



The Mandala as Portal to Healing

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Living in Chaos

We find ourselves immersed in chaos. The current pandemic due to the appearance of the COVID-19 virus is causing major disruptions to people's lives with a tragic number of deaths. The disintegration of everyday life under lockdown and sheltering-in policies has led to massive unemployment and collapses in local and global economies. People feel helpless in the midst of an invisible invader that rode into our lives like the apocalyptic horsemen of pestilence and death. Yet, these are not the only horsemen riding during these times. Climate chaos with all of its associated disruptions remaining ever present. This horseman, who has been riding for decades, is not going away until we turn and face it directly. We are tasked with being amidst immense chaos and working with it [Kiehl, 2016a].

Spirit of the Times

The threat of the climate horseman began with the Industrial Revolution and burning fossil fuels. It is a threat that has been understood and forecast for many decades. Our reliance on fossil fuels has created an imbalance between the flow of the Sun's energy available to Earth and the energy our planet emits out to space. Burning fossil fuels causes continual increases in carbon dioxide levels in the atmosphere, which increases Earth's greenhouse effect and causes the planet to warm. As long as we burn fossil fuels, we will continue to increase the amount of carbon dioxide in the atmosphere and inhibit the planet's ability to stay cool. The end result of 150 years of this is a warmer planet and acidification of our oceans. This massive warming has led to

additional problems, including melting of polar sea-ice and of Greenland and Antarctic ice sheets with an associated rise of sea level, intensification of storms with associated flood damages and coastal storm surges, intensification of hurricanes and heat waves, and shifts in global wind patterns leading to unusual weather phenomena. Changes in rainfall patterns have also led to more severe droughts, expansion of forest fires and catastrophic destruction of human and non-human life. Extinction of species connected to climate change is accelerating. The shifts in climate are causing changes to flowering plants and migratory patterns for birds. All of these disruptions trace their origin back to human behaviors that force Earth to be out of balance. To date, we have warmed Earth by 2° F, which may seem small until you reflect on all of the local damages that have occurred due to this seemingly ‘small’ warming. If we do not change our behavior, in other words, eliminate our reliance on fossil fuels, the planet will most likely warm by an additional 4 °F over the next 80 years, which will bring catastrophic changes to human civilization and the non-human world. Recently, a scientific study [Xu et al. 2020] predicts that over the next 50 years, 1 to 3 billion people will experience unlivable conditions due to this warming. Allowing this to happen would not only be tragic, but a crime against life of unprecedented proportions. Climate chaos is the greatest threat humanity has ever faced. If we do not act now, we are delivering future generations into destruction.

Let me be clear: I view global warming as a symptom, just as I view COVID-19 as a symptom. While these symptoms lead to tremendous disruption, they are not the ultimate source of these *dis-eases*. From my perspective, the ultimate source of our disruption is our collective state of psychic dissociation, or psychic imbalance, which in the words of Jung [CW 9ii, § 390, n.79] appear as a ‘psychic infection.’

For Jung, dissociation is an absence of wholeness, due to a state of one-sidedness or imbalance. Inner dissociation means a disconnection between one's consciousness and the unconscious, while outer dissociation arises from a myopic approach to perceiving the world. Inner disconnection originates from a lack of relation to one's instincts and archetypes, while outer disconnection arises from a devaluing of the world, which ultimately leads to its destruction. The more we lack connectiveness to inner and outer "other", the more likely we project our shadow out onto the world. Projection continues to isolate us from action on climate chaos. As long as we have someone else to blame for the chaos, why should we do anything about it?

In the spirit of the times, let us address three questions in relation to climate chaos: Where are we?, Where are we going?, and Why? To start, it is important to review the scientific facts of climate change, for we must all face the facts. As Jung [CW 9ii, § 44] declared, "One cannot dispose of facts by declaring them unreal."

Where Are We?

Science provides us with a clear picture of where we are with regard to Earth's temperature changes. Shown here is the evolution of global annual mean temperature from 1850 to present.

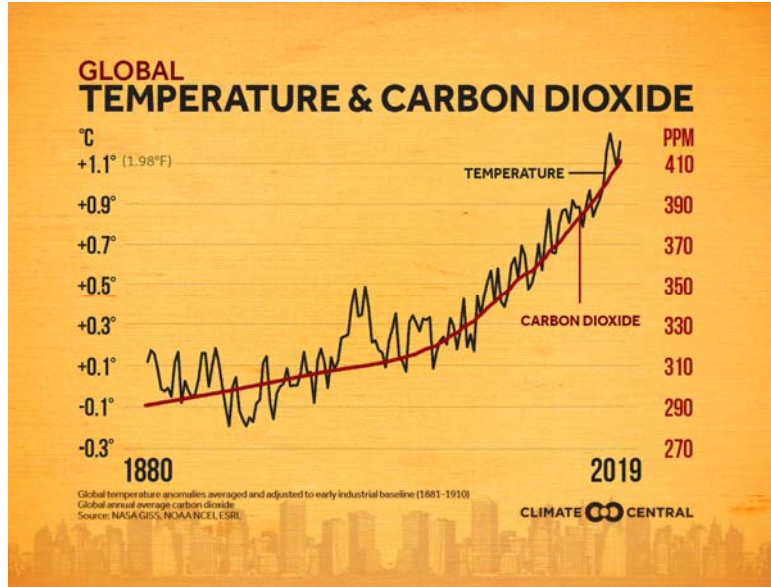


Figure 1 Global anomaly in surface temperature (°C) since 1880 (black curve) and level of carbon dioxide (CO₂) in the atmosphere over this same period.

The temperature (°C) is recorded as the deviation (anomaly) from the long-term average of Earth's temperature. Up until 1970 the year to year temperatures just vary randomly, while after 1970 there is a dramatic increase in surface temperature. The planet has now warmed by 1.1 °C or 2.0 °F, since the pre-Industrial period. All of this warming is due to a strengthening of the greenhouse effect due to increased levels of carbon dioxide in the atmosphere. As noted, this means that it is more difficult for Earth to cool off by dissipating the heat energy into space. It is like throwing more blankets on yourself, making it more difficult for your body to lose heat to the surrounding air, thus, more blankets cause you to feel warmer.

Here is an interesting way to visualize these same temperature deviations through time. It is an image mandala of temperature deviations for countries around the world through time.

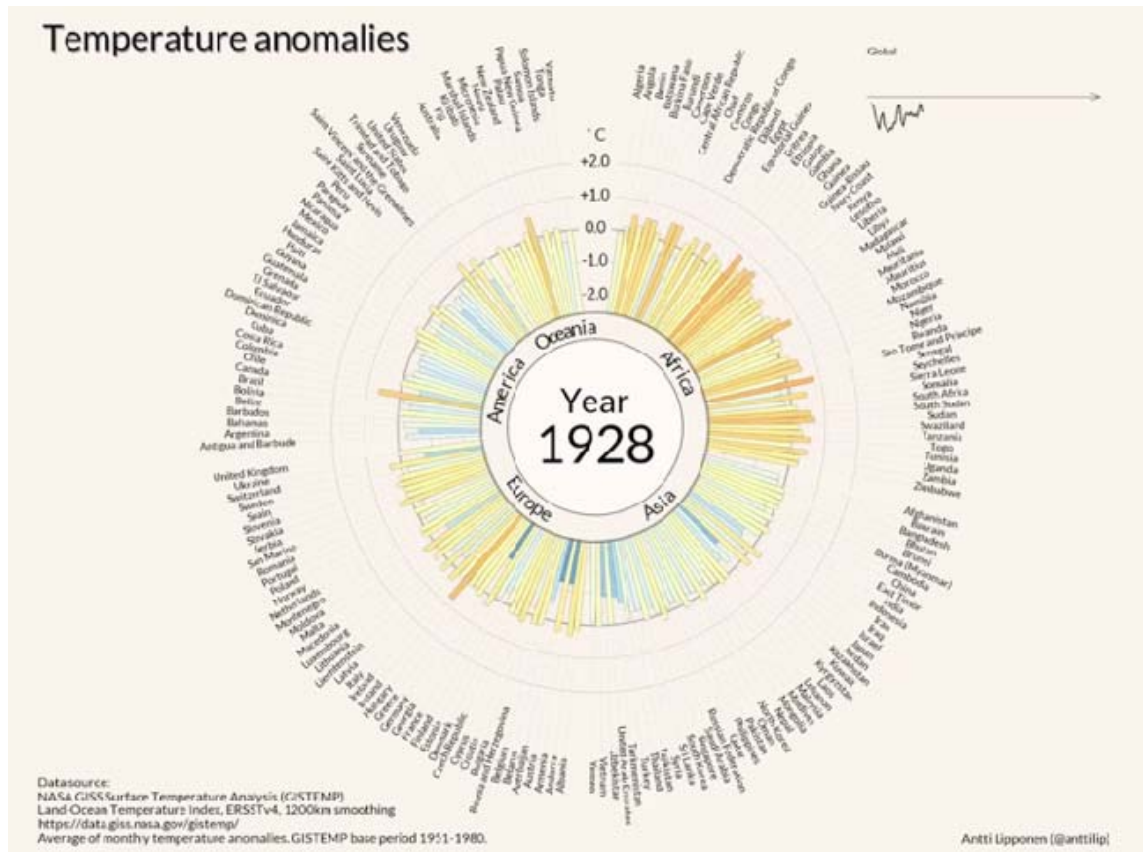


Figure 2 Animation of surface temperature change for countries around the world. (Source: <https://www.flickr.com/photos/150411108@N06/35471910724/>, Antti Lipponen). Please click on the image to see the video.

