model. Being a sphere, McFarlane's mandala "is the archetype for an infinite number of possible planar mandalas. These correspond to other possible models of the cosmos, different ways to draw distinctions among the manifest phenomena of reality. The sphere, like reality itself, does not dictate to us how it must be viewed or interpreted. It allows any number of modes of symmetry breaking to produce distinctions within itself and corresponding models when projected onto the plane" (McFarlane 2004). As a result, McFarlane's spherical mandala is enormously comprehensive.

Since the mandala of this book is the set of all mandalas, it also includes McFarlane's mandala. Thus, McFarlane's mathematical mandala can be seen as a mathematical transformation of the mandala of this book. To generate McFarlane's mandala, we could start, for example, with the mandala of Fig. 5-1, in which form is represented by only one circle and emptiness by the empty center. Then we transform the circle into a straight line and shrink the empty center to a point, the point at infinity. This provides the first stage in McFarlane's mathematical mandala construction. Then

we follow McFarlane to his second and third stage to arrive at his fully developed mandala, the integral sphere.

Although McFarlane's mandala can be seen as a transformation of the mandala of this book, it can also be seen as complementary to the mandala of this book because the two mandalas achieve comprehensiveness in different ways. McFarlane's mandala - as the work of a genius—has a unifying structure that constrains its openness and yet in several ways renders it more comprehensive than Wilber's map. If, in spite of its comprehensiveness, it turns out that it cannot accommodate all future observations and experiences, then it would have to be modified. In contrast, the mandala of this book lacks a unifying structure comparable to that of McFarlane's mandala. Consequently, it is not constrained: endless transformations are possible. How do we know whether all of these transformations make sense and correspond at least to one aspect of the Kosmos? We cannot know it *a priori* through a unifying structure as in McFarlane's mandala; but we can find out *a posteriori* by examining each interpretation and transformation whether it corresponds at least to some extent with reality. If it does not, then the interpretation or transformation is invalid. For example, if we would generate a mandala with fifty circles, we would have to discard it as invalid, unless we could show that there is some basis in reality for fifty circles. I am not aware of any such basis. However, the fact that I am not aware of it at this point in time does not rule out that perhaps in the future some basis for fifty circles could be found. Therefore, the rejection of an interpretation or transformation cannot be definitive and absolute. Furthermore, an interpretation or transformation that appears invalid at the present time, may inspire us to look for supporting evidence; if we can find it, the so-called invalid interpretation or transformation has helped us to broaden our scope. Among its many functions, this is one function of mandalas—to help us discover aspects of the Kosmos and ourselves of which have been unknown; in other words, to deepen and increase our awareness.

Other Complementary Maps

There are still other maps that complement and in some ways transcend Wilber's AQAL map such as M. Alan Kazlev's integral mandala (see www.kheper.net/topics/Wilber/AQAL_critique.html). Kazlev also discusses different versions of his mandala that complement each other.

Hugh & Amalia Kaye Martin's ADAPT model (or map), posted on Frank Visser's website <http://www.integralworld.net>, also complements Wilber's AQAL map. In some

ways it transcends the AQAL map, but it applies only to human development, not to the whole Kosmos as Wilber's AQAL map.

Complementarity Leading to more Tolerance and Peace

If we just could look at and experience the world more in terms of complementarity, we could alleviate beyond imagination the human predicament and human suffering. Much of our suffering arises from conflict, conflict between opposites that are only perceived as antagonistic. As a result the conflict cannot be resolved and often it degenerates into aggression and war. If instead we could see the opposites as complementary, the conflict would disappear or at least be diminished. People, organizations and nations with different or opposite views would no longer be perceived as enemies but as complements. Diversity and even contradiction could be enriching instead of threatening. And the result would be more tolerance and cooperation.

Unfortunately the vast majority of people are still imprisoned in an either/or mode of thinking and being: either your philosophy or mine, either your religion or mine, either your ideology or mine, and so on. The resulting attitude is that if you are not on my side, then you are against me. With this attitude mutual understanding, well being and peace are difficult or impossible to attain.

