Approaching A Possible Redefinition Of The Arts And Sciences: The Union Of The Two Cultures (With A Special Emphasis On The Discipline Of Music)

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Abstract

Emerging from our scientific-technological societies, scientific and artistic disciplines are creating a new environment, based on a new art and new or renewed sciences. The phenomenon has risen through a widening of horizons, expanding definitions, and throughout the assimilation and recognition of particular factors that have characterized various apparently non-related disciplines. The tendency is of an increase of exchange and unity of perception in what had been hitherto a divided world. The kind of minds that pioneered this novel approach during the twentieth century, are seen as emissaries of the new world forming today. Further, a dramatic change in the perception of the arts by both artists and scientists is on its way, particularly in the field of music. The emerging conceptions bridge the conflicting elements of the traditional *two cultures* into a unified view through a more inclusive understanding of the action of causal and non-causal factors that activate our culture.

The union, or harmonious relationship between very old traditions and modern approaches to psychophysical phenomena, are briefly seen, as it relates to the pioneering studies in the field of music psychology advanced by the music theorist Wang Guangqi. The synergetic working of causal and non-causal factors is also seen as they interact in the philosophical practice of an Oriental discipline.

Introduction

A redefinition, intentional or not, of some aspects of the arts and the sciences, seems to have begun during the twentieth century. Since then, an increase in the amount of research and discoveries has led us into more refined considerations concerning our old and new perceptions of artistic and scientific disciplines. Such changes continue in increasing proportions. A wider understanding of the functioning of the arts and sciences, their social implications and their actual manner of conception, has been partially assimilated in some circles, while it is almost ignored in others. Different types of causal and non-causal phenomena have been studied and applied in several fields of human endeavor, creating a new perception of man's reach and capacities. Within this trend, it has become increasingly obvious that the conventional understanding of our intellectual disciplines seems to be missing something, or else we have had a tendency to set aside important aspects of the

disciplines in our traditional descriptions or analyses of them. I believe this growing awareness, among other phenomena, was what eventually gave rise to the polemic of the two cultures initiated by Robert Snow. The convulsion generated by this discussion in the intellectual circles of England and the United States, it seems to me, was due to the readiness of society for a deep revision of many tenets it had held for a considerable time; this is, in preparation for a new stage in our scientific and cultural awareness. Many of the dramatic changes, both positive and negative, that occurred during the twentieth century have been part of this transformation. During the twentieth century we were forced to look at our cultural, and therefore societal, structures and weaknesses. We were awakened to a problem with enormous implications, arising from our very way of thinking, of perceiving the world and our life as divided and conflicting, just as the argument of the two cultures has suggested. Yet, the beginning of a solution might have been already under way in the work of several personalities in the sciences and in the arts. These visionaries appeared spontaneously in different places and in different disciplines, arriving to conclusions that point in the same direction. Simultaneously with the budding expansion of our collective horizons and emerging revolutionary views in the sciences and the arts, the twentieth century provided us with a clear and shocking view of our human state of civility as it had been based on our conditioned cultural structures. We could see the consequences of our beliefs and how they function and affect us in relation to one another. Our unquestioned understanding of our ways of thinking and therefore of perceiving the world became magnified through industry and technology, crystallizing in the most devastating global conflicts known to man. The same phenomenon also showed us, in a most dramatic way, that a universal destruction or removal of the old structures was imminent and perhaps inevitable, meaning

that it has been historically prepared. The change has begun, both as the removal of the old structures and the spontaneous emergence of newer and wider conceptions of the functioning, extent, and reach of our scientific and artistic disciplines. The experiences of the twentieth century were meant to tell us something about our culture, and are not to be considered an accidental happening or anything outside our common cultural patterns. Most importantly, the experiences of the twentieth century might tell us something disquieting about our educational systems and institutions. The ways we have been taught to perceive and think, the methods in which we have been educated, have created for us a world that may not survive once we acquire an extra degree of power through the increasing development of machines. The question is: To what extent are our education and our educational institutions responsible for the cultural environment of our lives? Our understanding of life, its purpose, and its processes determines to a considerable extent the make-up of our cultural environment. Yet in more than one sense, our universities have continued to function based on premises and organizational schemes from the past; this is, in spite of being at the same time the producers of most of the most modern research. I believe there are two main lines of argument concerning the influence of our educational systems on society. The need for access to higher education for the masses is one of them. The implication is that if more people had access to education, in the way it is imparted now, there would be fewer wars and less destruction. This point of view seems to me at least partially incorrect, in that it implies that our educational systems and the product they provide are adequate to the world's needs, and that we only need to have more of the same in order to solve our cultural and therefore societal problems. It seems to me that such a notion could actually be at the root of the problem. As Robert Snow pointed out, it has been the educated

people who traditionally have had almost all the positions and opportunities for power, and it is in that sense that our educational institutions might be at least partially responsible for the environment created by such leaders. The fault, it seems to me, is not to be found in improving technologies, or in becoming skillful in manipulating information or machines, but in our actual way of thinking. Our perception of the world in a divided way, which has been endemic in our culture in general as in our university settings, has become so habitual that a cry of alarm such as Robert Snow's seems necessary. For the correction, our university settings might be the places to begin. Such a solution has been already under way.

Although it is true that our universities apply and support discoveries and advantages that come from their departments and the culture in general, some of the findings that fall outside a conventional scope tend to be largely ignored. I am referring to research that involves and/or incorporates in one way or another non-rational and non-causal aspects of human life and knowledge. Those elements seem to be a very important key for the union of our disciplines and for a unified conception of our world. Important research that is seen as extremely revolutionary, in the sense that such research often points to the necessity of adjusting our accustomed views and systems has been coming out of universities for a considerable time.² It is in the general knowledge of the public and perhaps also in the educational institutional systems that the problem can be observed, and perhaps solved, since each system tend to take for granted its way of functioning, teaching, and

¹ By this I mean the environment that has been imposed by such leaders on the uneducated and the environment created for the educated.

² See David Hawkins, *Power vs. Force: The Hidden Determinants of Human Behavior* (Carlsbad, Calif.: Hay House, 1995), as an example of access to knowledge that is not associated or dependant on conceptual consciousness. This includes research on kinesiology and attractor patterns.

understanding as correct, while in many cases such established approaches may not represent the actual need of humanity for a more inclusive vision.³

The Beginning Of The Transformation Of The World Mentality During The Twentieth Century

To illustrate the transformation that is taking place, I will briefly mention some excerpts from several twentieth century leaders that emerged as examples of this new mentality. I have chosen personalities that worked in very different fields and in very distant places, all of them directing their work into an expanded appreciation of science and the arts, albeit each in different ways. I consider these leaders precursors to a more unified culture, in that they held increasingly defined tendencies to a more inclusive conception of knowledge. Some of the elements involved in this expansion of boundaries include causal, non-causal, and meaningful contents, some of which have been traditionally very alien to our Western world. These apparently extraneous elements seem to be sorely lacking in our conventional way of thinking, yet their addition may facilitate the sought for union of what has been a constant source of conflicts as separate cultures.