This ingenious, temporal mandala clearly illustrates how different regions of the planet have warmed over the past 90 years. Watching this video a number of times, it is possible to see how different places are warming at different rates. The colors of the lines indicate temperature, e.g. redder lines mean warmer temperatures. This is a good example of how one can connect people to scientific data through the use of mandala images and art.

As noted, increased annual mean warming is only one symptom of an increased greenhouse effect. Melting of polar ice sheets, rising sea levels, increased incidences of

forest fires, heat waves, drought, while other regions experience increases in rainfall and flooding, are occurring around the world.



Figure 3

Where Are We Going?

As long as we continue to rely on fossil fuels as our major source of energy, we will continue to emit carbon dioxide into the atmosphere and, thus, warm the planet. Exactly how much we warm the planet depends on a number of factors including how much energy we use over the coming decades. The best estimate of future warming lies at around 3 °C or 6 °F by 2100. Again, these may sound like small numbers, until we

realize what destruction 1/3 of this level of warming has already led to. A three-fold increase in warming over the next 80 years will be catastrophic for life on the planet. The amount of carbon dioxide will reach levels not seen for 40 million years and the climate of Earth at that time was extremely warm with massive increases in sea level due to the absence of ice sheet at either pole. Earth's history clearly tells us what happens when you elevate carbon dioxide to high amounts. The magnitude of such severe warming which has occurred over only 80 years (the life-time of a human being!) is unprecedented in Earth history. The ability of species (including humans) to adapt to change is dependent on the rate of the change, not just the magnitude of the change. The predicted rates of change over the coming decades will stress all life forms on Earth, with many unable to adapt to such changes.

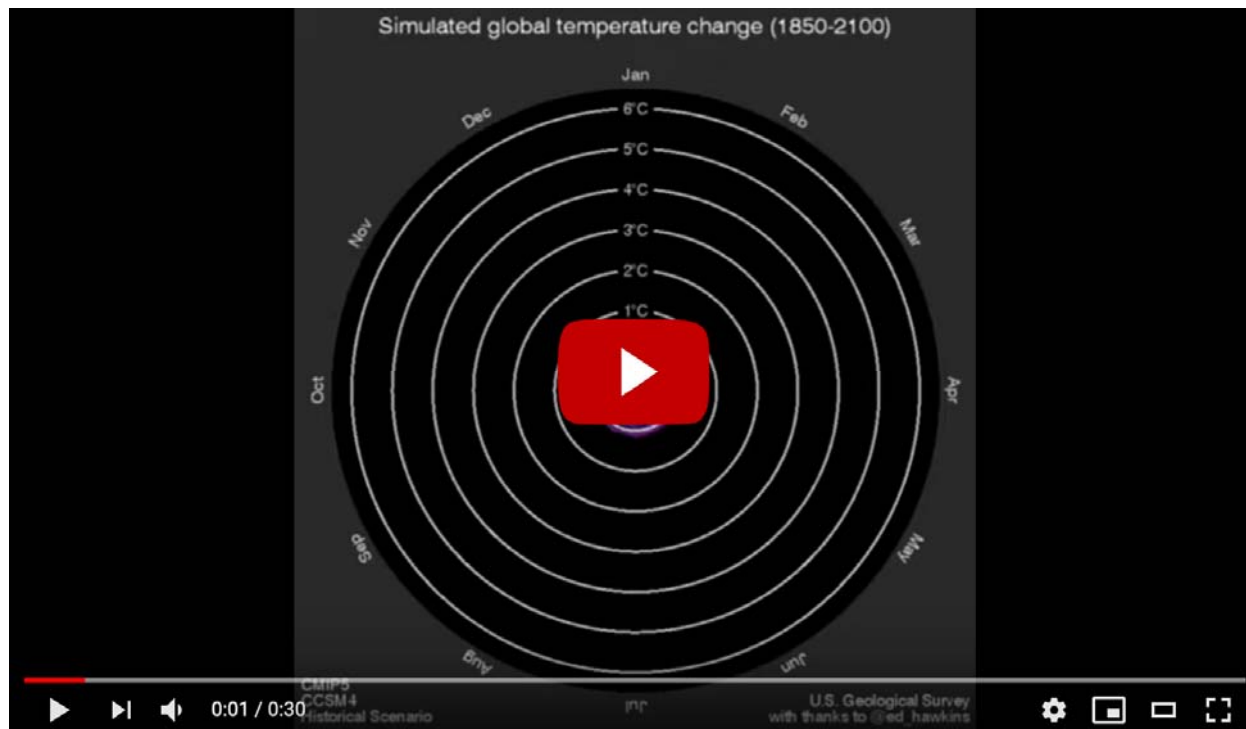


Figure 4 Changes in global average monthly surface temperature from 1850 to 2100. (Source: <http://www.climate-lab-book.ac.uk/spirals/>, Jay Alder) Click on the image to view the video.

This particular scenario of energy use predicts 10 °F of warming over the next 80 years! These are images of awakening for those who have eyes to see and psyches to accept the facts of climate chaos.

Why is this happening?

As I have stated, the physical cause of planetary warming is an imbalance in energy flow directly tied to the burning of fossil fuels. We burn these fuels to generate energy, which drives our increasingly complex societies. For centuries we relied mainly on the burning of wood to generate energy, then in the 18th and 19th centuries we discovered coal and oil as cheap, readily obtainable sources of energy. With these discoveries, the global consumption of energy through the burning of fossil fuels has increased dramatically since the late 19th century as shown here

[<http://www.columbia.edu/~mhs119/CO2Emissions/>],

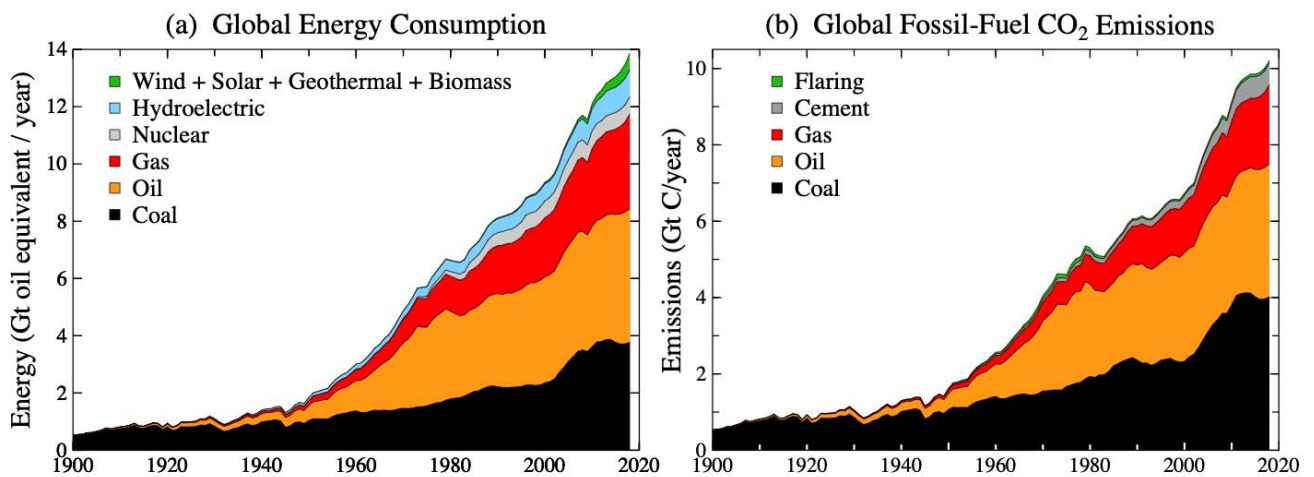


Figure 5 Global energy use per year by source, Global emissions of CO₂ by source.

