## **General Discourse on the Subject of My Philosophy**

Part 5 of 12

Franklin Merrell-Wolff March 1972

In the preceding tape, it was noted that characteristic of this philosophy is the recognition of three functions, faculties, or organs of cognition, instead of the two that have usually had philosophical and psychological recognition. To the normal cognitive functions of sense perception, or the aesthetic component, and of conceptual cognition, or the theoretical component, there was added the third, called "introception," which is a name for that form of cognition which has been variously called Realization, Enlightenment, or Mystical Unfoldment. It was there, in the last tape, stated that I personally had had a series of five Realizations, two of which were dealt with in detail, namely: first, the Realization, I am *Atman*, as a reaffirmation of a position of which I had been already convinced; second, a Realization in the form, I am *Nirvana*, which was an addition to knowledge which I already had and not simply a confirmation of some position already held. This led to a suggested resolution of a paradox which raises a considerable difficulty when it is noted that no cause set up in *Sangsara* can lead to a *Nirvanic* Realization, and so forth. We are now ready to proceed to the consideration of the third of the series of five.

As I remember it, the occasion of this Realization was in July of 1936. I was, at that time, standing by a creek in northern California looking at the sky when suddenly it dawned upon me that a fundamental error in our valuation and attribution of reality lay in the fact that we were oriented to the object of cognition; that in reality that object that appears before consciousness is an absence, or rather a relative absence, of substance and reality; and, that in contrast, there where no object appears before consciousness, such as empty space, there was, in fact, actual substance or reality. This involved an inversion of valuation, and, in that sense, may be called a conversion from a point of view that had been habitual heretofore and which is habitual, more or less, with nearly all men and all creatures. However, it was not a conversion in an ethical sense, but a conversion in a philosophical and psychological sense. There was, of course, as is typical in the Realizations known so far, the feeling of something delightful, something like a revelation.

I had not known that any such position had ever been formulated before, and it was not until recent time, on a rereading of *The Voice of the Silence* a certain sentence stood out, namely, "...study the emptiness of the seeming full, and the fullness of the seeming void."<sup>1</sup> This was not in my mind at that time. Although I had read *The Voice of the Silence*, this, like many other statements in that little book, had not made a real impression upon my consciousness, but I cannot exclude the possibility that it may have been effective in an unconscious way. Nonetheless, so far as my conscious field was

<sup>&</sup>lt;sup>1</sup> H. P. Blavatsky, *The Voice of the Silence* (Los Angeles: The Theosophy Co., 1928), 61: ". . . study the voidness of the seeming full, the fullness of the seeming void."

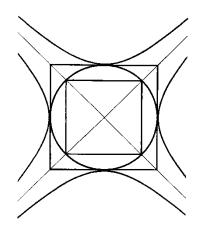
concerned, this Realization had the force of a major discovery. It took the formulation as follows: substantiality is inversely proportional to ponderability; or, it could be stated in the form: reality is inversely proportional to appearance. Characteristic of this Realization is a certain feature that I have never found in Oriental thought. In the case of the two preceding Realizations, there was a confirmation with the philosophy that is known as the *Adwaita Vedanta*, and it is, therefore, quite Oriental in its orientation. But the conception of 'inversely proportional' suggests very strongly the theoretic component. It is like the language used by Sir Isaac Newton when he gave the law of gravity as an attractive force which was directly proportional to the masses of the bodies that are attracting each other and inversely proportional to their distance from each other, or inversely proportional to the square of the distance between them. That is a correction.

Here we have a statement that lends itself immediately to a mathematical formulation, for the method of stating an inversely proportional relationship is very simple. If we were to use *S* as expressing substantiality and *P* as expressing ponderability, then our formulation would take the form:  $S = {}^{1}/{}_{P}$ ; or in case of the other formulation: *R*, for Reality,  $= {}^{1}/{}_{A}$ , for appearance. This places our statement into a form where at once we can apply mathematical treatment. We can, in the first case, multiply through by *P*, and we get PS = 1; or in the second case AR = 1. If, now, we think of the *S* and *P*, in the one case, and the *A* and the *R*, in the other case, as variables, we have an equation that is easily recognized. It is of the form with which the mathematician is familiar: xy = 1. Now, in analytic geometry, which is a use of algebraic methods for the handling of geometric subject matter, xy = 1 is recognizable as the equation of the equilateral hyperbola referred to its asymptotes as axes of reference. This can be transformed, then, very easily by the formula corresponding to a rotation of the axes of reference through  $45^{\circ}$ , and becomes an equation in the form:  $x^{2} - y^{2} = 2$ .

