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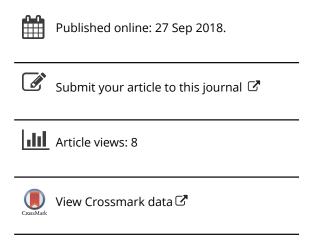
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ATTRACTING OUR FUTURE INTO BEING-THE SYNTONY QUEST

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This article explores a new perception of causality and time. It is proposed that our present is not the result of our past; instead it emerges from our futures. The intention to bring into being a world and future where all of us can thrive has been shared by numerous people. Yet despite these intentions, we have not yet been able to effectuate the deeper transformational change required for bringing this forth at the pace and scale now required. This article offers the quintessence of this quest, to liberate our focus from our entrapment within the systems we defined.

KEYWORDS: Alchemy; from causality to mutuality; syntony; system wholeness; transformational change.

OUR INTENTION AND INVITATION

This article is part of a Ph.D. research project by Anneloes Smitsman, titled *Into the Heart of Systems Change*. ¹ This work evolved in response to a growing urgency about the damage we are causing to the present and future conditions for manifesting our collective thrivability (Russell, 2013; Wahl, 2016). Increasingly, more of our eco-systems are now collapsing because we failed to act on these earlier warnings (IPCC, 2013). Although there is a growing awareness of the damage that we are causing to the fabric of Life through our planetary mismanagement, we have not yet achieved the transformational change necessary to stop what we set into motion thousands of years ago (WWF, 2012). We have attempted through new agreements, such as the Sustainable

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Development Goals (SDGs), to change the destructive course of our current trajectories. Yet to transform these trajectories it is not sufficient merely to attempt different actions now; it also requires a journey into our future potentialities for our full species awakening, and to bring those into action here and now. Most of our perceived *new* systems designs are still taking place within the same horizontality of thinking that has contributed to our sustainability crisis in the first place. How then do we access and actualize these future potentialities to help effectuate the kind of transformational change that can secure our collective thrivability all through time and space? Is there a more effective way that we can use the power of our intentions, in a way that we have not yet applied? In his book *The Road of Time: Theory of Double Causality*, Philippe Guillemant (2014) mentioned:

The mechanism by which our intentions are active and therefore susceptible of generating traces of the future is as follows:

- When our intentions are sustained by faith or confidence, they instantly increase the probabilities of realizing a future already potentiated on our Tree of Life;
- If a causal route does not exist, or no longer exists, then the potential of non causal solutions for the realization of this future will see their probability increased, according to a route that descends from the future to the present;
- This will favor the emergence in the present of favorable chances, and as a consequence, we must expect to observe around us opportunities for routes leading to this realization, providing we are open to them:
- Our intentions are active not only in our brains, but also in a future space-time outside our brains, one that houses all our potential futures: because our intentions instantly modify the probabilities in this future. (pp. 1105–1111)

If our intentions indeed modify the probabilities in a future space-time that houses all our potential futures, then the first shift toward collective thrivability should be to enhance the quality of our intentions. During our conversations we explored whether the future can cause the present. As alchemists of transformational change one of our common practices is to guide people through deep envisioning and hypnosis into the future potentialities of their thrivability. To replace and transform the patterns of dysfunction, disease, and fragmentation with new patterns generated by future potentialities that they had not yet accessed fully. Their activated access to these *new* future potentialities then optimize, harmonize, and synergize their current potentialities to align with higher more integrated levels of consciousness. Guillemant (2014) shared that "our intentions are not only active in our brain, but also in a future space-time outside our-brain" (p. 1111). This implies that we are not merely objects that exist within space-time, as is often assumed. We could say that we are in fact

space-time manifested as localities. Otherwise, changes within our intentions could not effectuate changes in future space-times outside of our mind.

This also implies that our own actualization, as expression of a larger unified field of consciousness invisible to most, directly impacts on the time-realities that we co-manifest. The future is thus not about *a time* that does not yet exist (Merleau-Ponty, 1962). Futures already exist as potentialities, yet most people are not conscious of these potentialities in their present experiences of their space-time realities. For most people their minds are too identified with the local dimensions of the universal and not the universal dimensions within the local (Smitsman, 2017c).

The alchemical transformational process dissolves the mind-made identification patterns that keep us locked in localized dimensions. When our perception becomes rigid and stagnant (i.e., locked in localized dimensions), our space-time parameter settings become inflexible. This inflexibility means that we can no longer attune, harmonize, and synergize our individualized consciousness to the larger collective field of consciousness of which we are part. Without this attunement, alignment, harmonization, and synchronization our individualized consciousness will over time start to generate its own patterns and feedback loop systems, similar to the growth pattern of a cancer or a virus. These feedback loop systems lack the necessary information in-put from the larger fields of Life, which are necessary to remain in touch with Life as a whole. Information that is not sourced, corrected, balanced, and attuned by Life's wholeness becomes (eventually) dysfunctional and starts to operate as a self-referential or endogamic reality that could be compared to a computer simulation. Many such information patterns become destructive over time, and one might even consider whether this destructiveness is not an in-built protection mechanisms to ensure the death of de-evolutionary inbred expressions of atavistic consciousness.