A note on Carl Jung

Carl Jung encountered enormous opposition from adherents of the conventional understanding of science, as he proposed through actual scientific methods a widening of the

With regard to music and the study of other arts, our traditional systems of teaching and of understanding the arts stem from times before the discovery and use of radio waves, microwaves, electromagnetic stimulation, and laser beaming, to name just a few. At the present, we could be dealing in the fine arts with concepts such as coherence, archetypal structures, and what has been called Hado studies (studies of the effects of meaning on matter) in addition to what conforms to established practice.

traditional scientific views, bringing very unusual concepts to the Western mind. Some of Jung's views, from the point of view of the conventional mind-set, were considered non-scientific. Besides important psychological advances that were accepted without much conflict, such as the theory of complexes or psychological types, there were other, much harder concepts to grasp, such as the union of rational and irrational values in the psyche, being considered a natural goal and an important part of the development of the personality. Some of those conceptions include the individuation process, theories of the collective unconscious, archetypes, and non-causal concepts such as synchronicity. Jung, among others, initiated this unifying cultural phenomenon, which arose somehow in spite of his ideas about science and art.

I once asked myself, "What am I really doing? Certainly this has nothing to do with science. But then what is it?" Whereupon a voice within me said, "It is art." I was astonished. It had never entered my head that what I was writing had any connection with art. . . . I said very emphatically to this voice that my fantasies had nothing to do with art, and I felt a great inner resistance. No voice came through, however, and I kept on writing. Then came the next assault, and again the same assertion: "That is art." This time I caught her and said, "No, it is not art! On the contrary, it is nature," . . . If I had taken these fantasies of the unconscious as art, they would have carried no more conviction than visual perceptions, . . . I would have felt no moral obligation toward them. The anima might then have easily seduced me into believing that I was a misunderstood artist, and that my so-called artistic nature gave me the right to neglect reality.⁴

Jung never accepted what his anima,⁵ his soul, repeatedly insinuated to him about the expanded conception he was actually opening. To this day the debate continues in some circles, whether what he did was science or not. My opinion is that he helped to open a more modern understanding of science, by incorporating non-causal and non-rational elements into it. His work,

⁴ Carl Jung, *Memories, Dreams, Reflections* (New York: Vintage Books, 1965), 185-187.

The anima, in Jungian terms, is the feminine part of a man's psyche, which is often personafied in dreams and

in spite of himself, also opened the way for new conceptions of the arts in their functionality, content, and effectiveness. Jung had a very high regard for the sciences and, apparently, not a very high one for the arts and the artists, whom he considered lacking in conviction and/or moral obligations, whereupon the arts would be irresponsible activities produced by irresponsible people. This seems very much the prevalent idea in our Western world about the arts as disciplines without social conviction or commitment and, in a way, without responsibility. This also seems to be what C. P. Snow suggested during the discussions of the *two cultures*, in his defense of science as a hope to provide for the most basic needs of the human society. Such conceptions were the source of Jung's conflict too.⁶ He was, in this respect, a dramatic example of a divided point of view, which he was actually transforming.

His colleague and follower Marie-Louise von Franz was very aware of this important relationship:

Thus the major obligation of an individual Naskapi is to follow the instructions given by his dreams, and then to give permanent form to their contents in art. Lies and dishonesty drive the Great Man away from one's inner realm, whereas generosity and love of one's neighbors and of animals attract him and give him life.⁷

Thus the Great Man of the Naskapi Indians does not merely reveal inner truths; he also gives hints about where and when to hunt. And so from dreams the Naskapi hunter evolves the words and melodies of the magical songs with which he attracts the animals.⁸

fantasies.

It might be worth noting that Jung was very distressed when one of his patients, a lady, told him his work had artistic value. Jung eventually broke off the relationship with her, so that he could find peace again. This is not unlike a story about Confucius, told by Jung in his introduction to the translation of the *I Ching* by Richard Wilhelm, where Confucius is offered by the oracle a totally aesthetic hexagram (Grace) and became very distressed. Jung compared this case to the one of Socrates being asked by his demon to make more music. After reflecting on these points, Jung comes to the conclusion that "the oracle may not have been wrong after all." See *The I Ching: or Book of Changes* trans. R. Wilhelm, 3d ed. (Princeton: Princeton University Press, 1967). xxxii. This might apply to Jung in what refers to art.

Carl Jung et al. *Man and his Symbols* (London: Aldus Books, 1964), 161-162.

⁸ Ibid. 208.

In the West, our conception of the arts has been tainted by what the average man does not see as practical. Indeed there are, and have always been, irresponsible artists, who in a sense are nurtured by our culture, beginning with our collective conceptions of art, as the artist is a part of the same cultural environment that produced him. Would it be more accurate to say that the true artist functions in spite of society? If the function of the artist is to awaken the life of the cultural environment in which he or she operates and which produced it, then the artist might be a compensatory function of a collective unconscious, as Jung suggests. On the other hand, it often happens that anything not seen as utilitarian is seen as useless by a certain sector of society, but such attacks have been traditionally aimed both at the arts and at the sciences equally. Sciences that do not bring immediate material gains tend to be seen with suspicion too, sometimes attacked or simply ignored. In a sense, it may have been that mentality which caused the split of the two cultures and not the disciplines themselves.

Jung succeeded as an observer of the phenomenology of the psyche, in bringing to our attention causal and non-causal elements, linear and non-linear phenomena, rational and non-rational phenomena intermingling in human affairs. This, incidentally, is how the arts work, by upholding a supra-intellectual function that has been described by many different names through history (due to its very non-rational character) but which for practical purposes will be described here as content or meaning. The presence of this important factor is also alluded to by Jacob Bronowski when he describes the scientific paper as missing something, or rather, as hiding the non-rational factors that

were a part of its creation. Many scientists have understood this very well, particularly in modern physics. I will mention an example of this wider application of a synergetic working of artistic and scientific perceptions for a more complete development and understanding of science and of life's processes, using some quotations from Neils Bohr.

Niels Bohr

It has been said of one of the most celebrated physicists of our times that his work was done using an artist's mind, and indeed, it is within that view that his innovations and new conceptions could have emerged. Again, this is a case of an important expansion of human understanding which brought about unity, sophistication, and immense potentiality in the sciences and in the arts, as evidenced in Bohr's description of his work and in the conceptions that produced it. Bohr was deeply immersed in the arts and was particularly interested in poetry. He used the way of poets and applied their use of language in order to grasp profound physical realities beyond the reach of our senses and beyond our habitual intellectual functioning. Could this extension of possibilities be called a refinement of the intellect? I believe so. A commentary by Jung would be appropriate in support of this widening or amplification of concepts. Jung comments on the aesthetic play instinct (closely related to the artistic mind) when he reflects on Schiller's views: ¹⁰

Sometimes instinct will allow itself to be allured by sensation, sometimes by thinking; now it will play with objects, now with ideas. But in any case it will not play exclusively with

[&]quot;... the scientific paper is often deficient. It often is only analytic; and it almost always hides the process of thought in its impersonal language." Jacob Bronowski, *The Ascent of Man* (Boston: Little, Brown, 1973), 332.