A little more of the mathematics may be given to facilitate clarification. The reference here is to a base which is known as the Cartesian coordinates in the rectilinear form—the most common base of reference used in analytic geometry. It consists of two lines of infinite length at right angles to each other and numbers are associated with these lines by taking the point of intersection and giving it the value zero, then a fixed distance is taken as a unit, and that unit distance is called 1, adding to it another unit distance, 2, and a third, 3, and so on unto infinity. These are considered, however, in both the positive and negative directions. Usually measurement to the right is arbitrarily assumed as positive and the measurement to the left as negative, but otherwise a mirror reflection of the right branch. The same also applies to the measurements on the vertical axis. As a matter of convention the horizontal axis is usually viewed as the *x*-axis, while the vertical axis is viewed as the *y*-axis.

Now, in the case of the equilateral hyperbola that is given in this case by the formula  $x^2 - y^2 = 2$ , the two branches of the hyperbola are bisected by the *x*-axis, and the vertex of the hyperbola will be found at the point  $\pm \sqrt{2}$  on the *x*-axis. There is a line known as the asymptotes which, in this case, would be at  $45^{\circ}$  with respect to either the *x* or *y* axis and passing through the intersection of the *x* and *y* axes. The asymptotes represent lines which the hyperbola approaches continuously, nearer and nearer, and become tangent only at infinity. With respect to an hyperbola of this sort, there is what is known as a conjugate hyperbola which bears the same relationship to the *y*-axis that the first

hyperbola does to the *x*-axis, but in the case of the equilateral hyperbola, the conjugate hyperbola is an exact duplicate and, therefore, we would have a configuration which is completely symmetrical with respect to both axes. I added to this a square, which was tangent to the apexes of the conjugate hyperbolas, and a circle, which was also tangent to these four arms of the two hyperbolas, and within the circle a second square adjusted at right angles to the axes, but which was circumscribed by the circle. I found, then, that I had built a figure which satisfied the requirements of the mandala. There was a principle of *circularity* and a principle of *fourness* involved, something which Dr. Carl G. Jung has found very characteristic of the mandalas which are familiar.



This will lead us now to a little discussion of the significance of the mandala as viewed by Dr. Carl G. Jung. He has found, in his own experience personally and in the experience of his patients, that in the process of the integration of the personality, there may appear a series of figures or configurations seen either in the dream state, or spontaneously drawn, or even spontaneously danced, that are expressive of something taking place in the interrelationship between consciousness and the psychologic unconscious. When, ultimately, a mandala emerges, it is, he finds, as indicative of an effective integration in the consciousness in its relation to the collective unconscious. This varies from individual to individual, and the number of possible mandalas is very great, if not possibly even infinite. But the principle of equilibrium or balance tends to be manifested within them, and that is very obvious in this particular case involving the pair of conjugate hyperbolas with the square, circle, and circumscribed inner square. A lot of meaning came out of this; much was here suggested.

It will be remembered that the circle and the square have played an important part in religious symbolism. There was the old problem of squaring the circle. Considered literally as a geometric problem, this is not too significant. It was certainly true that it was impossible to draw a square that had the same area as a circle if one used for his instruments of construction only a ruler and a compass, or pair of dividers; but it is known today that by the addition of an appropriate additional device such a squaring of the circle, in the purely geometrical sense, is possible. But there is a deeper meaning attaching to the conception of the squaring of the circle that has had religious significance; and this we have found as a result of the work of Piazzi Smyth, the then Royal Astronomer of Scotland, with respect to the measurements in the Great Pyramid of Giza; that here was a pyramid that exemplified the relationship of the circle to its diameter. The Pyramid gave from sheer measurement of its angles, and so forth, the formula for  $\pi$  correct to the fifth decimal place; and many other relationships within the Pyramid confirm this same valuation. There is reason to believe that the Pyramid was used for the purposes of initiation and that in some way that initiation was related to the significance of the squaring of the circle.