The left-hand figure shows global energy consumption through time, while the righthand figure presents the rise in global carbon emissions. Since the late 1950s, there has been a dramatic rise in energy use tied to two major factors, first, an exponential increase in global population, and second, the fact that people are using more energy over time. Not only are there more people on Earth, but individual people are consuming more each year. We are caught in a cycle of rampant consumerism that is now spreading globally. This spread is reflected in the fact that the United States is no longer the major emitter of carbon dioxide into the atmosphere. China has now surpassed US emissions. However, warming of the planet is due to the cumulative amount of carbon dioxide in the atmosphere, Earth's accumulation of emissions over a century, which until recently has been dominated by US energy use. So, although China is the current major emitter of carbon into the atmosphere, to date, the United States has contributed the bulk of climate disruption. As such, the United States must assume responsibility, along with other developed nations, for the existing climate chaos. The following mandala of accumulated carbon emissions makes this point

[\[https://energycentral.com/c/ec/who-most-responsible-climate-change-infographic \]](https://energycentral.com/c/ec/who-most-responsible-climate-change-infographic):

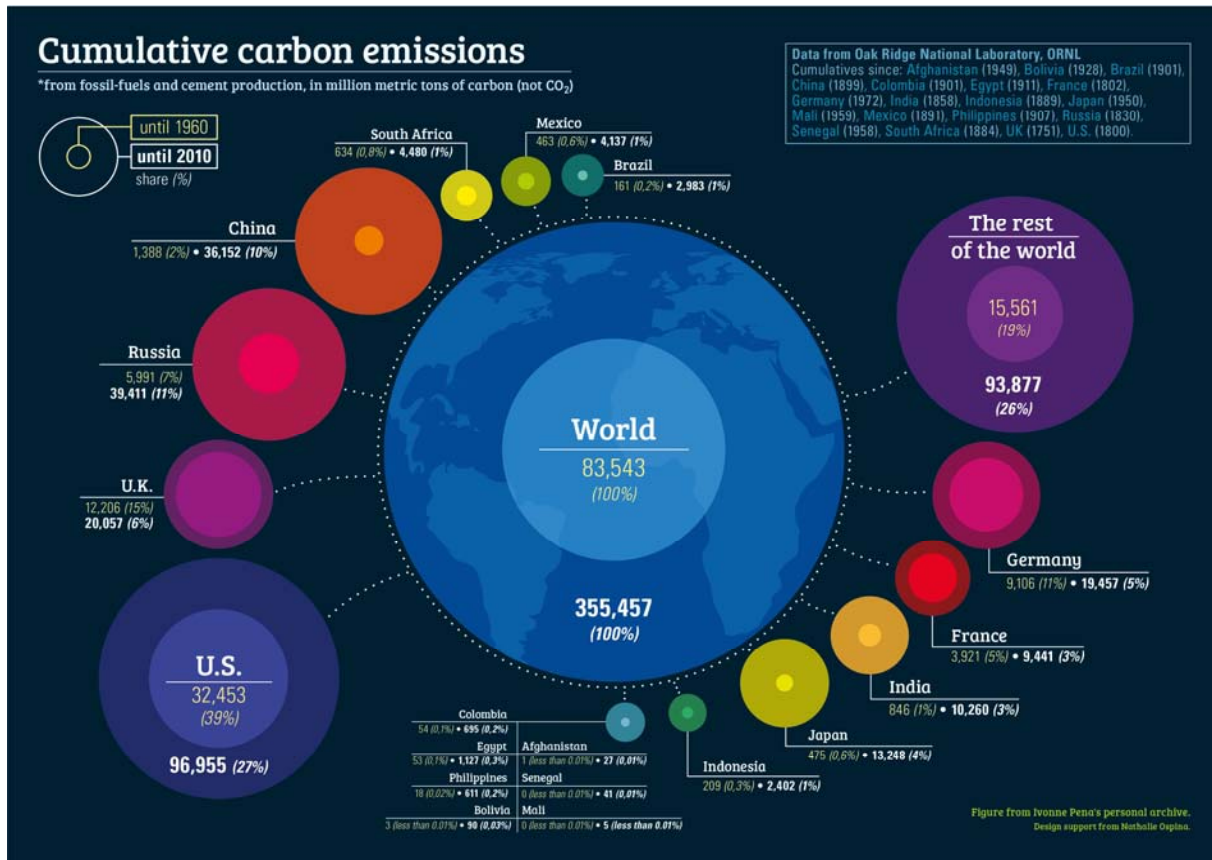


Figure 6 Cumulative carbon emissions from the late 19th century to 1960 and 2010.

The mandala breaks cumulative emissions down by country and by two time periods-- 1960 and 2010. Notice how the size of the inner shaded circles (up to 1960) radically changes to the larger circle area (up to 2010) indicating the enormous rise in energy use over this 50-year period. This figure also conveys the fact that the developing world in the Southern Hemisphere has contributed very little to climate chaos, yet these countries have and will continue to suffer the most from the impacts of climate disruption. This figure is a mandala of climate impact inequity which the developed world must face.

Spirit of the Depths

Collective Dissociation

“Nations have their own peculiar psychology, and in the same way they also have their own particular kind of psychopathology. It consists in the accumulation of a large number of abnormal features, the most striking of which is a suggestibility affecting the entire nation.”

C.G. Jung (CW 10, § 466)

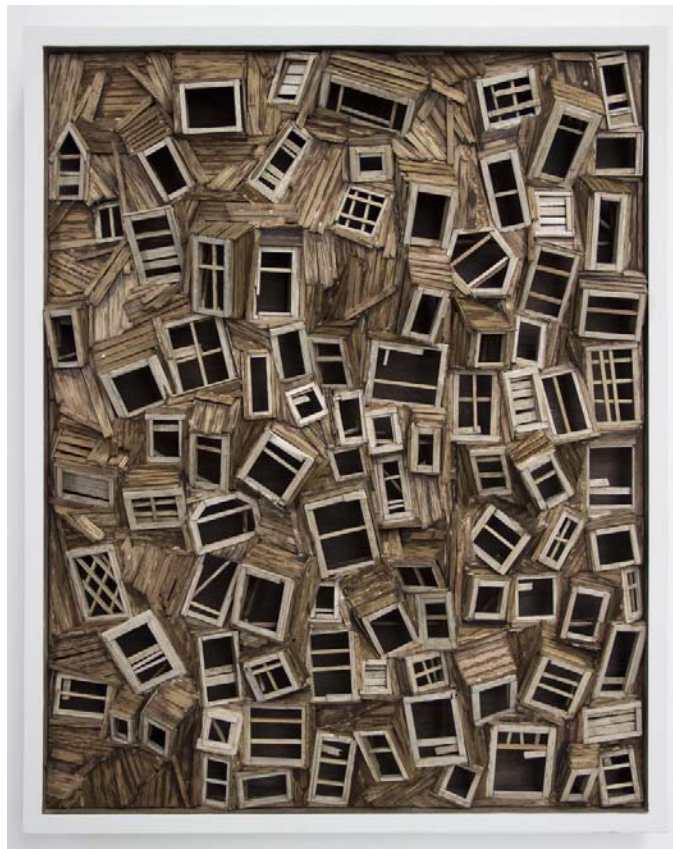


Figure 7 Fragmentation by Seth Clark

How do we understand our continued path of world destruction? Science tells us what is happening to the planet, including the physical forces driving the observed climate chaos. There is no question that humans are causing planetary warming, including all the effects linked to the warming. The scientific facts are incontrovertible, yet we have done far too little to avert increased catastrophic destruction. Of all the nations in the world, the United States is the only country currently not participating in the Paris Accord, which is the international planning body committed to eliminating fossil fuel use. Even with the Paris Accord, most nations are not acting fast enough to reduce their dependence on these fuels. Atmospheric carbon dioxide is at levels not seen in millions of years and will continue to increase until we abandon our use of fossil fuels.