Therefore, an awareness and recognition of complementarity are of utmost importance for achieving a more tolerant, more understanding, and more peaceful society and world. We have to be aware of complementarity to avoid or reduce conflict within ourselves, in our personal relationships, in society within and between nations. How do we achieve this? There are many ways. One important way is through education. Complementarity should be taught in kindergarten, elementary school, high school, and university.

Suchness

What can be talked about are only perspectives of reality. Reality itself—what is—is beyond the grasp of words. Hence, it is in silence—without any interference by symbolism, metaphor, judgment, prejudice, philosophy, ideology, and religious dogma. It is beyond thought, the thinking mind that dissects and thus can grasp only fragments of reality.

Therefore, suchness can be characterized only negatively: one can only say what it is not. Any attempt to say what it is must fail. Thus, this section on suchness is short—but it is important because it is an invitation to go beyond perspectives.

How can we transcend perspectives? Not by striving or doing something; not through the ego. Rather by letting go, letting go of questions, answers, doubts, should, must, expectations, effort, will, projects. This implies trust and acceptance of that which is. It can happen spontaneously and naturally when we are totally in the here and now: totally absorbed by a sunset, a flower, a person; or dissolved in music, laughter, dance (see Chapter 7). It can also happen in daily activities, but that requires profound insight and awareness, which we may foster through the practice of meditation.

Nonetheless, perspectives are important in the manifest world, the world of form. They are transcended in emptiness. The great challenge is to see and experience the nonduality the Heart Sutra refers to: Form is emptiness, and emptiness is form (see, e.g., the Dalai Lama's book on the Heart Sutra [Gyatso 2005]).

Conclusions

Mandalas are maps of reality. In our common mode of thinking, which is based on either/or logic, we ask which of two different or contradictory maps is correct or incorrect. We often take it for granted that if they contradict each other, at least one of them must be wrong. If the maps are only different, we still tend to think that one must be better than the other. Thus antagonism between maps is assumed.

In terms of complementarity, which is based on both/and logic, the situation can be perceived very differently. Even contradictory maps can be seen as complementary to each other. For example, a hierarchical map can be complementary to a nonhierarchical map. Maps that are not contradictory but only different need not be judged in terms of better or worse. It is, of course, possible that one map is more comprehensive or more accurate than another. If the more comprehensive map contains all of the information of the less comprehensive one, then one would normally opt for the more comprehensive map. However, a less comprehensive map may include features that are lacking in the more comprehensive map and then the less comprehensive map can still complement the more comprehensive one. Similarly, a less accurate map might have a feature that the more accurate one lacks and thus it may complement the more accurate map. Or the less accurate map may be more practical and therefore preferable in situations where accuracy is not crucial. It is most unlikely that any one map is completely wrong,

although one cannot dogmatically rule out this possibility. Therefore, any map can be at least of some limited usefulness and therefore at least potentially complementary to other maps.

With regard to the different interpretations and transformations of the mandala I tried to show that they can also complement each other. Together they give us a richer and more comprehensive view and understanding of ourselves, society, the world, and the Kosmos than any one interpretation or transformation alone.

What applies to mandalas is also the case for ideas, theories, viewpoints, philosophies, ideologies, religions, etc. Art and science complement each other. Yin and Yang are complementary and since Yin and Yang in the broadest sense symbolize all polar opposites, all of these opposites complement each other. Even antagonism and complementarity, either/or logic and both/and logic complement one another.

Since complementarity is of such wide-ranging applicability, it is of utmost importance to be aware of it. **Since much human suffering is due to either/or thinking that can lead to conflict, aggression, and war, awareness of complementarity that is based on both/and logic can bring us more mutual understanding, more tolerance, and more peace within ourselves, in our relationships, in society within and between nations. To foster more awareness of complementarity it should be taught in kindergarten, elementary school, high school and university.**

Perspectives can only be transcended in suchness, which is beyond words, concepts, thought, and ego.