But what does the squaring of the circle mean in this sense? It means that, it would seem, that the square being the unit whereby we are enabled to measure things-as, in fact, in all measurement we use either the square or the rectangle for actual measuring of a surface, a flat surface, as in land measurement; and, in fact, in the integration of a complex surface figure as is carried out in integral calculus, you really do reduce the surface, theoretically, to infinitely small squares or rectangles, and summing an infinite number of such infinitely small entities get a close approximation to the value of the area. Therefore, squaring could be interpreted as rendering ponderable or measurable, or in psychological terms, rendering conceivable or capable of conceptual representation; whereas, the circle represented that which transcended conceptual representation. The circle is that which transcends our power of representation. It, therefore, would very well mean the spiritual reality behind the manifestation, the hidden reality which can only be approximately represented in any conception whatsoever. This, therefore, did have a considerable importance in earlier religiosity; in fact it has been noted that the Hebrew term for Elohim, when you take the number values of the Hebrew letters, gives you an anagram of the number  $\pi$  itself, the ratio between the diameter and the circumference of the circle.

Now, what I am suggesting in this—oh wait, and another point is important with respect to the circle: the thing that is emphasized most conspicuously by it is centerness. A circle occupies the unique position as having a very highly balanced, perfectly balanced symmetry with respect to its center. The center, therefore, is emphasized. Now, in terms of consciousness, the center becomes the subject and the circle represents the environment of the world or universe about—that is the circumference of the circle—but consciousness here orients strongly to a center.

Now, in the case of the equilateral hyperbola, while there is a point, in this case the point of intersection of the axes, or the zero point, which is called the center of the hyperbola, you will note that that center may be said to be outside the hyperbolas because the concave side of the hyperbola includes space extending on to infinity and the center is on the convex side of these conjugate hyperbolas; whereas, in the circle the center is on the concave side, and all the consciousness tends to draw toward that circle; whereas, in the hyperbola, the consciousness tends to be drawn away from it and toward space, toward infinity, in fact. The circle, therefore, represents a circumscribed zone of consciousness centered in the Self as the center. The hyperbola may be viewed as a state of consciousness which is oriented, not to the center, but to space.

What is suggested now is, by this mandala, that there has been an evolution in our conceptuality, particularly in its technical mathematical development, that renders it possible to comprehend the circle as a conception; therefore, there is a square in the mandala that circumscribes the circle. There is also another square circumscribed by the circle which symbolizes the older, the earlier form of conceptuality which could not

conceive of that which was represented by the circle. The circumscribing square symbolizes a conceptuality that has reached the point where it can embrace the meaning of the circle.

This is involved in our evolution of number. Remember that back in the Greek days, the only numbers that could be embraced were the numbers which we call the rational numbers, and I imagine very largely only the positive rationals. But it was one of the great contributions of Pythagoras that he discovered the irrational number, the square root of 2, which generally could not be assimilated by the Greek mind. He discovered beyond, apparently his own understanding, something that was of tremendous importance—certainly beyond the general Greek understanding of that day. We, however, have gone on beyond the early Greek conception of number into a vast elaboration, so that our numbers today include not only the positive whole numbers, which are called the natural numbers, but also negative numbers; fractional numbers; irrational numbers, like the square root of 2 and the square root of  $\pi$ , imaginary numbers, like the square root of -1; and complex numbers, such a combination of an imaginary number and a real number; finally, transcendental numbers, which are technically defined, but of which the ratio of the circumference to the diameter of the circle is a representation. It is a transcendental number of great importance. Another of very great importance is the number e, conceived as the limiting value of  $(1 + \frac{1}{n})^n$  as n approaches infinity. In addition to these numbers, we have also the conceptions of transfinite numbers, every member of which is infinitely great in cardinality. There has, thus, been an enormous evolution in the conception of number, of which I have only outlined a relatively simple portion here. This means that there has been a vast development in our conceptual power which did not exist, openly for the record at any rate, in the old days. Therefore, the modern, latest development in the broad sense, offers something that, so far as I can determine, cannot be derived from the ancients, like the *Vedas*, or the ancients to which the Chinese turn.

Now, in viewing the concave side of the different branches of these conjugate hyperbolas, we may say that they move toward space, towards the infinite, toward an uncentered Consciousness. We could, then, say that from the point of this mandala the Self, instead of being the supremely important feature, as it is in the circle, becomes a subordinate, rather external feature with respect to the hyperbola. One could say that the Self is purely incidental to the Consciousness foreshadowed by this mandala, and that its orientation is to the illimitable Consciousness which is symbolized by a completely empty space when viewed from the perspective of our relative consciousness. As will become evident later, with the fifth of the series of Realizations, this foreshadows the step from the *Adwaita Vedanta*, and its *Atma Vidya*, to the Buddhistic philosophy of *Anatman* and *Nastikata*.