One could say that inflexibility of the system to attune, align, harmonize, and synchronize is a death to the system that sets in motion a process of involution whereby the elemental life forces that initially fostered our evolution now inverse and reverse. This involution serves the evolution of consciousness over the longer term, by casting a death within the shorter term. Life it seems, protects its continuous development by triggering death there within the system where information systems become decoupled from the whole.

The alchemist and the shaman know how to work with death purposefully in order to enhance Life and the system's health. Initiations always guide people into the experience of a death of former identities of self that limit the further evolutionary capacity of the being (Smitsman, 2017c). Liberation takes place within the process of death. That which in one direction, context, and dosage can serve as a medicine, can, within another direction, context, and dosage, become a toxin or poison. If we are to work with our current evolutionary and involutionary processes to bring forth a thrivable world and future, then we need communication systems, tools, and processes for working with these forces in a life-enhancing direction. The purpose and intention of this

article is to contribute to this emerging field that holds the bridge between the latest scientific insights and the ancient wisdoms.

Accordingly, this article also aims to contribute to the field of sustainability sciences and sustainability design, with new insights for how to access, actualize, and embody our evolutionary potentials for our collective thrivability. As mentioned by Alexander Laszlo (2004), Evolutionary Systems Design and transformative praxis of societal change is essential for a sustainable and evolutionary future (p. 36). This requires as well a better understanding of the kind of alchemy of transformational change that brings forth sustainability and thrivability (Russell, 2013).

As Daniel Wahl (2016) indicated, sustainability is a dynamic evolutionary process that is participatory and requires ongoing conversations and co-learning practices to participate in this constantly transforming life-sustaining process (p. 40). Furthermore, our current sustainability crisis requires a fundamental shift in the way we live and uphold our values and the standards we set for ourselves and others. The right identification of the syntony links between practical, political, and personal transformation potentials will become increasingly more important for achieving ethical, equitable, and thrivable outcomes for sustainability (O'Brien & Sygna, 2013, p. 21). Resolving out sustainability crisis thus requires a conscious participation in our own evolutionary journey in a way we have never done before (University of Oslo, 2013).

Our current world is full of pain because it denies so pervasively the deeper nature of our consciousness as Life (Laszlo, 2017). We could even go so far as to say that our world as we know it from the unified field of consciousness has hardly yet come into being. As if we have not yet begun and are merely living a shadow version of our true potentialities right now (Smitsman, 2017a). These reflections are not new; they have been echoed and are the echoes of countless sages, wizards, and seers from the dawn of our humanity (Smitsman, 2017b).

The purpose of the alchemical process is to liberate our consciousness by actualizing the universal dimensions within the locality of itself. This is also the symbolic re-birth, the phoenix that rises from its ashes, the resurrection from the death that follows involution. Alchemy facilitates our birth (evolution) into higher states of consciousness by attuning, aligning, harmonizing, and synchronizing our consciousness to the universal dimensions. If necessary this can also take place via a process of death, decay, dissolution, and transmutation, when involutionary processes of consciousness have been set in place. In physical alchemy nothing is wasted; the denser qualities such as lead are transmuted to become the more refined qualities such as gold. And so it is also in spiritual alchemy: when we actualize the universal qualities within the local, we become as Spirit-Matter—the quintessence of alchemy.

Our intention for writing this article is to inspire and remind the reader how to become a state-attractor for the future potentialities that are currently untapped within our local human dimensions. The direction of the transformational change that this article is focused on concerns our collective

thrivability. This requires specific steps and actions in a here and now that can receive and actualize these future potentialities. Through this article we share some of these steps and actions as an initiatory framework.

We invite you as the reader to join us on this quest, to explore how we can become an attractor to bring into being from our future the potentials necessary for our full species awakening. Our own consciousness is the main ingredient for this alchemical process. Within us the potentialities for both evolution and involution exist, in the same way that the potentialities for both manifestation and dissolution exist. We have called our quest the syntony quest, which is explained by Alexander Laszlo (2018) as follows:

[...] syntony is a creative aligning and tuning with the evolutionary processes of which we are a part. It involves listening to the rhythms of change and learning how to play our own melody in harmony with the larger piece—as in piece of music, piece of the whole, and peace. It is finding and creating meaning and evolutionary opportunity, both individually and collectively. This syntony quest, then, is really just a vehicle for the cultural differentiation and purposeful transcendence of social systems through convergent evolutionary pathways. It is the path of syntony and spark, of flowing balance with cosmic emergence. (p. 70)