Johann Christoph Friedrich von Schiller, *On the Aesthetic Education of Man, in a Series of Letters,* trans. Reginald Snell (Oxford: Oxford University Press, 1982), cited in Carl Jung, *Psychological Types* (Princeton: Princeton Bollingen, 1971), pp. 107-108.

beauty, for then man would be no longer a barbarian but already aesthetically educated, whereas the question at issue is: How is he to emerge from the state of barbarism?

The statement strongly equates man's emergence from a state of barbarism into a more developed state with the aesthetic development of the personality. If this assertion is correct, then the expansion of understanding and methods used by Bohr would definitely amount to a refining of the personality, the intellect included.

Some quotations by Bohr illustrate his way of working:

When it comes to atoms, language can only be used as in poetry. The poet too, is not nearly so concerned with describing facts as with creating images. . . . language is not describing facts but creating images. What lies below the invisible world is always . . . a play of images. There is no other way to talk about the invisible - in nature, in art or in science. 11

This kind of phenomena cannot be controlled by the intellect, and indicates an underlying reality behind "facts," which can only be accessed through analogy. These new conceptions have enormous consequences for our common understanding of science and of scientific research. By substituting the words "ungraspable to our senses" for the word atom, Bohr's idea becomes very clear as to its use in the arts, referring to realities beyond intellectual grasp. Realities beyond intellectual grasp may be deceptively simple however, since they are all. Our intellect makes abstractions about them, as Bohr says, creating images by analogy, but that still is not the actual phenomenon. Yet we humans, being a part of the real phenomenon, become dissociated. In that state, the intellect separates us from the phenomenon (our own phenomenon of life) and hence the necessity of a non-rational aspect of life as an expression of wholeness, a unifying glue for a unified

culture.¹² Most life realities are not intellectual, with the only notable example of the intellect itself; this includes the workings of particles, planets, animals and cells, deer, and frogs. The whole universe, having been there for a long time, is not intellectual. The phenomena of life are not intellectual. Reality belongs to another realm, as Bohr points out. But how are we to perceive it? According to Blaga,¹³ this is done through the unconscious. The unconscious provides the images, being nature itself, yet it does not give itself; it is always beyond our reach.

Bohr again:

When we step through the gateway of the atom, we are in a world which our senses cannot experience. There is a new architecture there, a way that things are put together that we can not know. We only try to picture it by analogy. A new act of imagination. The architectural images come from the concrete world of our senses, because that is the only world the words describe. But all our ways of picturing the invisible are metaphors. ¹⁴

We could conclude, therefore, that the intellect cannot grasp underlying or invisible realities beyond its conditioning, and that perhaps it can not grasp *any* reality in its essence, having to leave what is beyond its reach, and to see the act of creation as a release of conditioning structures, placing one's attention therefore in what is not known, not trodden, or not conceived. This is, at least one very important aspect to be recognized, fittingly described in the West as non-rational, and in the East as a void. However, this way of looking at the intellect is not common knowledge. It might be more accurate to say that the intellect only hints or points at phenomena; yet the artist may under

¹¹ Niels Bohr, cited in *The Ascent of Man*, 340.

Anything perceived by the intellect is not real in the sense that it is only an image, and not the essence of the phenomenon. Culturally, we seem to have forgotten that.

¹³ Lucian Blaga (1895-1961).

¹⁴ Bronowski, 340.

certain circumstances embody the actual non-rational phenomenon to such an extent that the work of art becomes itself a carrier of such information or meaning.¹⁵ Creation by analogy is at the root of both the arts and the sciences. It is in fact this act of imagination that triggers the intellect, yet the intellect has not true control over it, since it cannot understand the root of it. The phenomenon lies in another realm, a very real and fundamental one.

Bohr was not the only scientist who questioned the structure of the world as it had been traditionally laid down to us but looked for its underlying structures beyond perception. Many scientists and artists of the time began to alert us also about the need to change our perceptions of the functioning of the world. The purpose behind all of this seems to be a perceived approach of a more unified culture, a model for synthesis, with all its positive consequences.

Lucian Blaga

One of the leading personalities in the intellectual circles of Eastern Europe, Lucian Blaga, arrived at similar conclusions in the direction of a new understanding of the arts and the sciences as a poet-philosopher and poet-psychologist. He has been described as one of the few poet-scientists that have explored the mysteries of creation, having fashioned an original theory of cultural style. He is described as a poet "contemplating the ebb and flow of modern society." ¹⁶

Hitchins describes Blaga's philosophy and direction in a few phrases:

¹⁵ See following section on "non-causal" power.

Keith Hitchins, foreword to *Complete Poetical Works of Lucian Blaga* (Ia_i, Oxford: The Center for Romanian Studies/UNESCO, 2001), 24.

Blaga was one of many who doubted the ability of reason to supply answers, and he himself preferred to explore the non-rational ¹⁷ and the unconscious. . . . [Blaga] sought to ground his own theories not on language or religion or race, but rather on the traditions and the spirit of the village and on the collective unconscious that emanated from it. ¹⁸

... praised Goethe for his ability to contemplate natural phenomena from a perspective of spacial and temporal wholeness, looking for the primordial phenomenon, which elucidated the nature of entire cultures and civilizations. ¹⁹

Also:

[Blaga] "condemned intellectualism as the reduction of reality to the play of blind, elemental forces neatly arranged in algebraic formulas, a world devoid of the 'internal abyss,' without life and without values.

Blaga seemed to have understood man's transcendence of himself as transcending the dominance of his own intellect, ²⁰ yet he differentiates between the irrational aspects of man, as being below the intellect, from what he calls non-rational aspects, which are understood as above. According to Blaga, no human activity can be brought to fruition without magic thought. This is an extremely important element in his philosophy, which is not to be understood in the conventional sense of magic thought as being related to an undeveloped mentality, but rather as innocence and openness to nature, in the sense of being nature itself. This extra element is considered by Blaga a fundamental factor, one of the elements missing for a unification of the cultures in our Western world, as neither of the *two cultures* has truly recognized it. This root element has been alluded to in many works under many different names, since there is no specific word for it in our culture. For

 $^{^{17}}$ Note that for Blaga, and for Hitchins, a differentiation is made between the non-rational and the irrational.

¹⁸ Blaga, CompletePoetical Works, 24.

¹⁹ Ibid., 27 (modified).