There are other important consequences which follow from this Realization; of these we will note two or three. One is the implication that space, instead of being a void or vacuum, is actually a plenum or fullness; and second, that the objects which appear in consciousness, or whether we view them as contained in space, are actually relative voids. I use the word *relative* because we must conceive that there is a difference between a very subtle object, like a barely discernible conception, and one that is very obvious in its impact. I have used the illustration of the difference between a nuclear sun and the

conception of the *Dharmakaya*, conceived as a combination of *Rig-pa* and *Shes-rig*—a very subtle notion which has even been called an ideal breath.

The nuclear sun I have discussed elsewhere, but it is something of enormous, almost inconceivable density, in the ordinary physical sense. The scientists have said that its density is such that a cubic millimeter of its substance would weigh 100,000 tons. The formula would imply that this, apparently dense and apparently real, very real nuclear sun, was actually very nearly a void in reality, very nearly a perfect absence of real substance. And in this connection it is interesting, indeed, to note that our astrophysicists speak of a stage more advanced than this as a hole in space, in fact a black hole in space from which, however, emanate gravitational waves. The implication is, from the formula of the Realization, that the *Dharmakaya*, which is the subtlest principle of form that we can imagine, is actually very substantial, very real; while the nuclear sun is nearly wholly unreal.

And another implication is that consciousness is most complete when it has least content. In other words, the objects before consciousness, those things which we call stars, galaxies, planets, mountains, rocks, trees, buildings, books, trains, automobiles, and so forth through the whole list of the objects of our consciousness, that they actually are voids, relatively at least. The denser they are, the more void, the subtler they are the least void; and that in that state of Consciousness where there is no content whatsoever, that Consciousness is completely full.

And now at last, we have the material necessary for answering the question, "What is the meaning of Universal Consciousness?" It is this simply, that Consciousness which is in reality most full because it has no specific content as either sense perception or conceptual cognition at all. And since this which is true of the microcosm, in our present approach, is also a reproduction of that which is true of the macrocosm, or the All, therefore, we have the key to the real meaning of Universal Consciousness.

There is another implication which I have developed at length in the series of tapes on the paradoxes with a special reference to the philosophy of Sri Aurobindo where I showed that from this basic conception of this Realization, we could conceive of an integration between the universal illusionism of Sri Shankaracharya and the universal realism of Sri Aurobindo.<sup>2</sup> But I'll not develop that at this point since it has been developed in that series of tapes.

This then gives the significance, in substantial degree, of the third Realization; another Realization which is clearly of the mental, rather than the transcendental type, but has now brought to our conceptuality something new, so far as I know the literature. And it also begins the bridging between the aesthetic component and the theoretic component which is the essence of the meeting of the East and West. The East is represented in the statement from the Bhagavad-Gita, "...study the emptiness of the seeming full, and the fullness of the seeming void."<sup>3</sup> And the Western, or theoretic component, is introduced through the mathematical treatment. And now it would appear

<sup>&</sup>lt;sup>2</sup> See the audio recording "Further Thoughts on the Relation of Buddhism and the Vedanta with Special Reference to the Philosophy of Sri Aurobindo," part 3.

<sup>&</sup>lt;sup>3</sup> This quote is actually from *The Voice of the Silence*; see footnote 1.

that the essential emphasis between the aesthetic and the theoretic is the emphasis upon sensuous content and sensuous art in one case, which involves all of plastic art, all of architecture, all of music, all of the poetic spirit, on one side, and number on the other as the crucial and central feature of the theoretic component. In this mandala, there is represented the integration of these two. We have not here simply an importation to the West from the East of a religious orientation, but a certain degree of an actual intermarriage or integration of the two.

Before closing the discussion of this third mental Realization, there is a certain consequence which comes from it to which I would still like to direct your attention. As is no doubt known to most who will hear this discourse, there are associated with the circle, certain functions that are called trigonometric. A word about these may be of help to those who are not familiar with their trigonometry and the higher use or understanding of the trigonometric functions.

Fundamentally, and in the first case, in the development of trigonometry, we make use of certain functions associated with the right angle triangle. And, if we take a right angle triangle, designated as A, B, and C, where C is the designation of the right angle, and the A and B are the designations of the other two acute angles—these letters being, in this case, uppercase A, B, and C—then we designate the sides of the triangle with the lowercase letters a, b, and c, the side a being the side opposite the angle A, the side b opposite the angle B, and the side c opposite the angle C, which remember is the right angle. Lowercase c, therefore, is the hypotenuse of this right angle triangle. Now, the functions of the triangle are as follows: the sine is the ratio of  $a^{\prime}/c$ , that is small a over c, and the cosine is the ratio of small b over c. There are other functions such as the tangent and the cotangent, the secant and the cosecant, and so forth, but for our present purposes we are concerned only with the sine.