Humans have an amazing ability to avoid facing threats, especially, if addressing the threat requires changes to their views, beliefs and/or personal behaviors. We have known about climate change and its cause for over a century. Over the past 40 years scientific evidence has only strengthened our certainty of human-caused climate disruption. Yet, we continue to collectively resist taking needed actions to deal with this global threat. Unfortunately, the longer we wait to act, the more difficult it will be to address the issue. Had we begun to reduce our dependence on fossil fuels forty years ago, the transition would have required much less sacrifice. Our collective avoidance is similar to someone who has been diagnosed with a life threatening, but treatable illness. The actions necessary to treat the illness are known and available, yet the patient refuses to carry out these actions. The person fears implementing the required changes because they require too much change, over too short a time period. Some part of them chooses inaction, rather than action. They find themselves split between knowing what to do and not wanting to do it, i.e. they find themselves in a state of *dissociation*. (Note that the

root meaning of dissociation is ‘to be apart from comradeship, or a state of sociality,’ while the antonym of dissociation, *association*, has the root meaning of ‘to be joined together in partnership, or a state of sociality.’) We are at odds with one another around action on climate change both internally and externally. Jung [CW 10, § 290] observed that,

“... just as for the individual a time of dissociation is a time for sickness, so it is in the life of nations. We can hardly deny that ours is a time of dissociation and sickness. ... If we are honest, we must admit that no one feels quite comfortable in the present-day world; indeed, it becomes increasingly uncomfortable. The word “crisis,” so often heard, is a medical expression which always tells us that the sickness has reached a dangerous climax.”

I believe we are suffering from a collective dissociation, a collective sickness around climate chaos. Most people, even in the United States, admit that climate change is a serious threat to them and the world at large. Most want someone to do something about it. Yet, when asked what they personally are willing to sacrifice or change, most people are reluctant to commit to such changes. This is dissociation writ large and nowhere is this more evident than in the United States, the country that has historically contributed most to the problem and is thus most responsible to help to address the problem [Kiehl, 2020].

What does analytical psychology have to say about dissociation, from whence does it arise? Perhaps most importantly, is it possible to heal such dissociation? Analytical psychology provides a unique pathway to explore these questions. Of course, exploring collective problems requires us to expand our interests outside of the

consulting room to include larger social spheres. As Jung [MDR, pp. 233-234] noted for, "... a collective problem ... The cause of the disturbance is not to be sought in the personal surroundings, but rather in the collective situation. Psychotherapy has hitherto taken this matter far too little into account." Jung wrote these words more than 60 years ago, and unfortunately, the ability of psychotherapy to deal with general social problems has not progressed much since then. Social psychology has helped us study how groups behave under various circumstances. It has gathered much data on how cultural belief systems influence counter-productive behaviors, but these studies do not investigate the deeper psychic layers that create our state of dissociation.

In order to do this, we must enter the realm of collective complexes and archetypal dynamics populating the unconscious [e.g. Singer, 2018]. In terms of analytical psychology, Tom Singer has creatively led the effort to apply Jung's concepts of complex and archetype to social issues. Other areas of research that could be integrated into an analytical perspective include the field of systems dynamics which tells us that group behavior is not captured by a simple, linear sum of all individual behaviors within the group [e.g. Klemm et al. 2003, Castellano et al. 2009]. The internal dynamics of social groups are non-linear, within which whole new phenomena can spontaneously emerge from them. These new phenomena are *coherent patterns* of behavior that could never be deduced from a simple, linear perspective of individuals interacting within a group. Collective dissociation is more like an iterative fractal structure of social fragmentation on multiple scales ranging from the individual up to nation states.

Jung [CW 13, § 51] notes that, “Our true religion is a monotheism of consciousness, a possession by it, coupled with a fanatical denial of the existence of fragmentary autonomous systems.” Our one-sided focus on consciousness at the expense of the unconscious is our living myth. It is a myth that denies the importance of our ‘fragmentary autonomous systems’, i.e. complexes, archetypes and instincts. It is a living myth leading us to believe we can fix any problem through sheer will, a living myth leading to ideas like perpetual economic growth, which requires infinite energy and consumption of the Earth. It is a living myth at the root of our collective sickness.

By denying the reality of the archetypal realm we force ourselves into a state of disequilibrium, which manifests in the form of climate chaos. Disequilibrium denotes imbalance. Interestingly, as already noted, global warming arises from an imbalance between the amount of energy received from the Sun and the amount of energy exiting the planet in the form of thermal (infrared) radiation. By disrupting the greenhouse effect, which modulates how much thermal energy leaves the planet, we have upset the flow of energy to and from Earth. Psychologically, this outer energy imbalance mirrors our inner psychic energy imbalance. As above, so below say the alchemists. Jung [CW 16, § 394] puts it this way,

“... the further the conscious situation moves away from a certain point of equilibrium, the more forceful and accordingly the more dangerous become the unconscious contents that are struggling to restore the balance. This leads ultimately to a dissociation: on the one hand, ego-consciousness makes convulsive efforts to shake off an invisible opponent (if it does not suspect its next door neighbor of being the devil!), while on the other hand it increasingly falls victim to the tyrannical will of an internal “Government opposition” which displays all the characteristics of a daemonic subman and superman combined.”

This astute observation points out our tendency to find someone else to blame for our disequilibrium. We find someone to blame or some way to discount what is taking place in us. Hence, some deny the existence of human caused climate chaos (or even a global pandemic), or they foist the blame of the disruption on others, e.g. ‘China is now the major emitter of greenhouse gases, so why should we in the US do anything about it until they do.’

Thus, the answer to our first question about the deeper source of climate chaos is: psychological dissociation, which is a denial of the existence of the other within us, the unconscious with all of its archetypal and instinctual forces. The destruction we wreak on Earth is a direct reflection of our inner split, our discomfort with ourselves as individuals and as a society. This split activates – in non-linear ways – our complexes both individual and cultural.

Our second question focuses how analytical psychology can help us address our collective dissociation. Jung [CW 18, § 581] notes that,

“No wonder the Western world feels uneasy, for it does not know how much it plays into the hands of the uproarious underworld and what it has lost through the destruction of its numinities. It has lost its moral and spiritual values to a very dangerous degree. Its moral and spiritual tradition has collapsed, and has left a worldwide disorientation and dissociation.”

If our collective dissociation is rooted in the destruction and loss of the numinous, then perhaps one way to address our sickness is to reconnect to ways that reconnect us to the

spiritual, numinous dimensions of life. If dissociation means being apart from the other, then perhaps we need to foster experiences of being a part of the other.

Healing through Mandala Symbols

Jung & Mandala



Figure 8 From the Red Book (p. 107)

“Mandala symbols appear very frequently in moments of psychic disorientation as compensatory ordering factors.”

C.G. Jung (CW 3, § 582)

“... mandalas mostly appear in connection with chaotic psychic states of disorientation or panic. They then have the purpose of reducing the confusion to order ... At all events they express order, balance, and wholeness.”

CW 9i, § 645

Here, I briefly review Jung’s relationship to the mandala. For more detailed explorations of Jung and mandala, I recommend the following works: Finiello Zervas, 2018, de Moura, 2012, Harms, 2011 and Jeromson, 2006, 2007. Jung’s portrayal of mandalas began with his psychological descent to the unconscious and the creation of *The Red Book* [Jung, 2009]. After his intense experience, in 1916, recorded in the *Seven Sermons of the Dead*, he painted his first mandala. He called this mandala the *Systema Mundi Totius*, ‘the system of the whole world.’ It represents Jung’s own cosmology at that time. Jung [MDR, p. 195] writes,

“It was only toward the end of the First World War that I gradually began to emerge from the darkness. ... [in which a] ... principal event was that I began to understand mandala drawings. This happened in 1918-19. I had painted the first mandala in 1916 after writing the *Septem Sermones*; naturally I had not, then, understood it.”

Here we see the critical role Jung gives the mandala and also how he grappled with the meaning of the mandala. Clearly, his deep experiences with mandalas played a critical role in his ascent out of his darkness.