²⁰ Ibid., 27.

example, Gustav Mahler and Jean Cocteau allude to this element when they refer to another realm from which all real creativity comes and goes.²¹

Our conventional Western mind, when being faced with what can be considered effective multi-dimensionality, will inevitably be confronted with philosophical and religious implications, the recognition of which has either delayed the assimilation of these concepts, or has propiciated a tendency to ignore them. Philosophical and religious problems arise as our most conventional philosophies do not offer room or a socially acceptable structure to integrate such concepts. The other-worldliness of religion has been seen as a separate entity from the practical world or as plain superstition. As we acknowledge the value of our culture and recognize the many advantages that it has created for us, we tend to resist the questioning of the basic postulates on which it stands and, when we are faced with non-recognized elements that do not coincide with what we hold as real or accepted, there seems to be a tendency to hide such awareness. Therefore, often creative elements are rarely mentioned and, when perchance they are mentioned, it is normally done in a very quiet manner, hiding them, or else completely dismissing them as something not being worthy of attention. This peculiar avoidance of recognizing what lies beyond the intellect is generally found in both scientific papers and in most descriptions of artistic works. The non-recognition of the creative element might also have energetic basis, allusions to which can be found in tradition.²²

Gustav Mahler, *Letters to his Wife* (Ithaca: Cornell University Press, 2004), 324, describes that all masterpieces that humans have left behind are outer shells that open the way or point the way to that other reality. See also Jean Cocteau, *Orpheus* (Chicago: Home Vision Cinema, Janus Films, 1949), as a constant reminder of that other realm from which all creativity comes. In the East, the source of all creativity is more often described as perfect emptiness, perfect emptiness used as a figure of speech to the other dimension of all possibility.

I am thinking here of the traditional symbolism attributed to the drama and characters of the great Indian epic, *The Ramayana*, where the throne of rulership, because of intrigues, had to be temporarily given to a half brother of the hero (understood traditionally as the intellect) until Rama, the source of creation, is finally recognized. This only happens after a fierce battle to rescue his wife (understood as life energy or the fruitfulness of the earth) from having been abducted by the

The creative element, when it is addressed at all, has been labeled intuitive and considered above and beyond all control, intellectual or otherwise, and somehow because of that very definition, it has been dismissed comfortably as out of reach. Perhaps that judgement misses the point. Blaga fittingly calls it "mystery," but he understand it as a fuel or engine that propels us in an evolutionary direction. This is a mystery of which we are a part. Observing some philosophical traditions, one may find that there is an acknowledgment of a tendency or direction in that creative element, 23 and that we have a certain capacity, not to control it, but to harmonize ourselves with it, individually and collectively. In the West, we have a theory of evolution, too, but it is generally not understood as a force or a power to which we can relate. The *I Ching* states it differently: "An enlightened person, therefore, positions himself appropriately with the cosmic forces." ²⁴ This is a statement radically different from what most of us are used to believe. The idea of harmonizing ourselves with the universal life flow would finally explain creativity. Such concept coincides with recent theories about the functioning of the brain, in which the brain is not considered a container of information, but rather is seen as a receptor of wave information that fine tunes itself to the perception of specific layers of information.²⁵ How are we to interact with such a profound and important universal tendency? First we must learn of its existence and then prevent the interference of our conditioning (meaning all that we know), so that we can perceive without acquired structures of thought. This amounts to a (momentary) stopping of the intellectual function, in order to give way to a nonrational, biological, or more universal perception that is attuned to a living reality. The intellect is

energies of desire.

The tendency is often described as the energy and direction of a river.

Trans. R. L. Wing, *I Ching* (New York: Doubleday, 1982), hexagram 50.

understood here as a function of human consciousness that necessarily operates on "what we know" and therefore obstructs the perception of anything incongruent with established cultural patterns. Ideally, a more direct perception without the interference of conditioning seems to be possible, being effected by our unconscious. In this light, Blaga's statements become clear. ²⁶

Another important reason for hiding the creative, non-rational element in our culture's descriptions of scientific and artistic works is that, whether we know it or not, our thought processes arise not only from a series of rational and linear structures, but also to a considerable extent from a web and coordination of non-rational factors.²⁷ Not knowing is not easily explained in our culture, where non-rationality is often dismissed as irrationality. This distinction is especially important when non-rationality is considered a source of creativity. Since creativity necessarily implies a different or alternative conception of what is commonly established, non-rationality would by necessity imply what is not (or not yet) inside the parameters of the accepted. As a short example I would suggest that what has become common knowledge in our universities concerning quantum physics, would only a few years ago, have been dismissed as totally irrational. A few years earlier, flying machines and men walking on the moon would have seemed the fantasy of an insane person, and so on. Frank Martin²⁸ explains this in a beautiful way in an essay, one of the very rare ones concerning the actual creative or compositional processes, that the composer is responsible for the genuineness of what he

See Lynne McTaggart *The Field* (New York: Harper Perennial, 2002), 95. See also Gregg Braden, *Awakening to Zero Point* rev. ed. (Bellevue: Radio Bookstore Press, 2002), 64 ff.

A lot of distortions would be found in what Jung calls the personal unconscious. The perception by the unconscious that Blaga suggests is meant to come from a deeper layer.

For an explanation of man's conscious faculties rooted at least partially in his unconscious see Carl Gustav Jung, *Aion*, In *The Collected Works*, vol. 9 part II 2d ed. (London: Routledge & Kegan Paul, 1981), 5.

or she seeks, but singularly less (responsible) for what he or she finds. That confers to the creative person a certain innocence and, understandably, such an artist, after long and hard work, would often feel proud of a particular achievement or technical skill, but he could never feel proud about the conception of the work itself, because that element does not belong to him; it is the work of his spirit; truly his spirit's work.²⁹ Because of this, according to Martin, composers and other creative people (scientists or artists) do not normally talk about their creative processes, but would rather talk about technical achievements and analyses.³⁰ In addition, if the creative processes were revealed, the product in question would appear as not entirely owned by us. This would require from us a certain humility, balancing a peculiar belief of dominion or control so cherished in our culture. Blaga goes as far as to tell us that the poems write themselves!

Blaga's view is described by Hitchins as follows:

... the very source of style is in the unconscious, and, thus, his theory of style and his entire philosophy of culture were based on the proposition that creative acts such as the structuring of a work of art, a philosophical theory, or a scientific hypothesis were directed by powers beyond the control of the conscious.³¹

Blaga also expressed his conviction that a "magic substance" pervaded the entire world of phenomena. His views do not disagree with modern research in physics concerning wave

²⁸ Frank Martin (1890-1974).

Frank Martin, *Un compositeur médite sur son art* (Neuchâtel: Editions de la Baconnière, 1977), 21-22 (modified).

In many cases, the now common hiding of the non-rational aspects of the creative disciplines, and the overemphasis of technical aspects and analyses, have been a source of problems in education, in many cases literally misleading the students.

Blaga, 30 ff.

information.³² We will look at vibratory phenomena as sound, tone, and music in the work of an extraordinary music theorist.

Wang Guangqi 33

Through pioneering work in the fields of music psychology and its links to the phenomenology of sound, Wang Guangqi brought to us a very modern understanding of sound and music in its application to a transforming society. In addition, he grounded his modern musical views with deep roots found in the Confucian understanding of music. He harmonized our analytical modern mind with one of the oldest music theory traditions in the world, namely, *The Book of Odes* (sometimes translated as *The Book of Songs*) of the Confucian tradition.³⁴ His research and conclusions are strongly rooted in the spirit of the land and especially in the intimate relationship that musical elements play in the Chinese language. He differentiated between the understanding of music in the West and music in the East. He emphasized that, in the Chinese culture, musical elements cannot be separated from their (logographic) language, as they are deeply rooted in it as sound, tone, and music properly speaking, which are all interwoven in the written character.