Now, while our initial development of these functions is associated with the right angle triangle, there is a way in which we later associate them, even more profoundly, with the circle. If we take a given circle of unit radius and consider the center, which we will call A, and we divide the circle into four quadrants with a horizontal line and a vertical line, and consider that if we have a line coincident with the horizontal line to the right side of the center, we would regard the angle, in that case, as zero. Now, we imagine this given line as revolving counter-clockwise around the center. Let us take any position of this line in the first quadrant. We drop from the intersection of the line from A to the circle, a perpendicular to the horizontal line. We have, then, a right-angled triangle. Now, the ratio of this vertical line to the diagonal line of the triangle will give us the sine. But since the length of the diagonal line is a radius of a circle of unit radius, the length is 1; therefore, the sine is measured by the vertical distance *a*.

If we imagine, now, our radius as rotating around the center of the circle indefinitely, and generating as it does so a sequence of ever increasing angles; thus, when it has made the circulation once, it will have generated an angle of  $360^{\circ}$ , and so on, when it has made a circulation twice, an angle of  $720^{\circ}$ , and so on eternally. As this rotating line reaches the vertical position, the length of the side *a* has become exactly equal to 1, so that the sine of the angle of  $90^{\circ}$  is 1. Then it descends as the rotating radius continues until it reaches identity with the horizontal line extended to the left, at which point the value of the sine is zero. Then, as it passes through the third and fourth quadrants, the

value of the sine is negative until we reach coincidence at  $360^{\circ}$  with the original starting place.

We have now a picture of the sine in the form of a continuous curve; a curve that starts at the origin of a rectilinear coordinate system, rises to a unit position as the chord passes through 90°, then on down to zero again, repeating the process below the line, and returning up to coincidence with the line, and so on indefinitely. We have, then, what is known as the sine curve. Along the horizontal line, which we usually identify with the *x*-axis, we measure the distances of the angle, and we usually measure it, not in terms of degrees, but in terms of pi, or radians. The maximum point of 1 is attained at 90° which also is called pi/2, or  $\frac{\pi}{2}$ , at 180° we call it pi, and at 270° we call it 3pi/2, and at 360°, 2pi.

Now, this circle, or this line, which now is known as the sine curve, oscillates back and forth, indefinitely. In fact, it represents a curve which we can conceive of as extending from the infinite past to the infinite future along the line of the x-axis without change in shape. It becomes, therefore, the representation of all periodicities. And of these periodicities, the one of life and death is now of most importance to us. It becomes equivalent to the Buddhistic statement that life here, as it is in Sangsara without the release known as Enlightenment, is an endless process from the indeterminate past into the indeterminate future of a rhythmical process of birth and death; of passing to the height of expression during lifetime at the point represented by pi/2, and a corresponding opposite position in the negative or down direction of 3pi/2, and then emerging again at 2pi, which would be a point of birth. The entity is born at zero and at 2pi, dies at pi and at 3pi, and so on indefinitely. We must not here regard this periodicity as of equal length in terms of objective or cosmic time, but equal in its significance. The consequences of, say, the first life existing from zero to pi is reflected in the consequences of the following movement on the opposite side of the horizontal line. And *karmic* causes set up lead on to an endless oscillation of this sort, ad infinitum, and to the ultimate immeasurable disgust of him who has gone too long in this endless process which seems to have no significance. One of the ways of interpreting enlightening Realization is that it leads to a breakout from this endless process of periodicity.

Now, let us look at what happens when we shift from the orientation to the circle to the orientation to the equilateral hyperbola. The equilateral hyperbola bears the same relationship to the family of all hyperbolas that the circle does to the family of all ellipses; and it, too, has functions which are analogous to the trigonometric functions of the circle, and these are called hyperbolic functions. Corresponding to the sine curve, there is the curve of the hyperbolic sine. Let us now look at the form which this takes. Instead of being an endless periodic movement along the horizontal line of the *x*-axis, it is a curve that ascends from minus infinity, on the left side of the vertical line in our coordinates, passes through the zero point, and then the curve moves upward in a gently modified slope to plus infinity. We have broken out of the cycle of necessity. We have broken away from the obligation of involuntary incarnation. This, I think, is a rather beautiful representation to the circle to orientation to the equilateral hyperbola. It is a mathematical picture representing what happens in the process of awakening to the enlightening Realization.