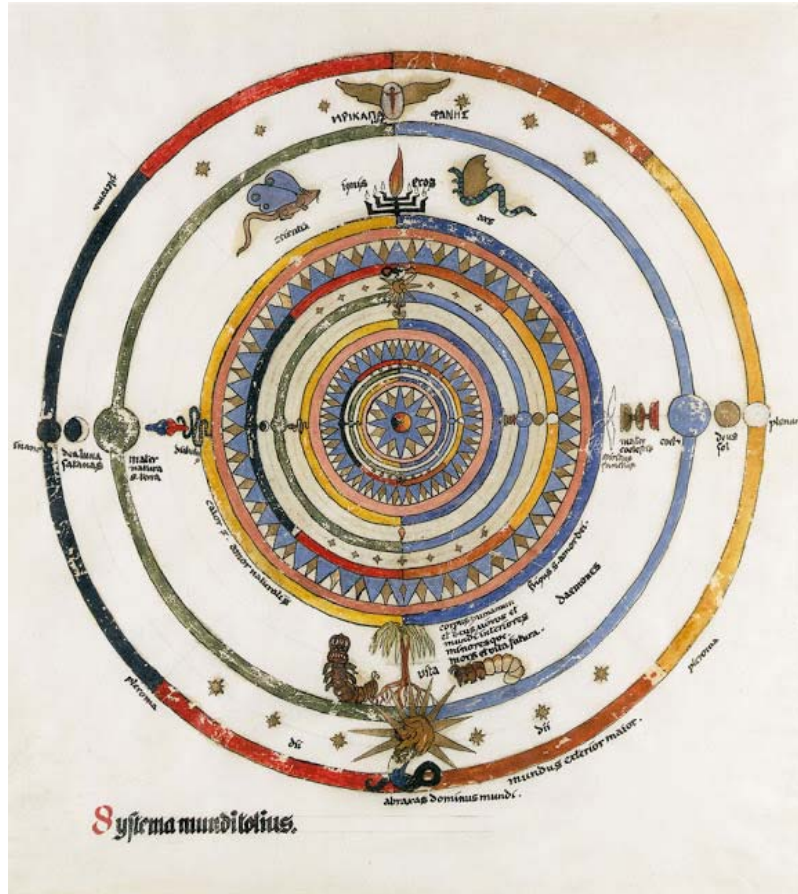


Figure 9 Jung's first mandala (1916) Published in *Du*, 1955

Although he drew his first mandala in 1916, Jung's experiences with this symbol appeared much earlier in his life. Jung notes [MDR, p. 85] that while trying to decide on a career path, circa 1898, he dreamt that, "I was in a wood ... I saw a circular pool ... half immersed in the water lay the strangest and most wonderful creature; a round animal, shimmering in opalescent hues ... it was a giant Radiolarian..."

Here is an electron micrograph of a radiolarian.

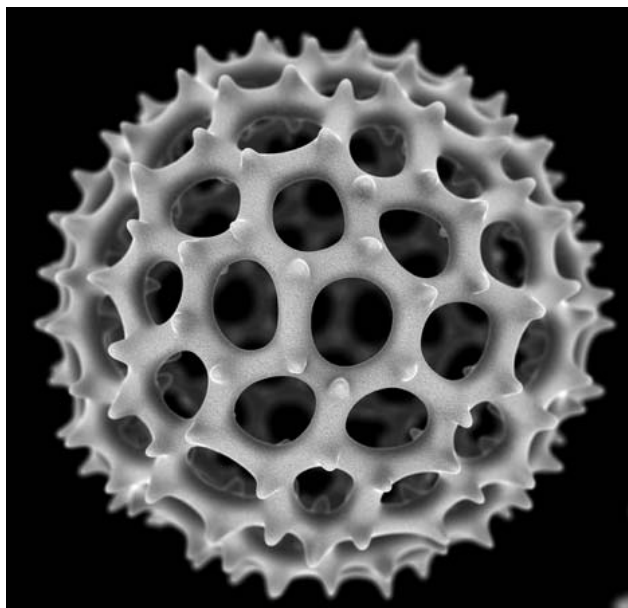


Figure 10 Radiolarian

Interestingly, the radiolarian is related to foraminifera which play a critical role in the ocean's ability to absorb and bury carbon dioxide. As the levels of carbon dioxide have increased in the oceans, it is more difficult for these tiny life forms to survive. Given they are at the bottom of the marine food chain, their demise is of great concern for life on the planet.

Jung's dream contains two mandala images – one for the the circular pool of water and one for the animal, both of which are symbols of wholeness. This dream convinced Jung to go into medicine and eventually psychiatry. Then, in 1900, Jung drew a mandala based on information his cousin, Helene Preiswerk, provided him. This cosmology arose from trance states his cousin was experiencing during séances, the records of which became the source of Jung's doctoral dissertation.

In 1925, Jung gave a seminar on his psychological ideas to a group of English-speaking students [Jung, 2012]. He created many figures to illustrate his theoretical ideas, including the structure of the psyche,

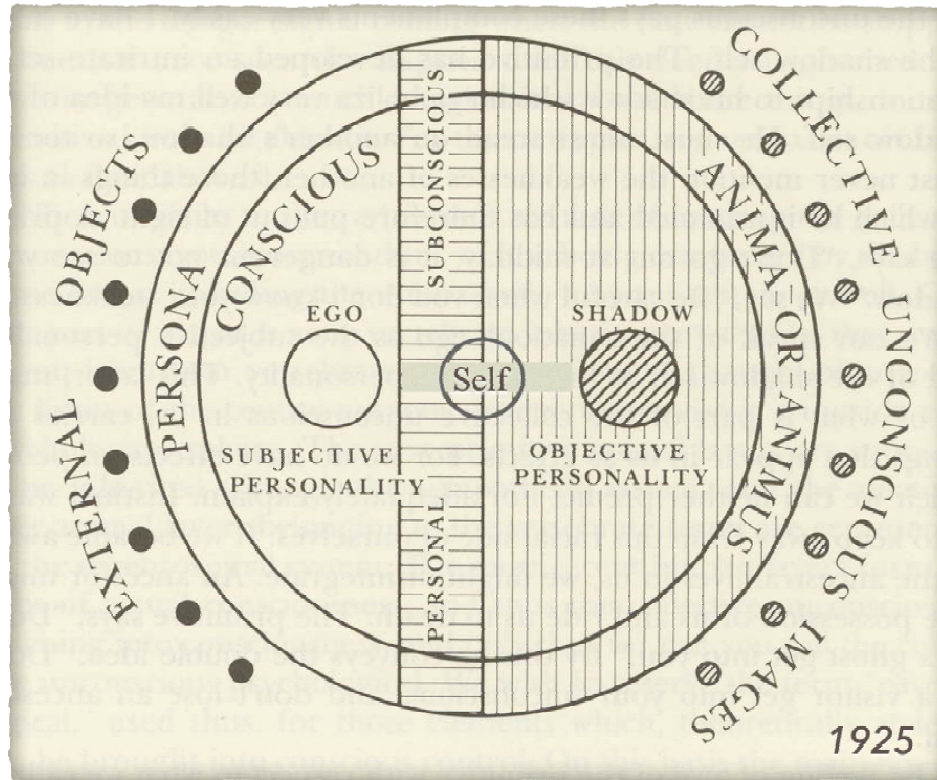


Figure 11 Jung's mandala of psyche as drawn in 1925 [Jung, 2012, p. 138]

At the center of the mandala is the Self (which Jung called the individual in the original drawing). The mandala unites outer and inner worlds and represents a balanced picture of these two worlds. It is a mandala of psyche and world in equilibrium with one another. Placing the Self at the center of the mandala is perhaps the first hint of how Jung viewed mandala as the image of the archetype of the Self. This discovery between mandala and Self is described by Jung in MDR [p. 196],

“My mandalas were cryptograms concerning the state of the self which were presented to me anew each day. In them I saw the self—that is, my whole being—actively at work. To be sure, at first, I could only dimly understand them; but they seemed to me highly significant, and I guarded them like precious pearls. I had the distinct feeling that they were something central, and in time I acquired through them a living conception of the self.”

In 1927, Jung had a dream from which he painted the mandala called the ‘Window of Eternity.’ Then, in 1928, he painted his ‘last’ mandala based on a powerfully numinous dream set in Liverpool. This dream made him realize [MDR, p. 199] “that the self is the principle and archetype of orientation and meaning. Therein lies its healing function.”



Figure 12 Mandala painted in 1928, Jung’s last mandala (The Red Book, p. 163)

At the time of painting the Liverpool mandala, Jung received a manuscript entitled, *Secret of the Golden Flower*, from the Sinologist Richard Wilhelm and Jung turned his attention more towards alchemy. Jung [MDR, p. 199] writes that, “After this dream I gave up drawing or painting mandalas.”