See McTaggart, 138-39. See also Steve Nadis, "Before there was light" *Astronomy*, Aug. 2005, concerning the possibility of "photographing" the big bang through wave information.

Wang Guangqi (1892-1936) is considered a pioneer in several aspects of music theory: one of them is music psychology, in a dual aspect of a psychology of music and a psychology of tone. Another of his leading views is a harmonizing of our modern vision of musical theory with the musical theory embedded in Confucianism. His is a deeply unifying approach, in the sense that in his work, the scientific, modern view, finds no contradiction with the most ancient humanistic tradition. His work also shows a historic tendency as an emerging development in accord with new conceptions of music. Wang Guangqi worked in revolutionary China but was able to complete doctoral studies in Germany, which allowed him to have a much clearer view of the philosophical and practical differences between the cultures of the East and the West. He was the grandson of a well-known pre-revolutionary poet from whom some of his conceptions may have originated, such as the view of music as an agent of transformation of society.

Based on the *Book of Odes*, Wang Guangqi divides the phenomenon of music into three distinct but interdependent layers: a hypothetically purely physical phenomenon sometimes referred to as sound, a biological phenomenon referred as tone, and finally a psychological phenomenon referred to as music. His view places a unique emphasis on tone as the root of the phenomenon of music, meaning the biological phenomenon which has its origin in the person and not in the physical sound. This tone, which is being projected somehow into the external world, could be also described as an inner, living signal that meets the external phenomenon, in a sense creating it or impregnating the exterior phenomenon with its information. In other words, the tone charges the physical sound with a living signal or meaning. Recent research may place us in a better position to understand the concept of tone as a biological continuum, a quality of information that is implanted in a particular vehicle, in this case what we perceive as sound.

The concept of tone is understood as something biological, yet, at the moment that the living tone finds its correspondence in the physical sound, feeling is produced (as an act of recognition), activating a psychological phenomenon; this is what is understood as music. According to Wang Guangqi, music can only be perceived by man.

The *Book of Music*, of which sections remain as the *Book of Odes* (or *Book of Songs*) was the Sixth Classic during Confucius' time. Many of its texts were considered ancient then.

³⁵ See a similar conception in the West in Evelyn Glennie's thought. For her, every person has a sound, is a sound, and perceives sound in a unique way. Note that Evelyn Glennie (1965) is a deaf musician that perceives sound through touch. She describes silence as the loudest and heaviest of all sounds. She is one of the most acclaimed percussionists at the present. See Evelyn Glennie, "Homepage," 2006 http://www.evelyn.co.uk/homepage.htm (9 May 2006).

See interview with Werner Thärichen, percussionist with Berlin Philharmonic describing Furtwängler's (biological) tone in *The Art of Conducting*, (New York: Teldec Video, 1994).

Wang Guangqi is one of the first personalities of the twentieth century to put forth the very modern and yet old conception that revolution, meaning a change in the quality of a society, can be effected through music. Social transformation through a change in the aesthetic and informational qualities of a culture. He found the necessary elements for such a change, embedded and lagging forgotten as a potentiality in the traditional language of his people. The three distinct musical elements embedded in the language, were to be used as a tool to explore and reawaken the vitality of the civilization.³⁸

At this point, I will follow some concepts of Wang Guangqi, developing specific views that might or might not be completely Wang Guangqi's thought. In any case, I trust the direction I take is at least partially in line with Wang Guangqi's work and thought. ³⁹ Reinterpretation becomes almost natural when dealing with languages such as Chinese, where different translations leave a considerable margin of interpretation concerning nuances of meaning.

Wang Guangqi tells us:

In general, the feeling around sound goes through a triple process related to physics, biology, and psychology. . . . The sound is processed, then re-processed by the different layers of the ear and brain in a more and more pronounced way, until it comes to the brain as such, at which point becoming a biological phenomenon. The stimulus goes from the physical to the biological fields. After the stimulus already processed is in the brain, then a sound emerges and an impression of feeling. Once we have an impression of the sound and an impression

See Masaru Emoto, *Messages from Water* vol. 2 (Tokyo: Hado Kyoikusha, 2001); also Masaru Emoto, *The Hidden Messages in Water* (Hillsboro, Or.: Beyond Words Publishing, 2004), for Hado experiments.

This is not entirely new. Since the 11th century, Nichiren's Buddhism proposed the transformation of society through sound and image, and Hindu mantra and yantra systems are still much older; yet neither were considered "scientific" in the sense we understand it today. In that sense, Wang Guangqi's theories of sound could be understood as a return to older formulations, albeit through a modern understanding.

The elaboration of alternative directions of thought, which may or may not have been within the scope of an original author, is a procedure that I call "reinterpretation." Its use is to reawaken or provide flexibility to conventional forms of thinking. It also works as a form of recognition and revivification of other composers work. See Leandro Espinosa, *An Alternative System of Music Serialism*, 2005, Faculty Scholars Collection, Eastern Oregon University, La Grande, Or.

of the feeling; then we have a psychological phenomenon. The sound becomes a psychological phenomenon. ⁴⁰

He interprets sections of *The Book of Odes* as follows:

"The Book of Odes says: The music and the tone are different. They have their similarities but they are not the same." We can see from the above quote that tone, sound, and music are three studies, and in the ancient times have distinct differences. Each has its own significance and definition.

"The Book of Odes said: Those who know the tone but not the music, leave the path of good. Those who know the music but not the tone, is what the majority of people do.

Only the gentleman has the ability to know the music.

And also:

The phenomenon goes from the stimulus to the inner part of the brain, where it becomes the tone. Yet all tones come from the heart of the person, meaning from the movement of the hearts of the people. The feeling arises as a phenomenon, as a movement, and for that reason it transpires into the tone.⁴¹

Another Chinese scholar quotes a similar passage, taken from the same book:

Tones rise from the human heart, and music is connected with the principles of human conduct. Therefore the animals know sounds but do not know tones, and the common people know tones but do not know music. Only the superior man is able to understand music. ⁴²

I believe what Wang Guangqi means by tone is an intermediary element which is biological, non-rational, and a living informational quality that is transmitted and can affect or implant its information on a variety of media. Wang Guangqi therefore, had the conviction that a revolution (political or otherwise) should not be engaged in from the outside (by fighting, etc.), but from the

Marilyn Levine, translating from Wang Guangqi's sources, interview by author, videotape recording, La Grande, Or., February 2006.

Thid

⁴² Lin Yutang, *The Wisdom of Confucius* (New York: Modern Library, 1938), 54.

inside as a change in the biological information, which is understood as what attracts the whole play of human relations by its very perceptions and conceptions. Again, this view is not new, as it is rooted it in the Confucian tradition, but indeed, this way of effecting a revolution is not a popular one.⁴³

Several implications can be derived from the above passages. One of them suggests that what is referred to as the tone may be a link between the physical and the psychological phenomenon, being defined as a biological process. Music is understood at a different level from that of sound (almost as a different dimension) or it may imply that music is the whole unified spectrum of physical, biological, and psychological experience. Something is awakened in the experiencing person, or rather, something in the experiencing person looks outside for a matching expression. This is not entirely related to an auditory stimulus but rather with a psychological phenomenon, psychological information, and simultaneously with psychological perception. I would differentiate, however, between a phenomenon that is being caused and a phenomenon that is being awakened or rather "reminded" ⁴⁴ by a particular stimulus, the stimulus not necessarily being causal but informational. ⁴⁵ In fact, we perceive thousands of stimuli on a constant basis, but only some of them awaken in us such patterns. What prevents in us a perception of stimuli from a more equal basis? Perhaps not only our senses, but rather internalized structural elements related to

For a more detailed exploration of Wang Guangqi's ideologies see Marilyn A. Levine, *The Found Generation: Chinese Communists in Europe during the Twenties* (Seattle: University of Washington Press, 1993) 43 ff. and 138-41.

I used the word "reminded" because I am assuming that the awakened structure is already in the perceiver, and therefore is not strictly caused by the stimulus but is rather activated through recognition of similar structures, at an informational level. In other words, the structure recognizes its kind, producing coherence, yet one is not caused by the other.

For a fuller discussion see: Carl Gustav Jung, *The Collected Works*, vol. 8, *The Structure and Dynamics of the Psyche* 2d ed. *Synchronicity: An Acausal Connecting Principle*, (London: Routledge & Kegan Paul, 1969).

aculturalization⁴⁶ when those structures had acted on the person as a deformation. Nevertheless, those states may be more or less superficial.⁴⁷

Common people are described by Wang Guangqi (and the Confucian tradition) as knowing the tone or even the music but not both. The awareness or understanding of the link between the two is missing. Those who know the music, but not the tone seem to be the ones ignoring what Whang Guangqi describes as a third, biological, and unifying factor. This ignorance necessarily implies an absence of wholeness.⁴⁸

Although sound as a physical phenomenon is described as arising independently from us, and being processed and re-processed all the way to the inner part of the brain, Wang Guangqi makes an unusual commentary for the Western mind: "... and this is why *The Book of Odes* has the notion of tone to be defined as all sound that arises from the heart of the person." ⁴⁹ This statement has deep implications besides the obvious ones of resonance and synchronicity. It implies that in accord with traditional Chinese wisdom, there is a natural movement in the heart of man, a natural outcome of creation as coherence being imprinted or projected into matter. This also implies that there is no musical principle without a correspondence of the internal with the external phenomenon. Music in that sense could be defined as the bringing of the information that exists in the human heart

See Richard Wilhelm, *Lectures on the I Ching: Constancy and Change*, trans. Irene Eber (London: Routledge & Kegan Paul, 1980), 68-69, where the author describes man's superficial desires and a profound will embedded in his concept of the will of the nation.

See Seung Heun Lee, *Healing Society* (Charlottesville, Va.: Hampton Roads, 2000), 43 ff., for a discussion of different kinds of information in the brain.

Evelyn Glennie perceives humans as sound. She also asserts that each person perceives sound differently, our frequency or information determines our perceptions and the signals we transmit.

This coincides with an idea exposed in the hexagram Nr.16 of the *I Ching*, "The enthusiasm of the heart expresses

(meaning the non-rational, biological quality of information) into a potentiality in the external world. This functions as a bridge between a timeless realm and time: as a created impulse that manifests itself as wave information, becoming movement or vibration as it enters the realm of time. The potentiality of the external world is to be recognized by the heart, or more exactly, by a feeling of what is akin to its nature. The man is the music in this sense, and that is why Confucius relates music with the principle of human conduct. Subtly, an element of non-rationality and of non-causality has been incorporated. This amounts to a matching of two dimensions, through the participation of an extra, living element of a non-rational quality.

If we agree that scientific and artistic works have a common source, and that one discipline cannot function without the creative elements from the other, we might conclude that the conflict of the *two cultures* could be seen as a separation produced from one element being perceived by one group only and not by the other. Why are we missing the link? Perhaps an answer could be found by looking at the concept of knowledge in the Confucian way, which is traditionally understood as the search for sincerity of heart. We might come to realize that our Western concept of knowledge and reason do not exactly coincide with what Confucius and the Confucians of the time understood by it. Sincerity of heart or knowledge may be defined by the Confucians as having no artificial bias (concepts) or any other distortion, since that would create an interference between the perceiver and what is perceived. In the West, knowledge is more often associated with intellectual achievement. I

itself involuntarily in a burst of song, in dance and rhythmic movement of the body." Trans. Wilhelm, 68.

Wave information does not function in the realm of time until we humans measure it, or until we add the concept of number to it. Before that it is only a quality.

Heart understood as a sensor to (timeless) qualities.

⁵² This is non-causality in the sense that from the timeless to time, there is no energy transmission but only information.

would further suggest that the acquiring of knowledge, being equaled to sincerity of heart might mean then a liberation from the information that has been implanted in us by common usage, which may have been passively accepted by tradition, imposition, or by an absence of a critical mind. The question then becomes: how would Confucius (or anyone else) achieve such a state? To achieve a capacity for observation beyond intellectual biases, and to search instead for the sincerity of heart that is mentioned, Confucius used oracles, adding a biological, non-rational factor in combination with the intellect. This incorporated a connection to the living, non-rational, natural forces, and a balancing criticism to his actions. In other words, he contacted an impulse or direction of life itself as a unifying factor, in one of its very many manifestations.

Wang Guangqi seems to equate a similar biological connection with the concept of tone, or living vibration, from which things are attracted or imprinted.⁵⁵ In the West we tend to understand knowledge differently, in a way somehow detached from a biological sincerity of heart. In modern parlance we would say that Confucius allowed the participation of the unconscious in his way of life, as a voice of the heart, so to speak, in addition to his intellect.⁵⁶ I am not suggesting that the participation of the unconscious may lend objectivity any more than a measuring machine does, but it certainly faces one with one's own intuitions or distortions, leading ideally to a psychic wholeness by assimilating conflicting contents, and leading therefore to the sought for sincerity of heart or self

The unconscious represented thus might show a biological factor or, if altered by convention may show the altered contents; in either case it makes its contents accessible. See also research in kinesiology by David Hawkins, uniting a biological factor to intellectual inquiries.

See research in kinesiology by David Hawkins, uniting a biological factor to intellectual inquiries.

⁵⁵ See waves as encoders and carriers of information. McTaggart, 26.