Of course, Jung continued to create mandalas not with brush, but through carving stone,



Figure 13 Jung's stone carving at Bollingen

At the same time that Jung was discovering the power of the mandala through his personal work, many of his clients were drawing their own mandalas [see, de Moura, 2012]. Jung [CW 9i, § 645] notes that,

“... mandalas ... have the purpose of reducing the confusion to order, though this is never the conscious intention of the patient. At all events they express order, balance, and wholeness. Patients themselves often emphasize the beneficial or soothing effect of such pictures. ... Most mandalas have an intuitive, irrational character and, through their symbolical content, exert a retroactive influence on the unconscious. They therefore possess a “magical” significance, like icons, whose possible efficacy was never consciously felt by the patient.”

Thus, through personal experience and work with his clients Jung realized the power of the mandala as a portal to healing. Of course, the mandala was more than a personal experience. Jung recognized the essential archetypal nature of this symbol and devoted much time to exploring the transpersonal dimension of the mandala in his writings.

Mandala as Archetype

Mandalas are ubiquitous across space and time, and, as such, appear throughout the world. Some of the earliest mandalas were created by indigenous peoples in the form of rock paintings, stone engravings, burial mounds, and astronomical stone structures.

Jung [CW 9i, § 712] notes that,

“Knowledge of the common origin of these unconsciously preformed symbols has been totally lost to us. In order to recover it, we have to read old texts and investigate

old cultures... And when we penetrate a little more deeply below the surface of the psyche, we come upon historical layers which are not just dead dust, but alive and continuously active in everyone— maybe to a degree that we cannot imagine in the present state of our knowledge.”

Below is a petroglyph in the western United States that dates back over a thousand years. Note the many mandala forms in this image.



Figure 14 Petroglyph in Moab, Utah

Perhaps, the oldest known mandala is the recently discovered circle of stalagmites created by Neanderthals in what is now southern France [Jaubert et al, 2016]. Some of these stalagmites weigh more than a ton and were dragged long distances to form the circle. The radiocarbon dating of this structure is around 175,000 years old, which predates the cave painting of early homo sapiens by more than 140,000

years. This phenomenal discovery provides evidence that Neanderthals were expressing symbolic thinking, and that the archetype of the Self was manifesting itself far earlier than the cave painters.



Figure 15 Circle created by Neanderthal 175,000 years ago

When I read the story of this archeological discovery, I was reminded of the following statement by Jung [CW 8, § 435], “Because it is a question of characteristically human modes, it is hardly to be wondered that we can find psychic forms ... which occur ... in other epochs with which archaeology provides the only link ...” This discovery shows how mandala has resided in the psyche of hominids for well over 100,000 years.

Of course, mandalas are ubiquitous in nature, too. Consider the manifold symmetries in life forms throughout evolutionary history, e.g. the radiolarian. Many of these natural mandalas evoke within us a deep sense of reverence. How is it possible

that the world is so full of these numinous patterns? Science has shown how these forms spontaneously emerge from the inherent complexity of nature. It seems as if nature feels compelled to generate symmetries. Extending our gaze away from Earth out to the heavens, we see that the cosmos is full of beautiful symmetries. Pictures from the Hubble space telescope show how symmetry abounds in the cosmos. The mandala is ever present, providing us with a pathway to numinous wholeness be it through nature, science or the arts.

Finally, what, if anything, is the archetypal *purpose* of a mandala? This question has, no doubt, many answers, but from a depth psychological perspective, the mandala emerges from the unconscious to heal our dissociation. As such, it plays an integral role in the self-regulation process that Jung identified as a key element of psyche. Jung [CW 16, pr. 330] states,

“The psyche is a self-regulating system that maintains its equilibrium just as the body does. Every process that goes too far immediately and inevitably calls forth compensations, and without these there would be neither a normal metabolism nor a normal psyche. In this sense we can take the theory of compensation as a basic law of psychic behavior. Too little on one side results in too much on the other.”

If this is the case, then mandala is a symbol facilitating this ‘law of psychic behavior.’ As Jung [CW 9i, § 714] notes, “As a rule a mandala occurs in conditions of psychic dissociation or disorientation...”

In terms of psychic self-regulation, imagine a time when a symbol was truly living and provided meaning and orientation to the collective, and then, after some time, the symbol lost its numinosity. It no longer provided a sense of orientation to the group. An

historical example of this would be the transition from the Middle Ages to the Renaissance [Kiehl, 2016b], in which the center of meaning moved from a god above, to the measure of man. Humanism re-centered our collective cosmology opening the doorway for the modern sciences. In such a situation, a new symbol than emerges, often first in the arts which unifies and provides a new living meaning for the collective. The process moves from a state of integration, through dis-integration, to a re-integration. I believe we are in a time of dis-integration in which we lack living symbols to provide a sense of collective meaning. As Thomas Berry [1988, p. 123] put it, “We are in between stories.” Climate chaos and the pandemic are symptoms of this state of dis-integration. Is there a new symbol that could re-integrate us? As I argue in the next section, I feel that the mandala can help us in work towards a new symbol.

Jung’s hypothesis for self-regulation extends well beyond psyche. Self-regulation appears in many dynamic systems [Capra, 1996]. Earth’s climate system can be viewed as a system containing processes that insure stability [Steffen et al. 2018]. From a dynamic systems viewpoint various feedback processes ensure the system reaches a set point of stability.

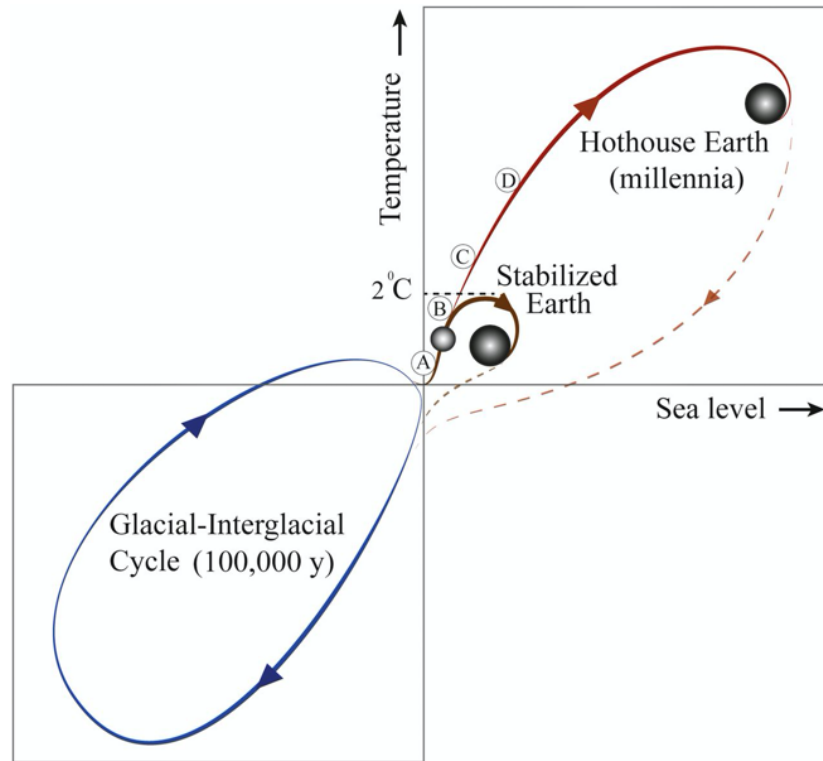


Figure 16 Earth's climate states in terms of global temperature and sea level.

Shown above [Steffen et al. 2018] is a description of how Earth's climate has oscillated, through geologic time, between states of cold temperatures and lower sea level to states of hothouse temperatures with high sea level. In cold states, glacial ice grows locking fresh water on land, while in warm states there is little glacial ice resulting in high sea levels. For millions of years, Earth has moved through these two cycles, a sort of Earth climate mandala. For the past 10,000 years Earth has been near the center of this Earth system mandala, but through our actions we are now propelling Earth onto the hothouse trajectory, which appears in the upper right box. The usual transit time for the cold to hothouse states is many millions of years. Our actions are accelerating us along the red hothouse curve far beyond this natural time scale; we are hurtling along

the hothouse curve at an unprecedented rate. If we act in time, we can keep Earth close to the center of the mandala and thus avoid climatic catastrophe.