⁵⁶ See Carl Gustav Jung, *Dream Analysis* (Princeton: Princeton University Press, 1984), 249, for a description of this important need.

knowledge.⁵⁷ If the movement of the heart (or of life) is taken seriously and is integrated, such harmonization will be reflected in the external world. The limitation of this assimilation seems to be in perception. In other words, although we cannot recognize what is not in our hearts,⁵⁸ if our hearts are not free from convention and therefore attuned to their own tone-quality, then the people in question will not arrive at the state of sincerity, perceiving falsely.⁵⁹

There is an important relationship in Chinese culture between the heart and the mind, ⁶⁰ thus equating the finding of true knowledge as the achievement of the sincerity of heart. ⁶¹ According to Confucius, all mind activity can be sincere only through true knowledge. ⁶²

Wang Guangqi further tells us:

If we were to use current scientific terminology we could say that the arising of all music comes from our brains having certain feelings, and inside our brains something flourishes from our feelings. This is then stimulated by what comes in from the exterior through the brain perception of the external stimulus. That is why people have those feelings; and that is how the tone, or the phenomenon (or sentiment) of the tone is commonly communicated. This is not only applicable to human beings, but it can be observed in animals too. ⁶³

See Jung's use of the same oracle as a therapeutic tool in some of his treatments. There is a good example mentioned by Jolande Jacobi in *Man and his Symbols*, 290 ff.

Note that in the traditional Chinese language, the character for heart means both heart and mind. This further emphasizes the notion of their synonymity, and that both are perceived as emanating from the heart. Marilyn Levine, interview by author, February 2006.

See Jiddu Krishnamurti, *Direct Perception & Transformation* (Ojai, Ca.: Krishnamurti Foundation of America, 2002) compact disc, for statements regarding ideas, or ideals, as obstructing perception.

See note 54 above.

⁶¹ Confucius believed that the only way to attain sincerity of heart was through knowledge, understood as "self knowledge."

Marilyn Levine, interview by author, concerning *The Great Learning*, February 2006. See also Yutang, 139-140.

Marilyn Levine, translation of documents by Wang Guangqi, interview by author, February 2006.

The implication here is that such root in the heart, the source of feeling or tone, may be a natural medium of communication in nature.⁶⁴

Causal And Non-Causal Power

Oh, will I reach, will I ever reach the strand of that ocean, which today I feel but cannot see? ⁶⁵

In my view, there are two main kinds of energy stimulation in living beings: one that is causal, and one not causal. Often they complement each other, working together in a particular phenomenon, yet their functions are quite distinct. In the arts, music in particular, there is a causal energetic factor that indeed alters, modifies, stimulates, and imprints structures. This factor acts through vibration, frequency, and resonance. In addition, low frequency wave rates such as power waves and radio waves clearly seem to produce considerable effects through their capacity to create coherence. The effects can be seen in matter, in our physical bodies, and in our psyche. Yet the concept of energetic manipulation, alteration, or transformation through "meaningful" wave frequencies include two aspects that, although often working in simultaneity, differ in their mode of

 $^{^{64}}$ There are further implications in Wang Guangqi's work, regarding a very important concept of the fragmentation of the tone.

⁶⁵ Lucian Blaga, *The Shell* 1919, 68.

Effects of this causal factor in sound and in music can be seen through the published studies, *Cymatics*, by Hans Jenny. See Cymatics 2006, <http://www.cymaticsource.com (9 May 2006). Sound waves are photographed causing different geometric patterns as stimulus on different materials. I would also mention some of the studies of Masaru Emoto, who photographed the effects of specific musical works and different kinds of electromagnetic waves affecting water molecules. Accepted ranges considered safe by different wave frequencies as static electromagnetic fields in the human body can also be seen in detail at: John E. Moulder, *Electromagnetic fields and Human Health*, Medical College of Wisconsin 3 Apr. 2005,

action, one being causal (concerning vibration, sound, and up to a point, frequency), while the other is not causal (concerning information and/or meaning). The two modes of action have different ways of producing effects, or perhaps they represent two different understandings and applications of power. The non-causal aspect that I want to emphasize has been studied, yet it seems that its enormous implications of power have not been readily understood, nor its unifying attributes between the realms of content (life meaning), and the intellect.

Non-causality can be found directly studied by Jung, ⁶⁷ or implied in some of his writings as he struggled to define and defend his concept and action of archetypes against many critics. In his descriptions he occasionally seems to define the action of archetypes as causal, in the sense of affecting the person through an energetic charge. It seems to me that in some cases, such expressions were due to the conventional use of speech, as he also describes the action of archetypes not only as split energetic contents, but also as connectors of the human psyche to a wider realm of nature. In that case, the connection to the wider or primordial realm of nature would seem to be made in the realm of information, although transmission of energy would be possible. We have, in this case, a double aspect of non-causal and possible causal action of archetypes, but in general, Jung describes archetypes as "perfect emptiness" acting powerfully in a non-causal way.

The following are examples of definitions by Jung in which the action of archetypes are described as not being causal or not defined:

http://www.mcw.edu/gcrc/cop/static-fields-cancer-FAQ/toc.html (22 Dec. 2005).

Jung, Synchronicity: An Acausal Connecting Principle.

Any archetype is really perfectly indescribable, something perfectly empty, but capable of assimilating a certain kind of material of tremendous variation, yet always pointing to a certain archetypal quality. ⁶⁸

The archetypes are the primordial vessels in which you express anything mental or psychological. ⁶⁹

The unconscious, . . . seems to be guided chiefly by instinctive trends, represented by corresponding thought forms - that is, by the archetypes. ⁷⁰

I would suggest that Jung did not emphasize enough the obvious but important fact that an archetype is <u>not a thing</u>. Strictly speaking, an archetype does not send a beam of energy or carry with it an electromagnetic field (implying cause and effect); but rather, it uses the person's own energy, awakening it as power and guiding it by attraction. Jung describes an archetype as a missing piece of a puzzle that one's energies tend to fill up. Such a hole or emptiness, does not emit energy in the conventional sense, yet one's energies are strongly compelled by it. This is the awakening of energy that the archetype induces. The Arts function in the same way. The form and content (meaning) trigger the living energy of the subject, attracting it in a given direction, or resonating with a certain quality.⁷¹ From that perspective it becomes clear that it is relatively useless to try to examine how much a wave causally affects "x" part of the body or of the human psyche (although we know that such aspect is also active) in the interplay of musical or artistic phenomenon. The actual information or content works through a more efficient medium, the archetype, which can be very powerful and yet does not spend any energy.

⁶⁸ Jung, Dream Analysis, 525.

⁶⁹ Ibid., 132-133.

Jung, Man and his Symbols, 78.

Art awakens qualities that are not conspicuous, or prevent them from emerging by reaffirming fixed structures.

The causally applied part in the work of art or the stimulating vibrational phenomenon of music in particular seems to me to complement the non-causal content by fulfilling a very specific function of not only stimulating and transmitting (imprinting) form at a cellular level, ⁷² but literally exposing the body and mind to form and physical frequency. This causal aspect of vibrating the body-psyche system at certain frequencies and qualities is meant literally ⁷³ to soften, or break by means of mobilizing them, bodily and mental energy structures ⁷⁴ that often have become fixed or stagnant through convention, daily habit or circumstance. The vibratory phenomenon prepares the way, so to speak, for the (core or natural) information to set in. The intended prophylaxis, so to speak, or the flowing of energies is achieved simply by breaking the obstacles (the old fixed structures) through making them move. As energies and structures are moved causally by literally being shaken out of their habitual patterns, content, meaning information is re-established through the non-causal element, awakening one's natural state and a more powerful, connected and integrated condition. ⁷⁵ The saying "awakening of one's natural state," requires extra clarification, since at first glance the awakening or not awakening of the natural state of man would seem to depend on each person's individuality and on the quality of information that is being induced. Yet, a closer look may reveal that the only information that could be considered real, or that would have a real effect, is the one that corresponds with the deep inner tendencies of man. Any information

As the studies of Emoto and Jenny have shown.

There are artistic disciplines that use color as frequency, and there are other transforming philosophical disciplines that use physical pulsation and/or exercises in addition to sound, as for example, the Korean discipline Dahnhak.

The mobilization and transformation of energies in the human body have been studied, among others by the Core Energetics Institute of California. See also Braden, *Awakening to Zero Point: The Collective Initiation* rev.ed. (Bellevue: Radio Bookstore Press, 1996), 108-111, for studies on possible transformations in the genetic code for carbon-based life.

This state is referred to in Chinese philosophy as innocence. See Wilhelm trans. *I Ching* hexagram No.25.

⁷⁶ See notes 37 and 44 above. As an analogous example, Masaru Emoto found in his studies of water copying

that would violate this requirement would necessarily be superficial, creating in the recipient only confusion. That is why the quality of intent is of paramount importance in artistic works. In addition, the word integration is mentioned because we refer here to a biological, non-rational, and often not conscious reaction, in which the whole living system responds to the non-causal archetype. This is a natural and most powerful way of awakening natural energies and their flow in the psychobody system, a method which could hardly have been equaled by the application of causal, particular stimuli.

Concerning the power of archetypes, the question has always arisen as to why they attract as they do, and what is their purpose, if any? I believe there are two main answers to these questions, one being that human beings respond (the archetypes being a projection) to biological a priori structures, as, for example, coded patterns of cell reproduction in the human body. The other answer comes from Jung, as he suggests that there is a purpose in the great energy that archetypes activate, in spite of their apparent autonomy and whimsical behavior. Such function seems to be the biological intent to make the personality whole, meaning the uniting of the (limited) ego personality with a more universal Self. In this sense, archetypes function as split energetic attractors; and they are split, to a good extent, because of our ignorance of them. Those attractor patterns are active in our psyche seeking to balance energetic values. The process cannot be done in a rational way, because it must include all of the human energies, meaning the whole of the living personality, not only the intellectual part. This unification of the personality is labeled by Jung the "individuation process;" it is also referred to by Blaga as the allowing and accepting (more than intellectually) of

information, that when the water was not pure enough, or not natural enough, the information was not reflected through.

the ever present mystery, in a sense being with it or becoming it. It is also expressed by Bohr as the inability of the rational mind to truly see intangibles, the invisible, the inconceivable, therefore resorting to representative images (Art).

To conclude, I would like to mention an example of an old philosophical discipline that uses scientific and artistic elements working in synergetic harmony for the transformation of society. This is also an example of a most powerful, non-causal effect of an archetype that is embodied in what would be called in the West "a work of Art." This is the practice of Nichiren Shoshu Buddhism, where the power of an archetype which is embodied in a piece of art (a sculpture or painting) creates an enormous impact on the beholder, transforming through its meaning (content) the living relationship of the beholder with life and the universe. This is a big claim to make! The point is that the Object of Respect (as it is referred to) does not emit energy to the person; it does not transmit or hit the beholder with particles or waves (at least not in a conventional way), but rather, it is the person's own energy that jumps, so to speak, and is awakened by the meaning (content or information) embedded in the sculpture-painting. This is what I call non-causal power, and this is how the arts at varying levels work.

To continue with my example I must add that in the mentioned philosophical Buddhist practice, there is a causal aspect to it, too, which is of a vibratory nature. This causal aspect is done through sound, through chant. Vibration and form in the form of chant, serve as an auxiliary element helping the efficiency of the non-causal information that is being induced. The physical vibration not only stimulates and induces form structures, but also softens bodily and mental

⁷⁷ See Braden, 90.

structures by literally shaking them, vibrating them, in this way allowing flexibility for the core information (the non-causal content) to be assimilated.⁷⁸

I would suggest that the function of the archetype is to connect the living personality with the life flow, and in a sense, arts follow that same function by awaking and connecting living energies with natural biological processes and the whole of nature. This indeed, should be the natural condition of man, but our habitual mental structures often prevent this equilibrium from happening. In this sense the arts work in a double fashion, one side of it causally breaking or modifying mental structures, while the other inducing a non-causal, integral response (assimilation) to information.

I believe that now the arts and the sciences are working in a synergetic combination too, through an expansion of conceptions and applications of our disciplines. New and very powerful concepts deriving from studies of wave, information, causal and non-causal effectiveness, cellular stimulation, resonance and coherence are being assimilated in the arts. Yet the most important assimilation for our Western culture, as far as I can see, is the incorporation of the above mentioned non-rational, life unifying element, which has been slowly but increasingly accepted in some scientific circles and in society.

An excerpt from one of the profound philosophical texts of mankind gives us a glimpse into this life unifier and harmonizing element:

Know Kāśyapa!
It is like a great cloud
Rising above the world,
Covering all things everywhere,
A beneficent cloud full of moisture;

⁷⁸ I used the words core information and not new information in order to be congruent with the explanation I received when I asked Buddhist instructors what the Object of Respect was, or what was its function. It was explained to me that it functions like a mirror, where one sees and finds oneself, one's energies.

Flashes of lightning shine and glint,

The voice of thunder vibrates afar,

Bringing gladness and ease to all.

The sun's rays are veiled,

And the earth is cooled;

The cloud lowers and spreads

As if it might be caught and gathered;

Its rain everywhere equally

Descends on all sides,

Streaming and pouring without stint,

Enriching all the land.

On mountains, by rivers, in steep valleys,

In hidden recesses, there grow

The plants, trees, and herbs;

Trees, big or small,

The shoots of all the ripening grain,

Sugar cane and grapevine,

All these by the rain are fertilized

And abundantly enriched.

The dry ground is all soaked,

And herbs and trees flourish together.

From the one water which

Issued from that cloud.

Plants, trees, thickets, forests,

According to their need, receive moisture.

All the trees,

Superior, middle, inferior, all,

Each according to its size,

Grow and develop

Roots, stalks, branches, and leaves,

Blossoms and fruits in their brilliant colors;

By the pouring of the one rain,

All become fresh and glossy.

Just as their bodies, forms,

And natures are divided into great and small,

So the enriching [rain], though one and the same,

Yet makes each flourish. 79

⁷⁹ The Threefold Lotus Sutra Tr. Kat_, Tamura, Miyasaka (Tokyo: Kosei, 1975), 129-30.

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