This is just one example of mandala as regulator. The Gaia Hypothesis proposes that the stability of the planet, the oscillations in the figure above, is regulated by life itself. If so, this would be a Great Mandala. Regulating phenomena occur also in ecological systems between the abundance of predators and prey. Given the plethora of regulating systems, perhaps it is not surprising that Jung discovered a similar phenomenon in the human psyche. (Note that neuroscience also has viewed the interaction between the prefrontal cortex and the sympathetic nervous system as a homeostatic self-regulatory process [e.g. Siegel, 2018].)

Mandala as Path Forward



Figure 17

For a balanced psyche, we need to maintain a conscious relationship with the unconscious, not just as individuals, but as a collective. We need to be aware of the archetypal presences appearing in the world and the cultural complexes that are appearing in their varied forms. We need to be conscious of our instinctual nature. Considering conscious and unconscious as the primary dyadic manifestation of opposites, Jung [CW 14, § 201] notes that with the union of opposites,

“we are dealing with an eternal image ... Whenever this image is obscured one’s life loses its proper meaning and consequently its balance. So long as we know that we are the carrier of life ... then the mystery of our soul lives ... But if we no longer see the meaning of our life in its fulfillment ..., then we have betrayed and lost our soul, substituting for it a madness which leads to destruction...”

In a dissociated state, the world is alien to us and we no longer value its inherent beauty. We live a soul-less life rife with destruction. Jung [CW 10, § 290] notes that, “... just as for the individual a time of dissociation is a time for sickness, so it is in the life of nations. We can hardly deny that ours is a time of dissociation and sickness.” Indeed, we can hardly deny this. Here, is a list of some opposites that need to be a part of our healing, i.e. our wholeness process:

| | |
|--------------------|-----------------------|
| Masculine | Feminine |
| Image | Instinct |
| Idea. | Value |
| Sensation | Intuition |
| Independent | Interdependent |

| | |
|----------|---------------|
| Action | Receptivity |
| Mundane | Sacred |
| Rational | Transrational |
| Matter | Spirit |

Many of these dyadic aspects are represented in Jerome Bernstein's [2018] description of the dominion and reciprocity states of psyche. Bernstein argues the Western world has been living a one-sided life, skewed far towards the dominion psyche and that our survival depends now on bringing back and honoring reciprocity psyche. In this process, we do not reject the dominion psyche, but integrate it with reciprocity psyche, i.e. our task is to bring the two states of psyche into balance with one another.

How does mandala help us live in such a balanced state? Is it realistic to expect humanity to connect to the archetype of wholeness to avoid catastrophic environmental (and social) collapse? At this point, I make a transrational leap to answer these questions. Since the beginning of the scientific revolution, we have confined ourselves to solving problems using one-sided approaches. We either use a one-sided approach centered on conscious rationality, or a one-sided approach immersed in unconscious compulsive emotionality. Yet, as Einstein's apocryphal quote goes, "we cannot solve our problems with the same thinking we used to create them." The complexity and enormity of the problems we now face, e.g. climate chaos, pandemic, social inequality, cannot be solved by purely rational, linear, thinking. Nor can they be avoided through irrational compulsivity. I am not saying we can dispose of rational thinking! We need science and technological innovation to create a carbon-free future. We need well thought out strategies and planning to get off of fossil fuels. If we were to ignore science, as our

current president and his followers have, then we live a compulsive one-sided, destructive lifestyle. Rejecting reason creates imbalance. I am arguing for balance in which our technological solutions are coupled with the valuing of nature: a balance that recognizes the compulsive tendencies of the unconscious, a balance rooted in wholeness that includes a deep sense of the sacredness of Earth. All one-sided approaches come with a shadow and we should never forget that.

How do we solve problems more integrally? How do we include other ways of knowing in addressing climate chaos? Jung [CW 18, § 599] states,

“As any change must begin somewhere, it is the single individual who will experience it and carry it through. The change must indeed begin with an individual; it might be any one of us. Nobody can afford to look round and to wait for somebody else to do what he is loathe to do himself. But since nobody seems to know what to do, it might be worthwhile for each of us to ask himself whether by any chance his or her unconscious may know something that will help us.”

The unconscious transcends space and time, holding unimagined creativity. We need to place ourselves in a state of humility before such a reality. Jung further states, [CW 7, § 275], “... the unconscious produces contents which are valid not only for the person concerned, but for others as well, in fact for a great many people and possibly for all.” Thus, we are not just doing our own work when we seek guidance from the unconscious, we may be helping ‘possibly all.’ Such statements fly in the face of rationality, which is why they are called transrational. Also, note that individuals working together form complex interactions through which positive transformations can

occur, and, yes, destructive ones, as well. However, the more conscious we are in balancing ourselves collectively, the better we can work with the destructiveness.

From an environmental perspective, I encourage us toward a balanced, ecological psyche that honors the wonder of the world around us. Such a psyche is beautifully rendered in the following sculpture by Kate MacDowell.



Figure 18 Kate MacDowell

If we open ourselves to the wisdom of psyche and trust in its self-regulation process, then perhaps mandalas will emerge leading us to more holistic ways to live on Earth. As Jung [CW 10, § 293] noted, “... the sickness of dissociation in our world is at the same time a process of recovery, or rather, the climax of a period of pregnancy which heralds the throes of birth.” Is this mere fantasy? Yes, but remember that all creativity

arises from the play of fantasy images. So, I ask us to play with images to see what mandalas arise that speak to us individually and collectively around the issue of climate chaos.

Let me give you some examples of mandalas that have emerged over the recent past. The creative work of Andy Goldsworthy brings psyche and the environment together through mandala. Shown here is one of his installations at the Presidio in San Francisco,



Figure 19 Andy Goldsworthy

Many of Goldsworthy's installations ingeniously weave together natural environments and have the symmetry of mandala. They show how we can be in balance

with the environment, rather than at odds with the natural world. They are playful and transitory, reflecting the dynamic dimensions of the natural world.

Mandalas have also appeared in the exploration of paths to create a future fossil free economy. Here is a mandala-like image of ways to reduce carbon emissions [Socolow and Pacala, 2006]. Each slice of this mandala, if implemented, would reduce carbon emissions by 25 billion tons over 50 years. We get to choose which of these solutions to implement. Unfortunately, we have not acted aggressively enough to reduce our emissions since this paper was published, so now we need more slices of the mandala to address climate change. The more we wait the more slices required to avoid climate chaos. If we wait too long, there will not be enough slices to address future climate chaos.

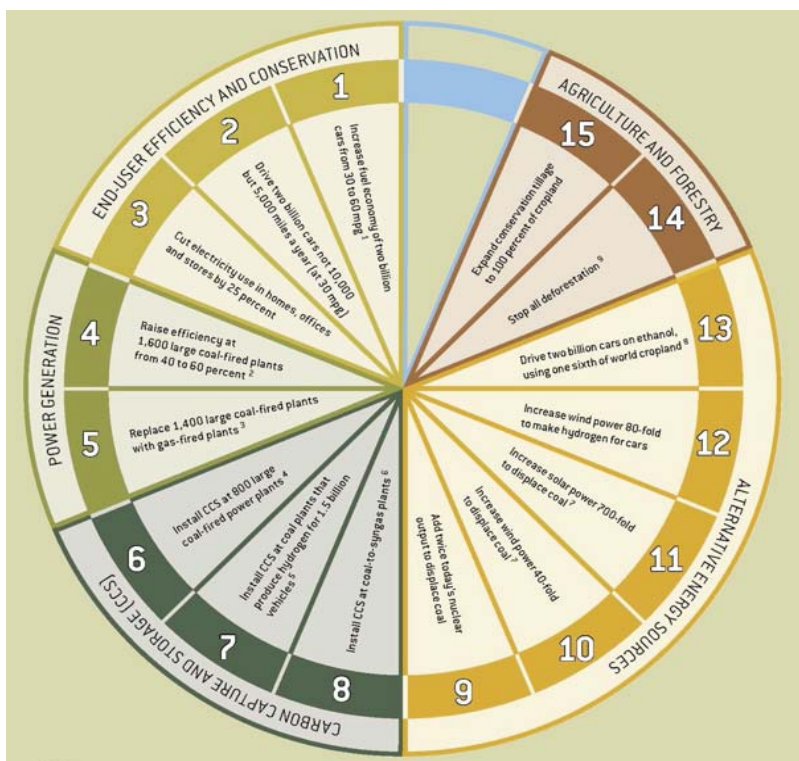


Figure 20 Ways to reduce our use of fossil fuels

Finally, mandalas are emerging around social action on climate chaos. At the center of this mandala is the Swedish teenager, Greta Thunberg. Her protest to reduce carbon emissions has galvanized youth around the world. Millions of school children now take Fridays off from school to publicly demand action on climate chaos. This rapid, self-organizing rise in activity is how archetypes constellate and emerge quickly. The presence of the feminine, and the child archetype with its association with the future are indicative of what is required now to change our collective behavior. As Thunberg eloquently states it is the children's future that is most threatened by inaction on climate. They have the most to lose, yet it is older generations who have more power and who have done too little. As I stated in my book [Kiehl, 2016a, p. 71], "Movement to wholeness requires a radical transformation in how we see the world..." The children's movement is just such a radical transformation in how we need to view the world.



Figure 21 Our future

Union of Spirit of the Times and Spirit of the Depths

I have argued that collective dissociation is occurring on multiple space and time scales. Our separations from archetypal numinosity and instinctual nature form an inter-psychic split, which is coupled with a separation from others and the environment, an intra-psychic split. Separation propagates up through individuals, families, communities and nations. At the root of our *dis-ease* is the wounded separation between psyche and matter and at the most basic level, a separation between psyche and cosmos. We have lost our sense of deep inter-connectedness with the cosmos, which was present

for thousands of years in human history. Our primary mythologies were based on the connection and inter-dependence between the human and non-human world. Nature, Earth, Cosmos were animate and infused with soul. These mythologies evolved into cosmologies that placed humans in direct connection with the cosmos. Modern and post-modern civilizations have lost all such connectedness. Jung recognized the importance of such deep connections. He [MDR, p. 335] states that “Our psyche is set up in accord with the structure of the universe, and what happens in the macrocosm likewise happens in the infinitesimal and most subjective reaches of psyche.” Perhaps the Medieval and Renaissance periods were the last times in Western history when we recognized this deep sense of connection, as depicted here:

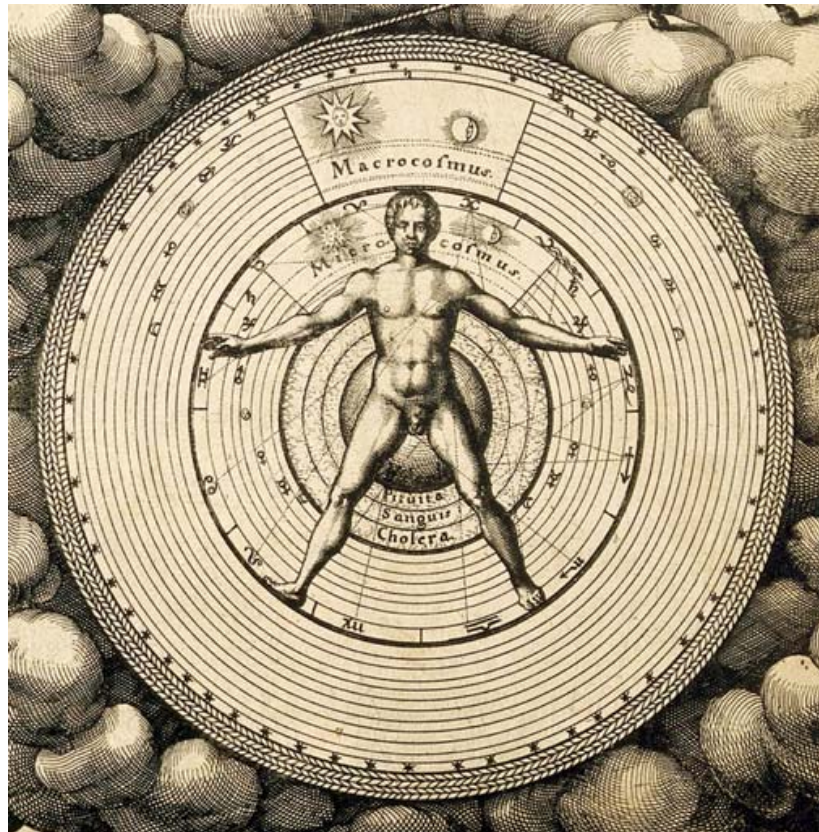


Figure 22 Drawing for Robert Fludd, 1617-1618

Yet, this view of universal connectedness is not just a relic of ancient cosmologies. The Nobel physicist, Werner Heisenberg, a founder of quantum theory, states that, “The same organizing forces that have shaped nature in all her forms are also responsible for the structure of our minds.” Science tells us that our planet and all life on it, including human life, arose from elements generated within exploding stars and colliding galaxies. The oft quoted statement that ‘we are star dust’ is quite accurate. We know also that quantum processes entangle matter at the most microscopic level. Our new cosmology of modern science, thus, reaffirms our fundamental inter-relatedness with the cosmos. But, the realm of soul lies outside of the sciences and it is here where we need to renew our connectedness. We need to experience our inherent participation in the cosmos to feel the soulfulness of nature. Jung [CW 10, § 635] states, “... wholeness ... has always been characterized by certain cosmic affinities: the individual soul was thought to be of ‘heavenly’ origin, a particle of the world soul, and hence a microcosm, a reflection of the macrocosm.” I find Jung’s term ‘cosmic affinities’ quite interesting for it captures exactly what I have been circumambulating in this article. How can we discover our cosmic affinities? Do they even exist?

To answer the later question, I end with a tale of the seemingly insignificant dung beetle. This beetle has a preferred straight-line direction to roll its dung ball along. Scientists [Dacke et al, 2013] hypothesized the beetle was using some aspect of nature to orient itself to roll the dung ball so straight. In particular, the beetle rolls the ball in a straight line during the night. To test these various hypotheses, scientists constructed a home for the dung beetle on a platform within a planetarium. They then projected different sky configurations on the dome of the planetarium, while at the same time observing which way the beetle rolled its dung ball. After many different projected

images, they eventually projected the light of the Milky Way galaxy onto the screen and discovered it was this light the beetle uses to spatially orient itself.



Figure 23 The dung beetle and the Milky Way

If ever there was an example of cosmic affinities it is the story of the dung beetle. Let us also not forget the importance the scarab beetle played in Jung's discovery of synchronicity [CW 8, § 843]. This beetle plays a remarkable role in reminding us of the beauty of the cosmos and how life on Earth is integrally coupled to the cosmos. If a small dung beetle can manifest a cosmic affinity, is it too much to ask that we do the same? Can we look to the cosmos, inner and outer, and once again experience a deep soulful connection to these realms and ultimately realize that there is truly only one world, the *Unus Mundus*? If we were to open our hearts and minds to this reality, we

would find the universal mandala of One World. Creating such a worldview would transform our relationship to the world around us. We would look at the world from a whole new perspective.

Endings & Beginnings

According to Jung [MDR, p. 335],

“the mandala, ... is probably the simplest model of a concept of wholeness, and one which spontaneously arises in the mind as a representation of the struggle and reconciliation of opposites. The clash, which is at first of a purely personal nature, is soon followed by the insight that the subjective conflict is only a single instance of the universal conflict of opposites. Our psyche is set up in accord with the structure of the universe, and what happens in the macrocosm likewise happens in the infinitesimal and most subjective reaches of the psyche.”

As such, mandalas allow order to emerge from chaos, and, at the same time, open us to a direct experience of the sacredness of the everyday world. We find mandalas in the outer world wherever we look. They appear to us in nature and in art and architecture. They appear in our homes in the way we set our table, arrange flowers in a vase, or decorate our living spaces. The mandala also arises when people gather to share with one another. In today's world the gallery screen view in our Zoom meetings creates mandalas of communality.

To the extent we make the mandala an integral part of our lives, we become more centered and can heal the myriad splits, inner and outer, that keep us in the dis-ease of dissociation. It may seem unlikely that being in a mandala could help us overcome our

present state of ecocide, along with the many other symptoms of collective dissociation, but the archetypal nature of the mandala transcends any such doubt. Cultures around the world for centuries have lived in the mandala. We too could choose this path to healing ourselves.



Figure 24 Kalachakra Mandala

I conclude this circumambulation of mandala by offering the following video (click on image), which uses the beauty of modern science through the images of the Hubble telescope along with images of mandalas through the ages. It is accompanied by

the Adagio from JS Bach's Concerto for 2 Pianos in C Minor, BWV 1060. Please meditate on the images and music, which too is a mandala, to experience our affinity with the cosmos.



Figure 25 Cosmic affinities. Please click on the image to view the video.

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