In essence, the concept of syntony is best captured in the work of Erich Jantsch. He writes of syntony as "inquiry at the evolutionary level par excellence" (1975, p. 103). According to Webster's Unabridged Dictionary (1979), syntony can be defined as "in radio, resonance," while "to syntonize" is "to tune or harmonize with each other." As such, syntony can be understood as a creative aligning and tuning with the evolutionary processes of which we are a part. It involves listening to the rhythms of change and learning how to play our own melody in harmony with the larger whole. It is finding and creating meaning and evolutionary opportunity, both individually and collectively (Laszlo, 2015). In other words, we can talk of intrapersonal syntony (physical, psychological, and spiritual meta-stability and balance), interpersonal syntony (community and societal peace and dynamic harmony), environmental syntony (ecosystemic consonance and sustainability), and future-oriented syntony (consistency and coherence in past, present, and future actions and mindfulness for future generations). As Jantsch (1975) put it, "we shall have to learn now to design systems of syntony" (p. 270).

A deeper understanding of syntony shows it to be a powerful organizing force in societal evolution (Laszlo, 2001). Syntony involves diachronic harmony and evolutionary consonance at various levels of an interconnected complex dynamic system, providing coherence and consistency to change efforts. It is not always a conscious process, but the evolutionary challenge for humanity is to raise it to consciousness so that our actions are intentionally aligned with evolutionary purpose. The simplest form of such conscious intention to create evolutionary consonance would be contemplation of the consequences of our actions and the implications of our intentions, and subsequent alignment of them in ways that are considerate of their likely salient impacts. Of course,

we cannot foresee how any thought, value, or act will eventually play out with 100% certainty, but through mindful and reflective attention, we can learn to appreciate the patterns of stability and instability to which they are likely to contribute. And through an engaged syntony quest, it is possible to consciously evolve human consciousness so that it is more consonant, coherent, and connected with the underlying warp and weft of cosmic emergence.

THE SYNTONY QUEST

The Dao generates the One, the One generates the Two, the Two generate the Three, the Three generate the ten thousand things. (Pregadio, 2014, p. 53)

One of humanity's most favorable questions is: why and what caused this? Our own foray into the nature of reality that we experience from within, which is filtered by our mental fabrics, has given rise to a phenomenal amount of theories, innovations, and technologies. This has also been the driving force for how we became actively involved in the exploitation of our evolutionary potentials as a species. About 2,400 years ago Aristotle wrote about the "four causes" for explaining change in the world (Todd, 1976). Before Aristotle there were many others. Some may say that this deeper searching for causality and understanding why things happen and how things change is an existential quest. Others may argue that knowing why something is happening can give us insights into the laws of nature and thus increase our abilities to work with these laws for our benefit. The question of why also entered into our hearts and minds, and became the source of a series of conversations between us that resulted in this article, where we delved into the why and how of transformational change for a deeper evolutionary purpose.

Transformational change is a concept that is often mentioned these days. There is increasingly more agreement among people that our current societal systems do not contribute to our thrivability and are destroying our planetary health systems (IPCC, 2013; Korten, 2015; Wahl, 2016; WWF, 2012). Somehow many of our current human-made systems are not compatible and aligned with our planetary wisdom. Many of these systems have been designed to extract from nature, not to co-evolve synergistically with our fellow beings within the Web of Life (Smitsman, 2017b). Our current ecological crisis is in many ways the result of our misalignment and disconnection from the wisdom that is Life (Smitsman, 2017c, Smitsman & Chung, 2018). This implies that many of the answers we seek for resolving our global ecological crisis start by listening and attuning to this wisdom that is inherent in all our natural systems (Russell, 2013).

In contrast to the mechanistic view of our Universe that reduced reality to random parts, this article is based on the premise that our Universe is the manifest expression of an embedding and in-forming Cosmos that is whole, conscious, and intelligent. Accordingly, our view of Life is one that deeply acknowledges the interdependent co-arising nature of Life—also called the

Web of Life. This implies that we are not only deeply interconnected, we are each holons of the wholeness of the All that is (Koestler, 1967, p. 48). This worldview of the Universe as whole, conscious, and intelligent has also been called the *New Paradigm*. It is considered a *new* paradigm since it is founded on a different understanding and perception of *what is reality* than what has dominated our current Western societal systems for the last centuries. As explained here by Ervin Laszlo and Alexander Laszlo (2016):

In the second decade of the twenty-first century we can describe the basic tenets of the new paradigm. Particles are not corpuscular entities, and they do not exist independently against a passive background. The fundamental reality is not matter but energy, and the laws of nature are not rules of mechanistic interaction but "instructions" or "algorithms" coding patterns of energy. (p. 5)

This newer scientific understanding of reality as unitary aligns with what the ancient wisdoms have shared for thousands of years. This unitary perception of reality is expressed well in the daodejing. The earlier quote from the daodejing also reveals how the nature of Life is transformational change (Pregadio, 2014). That which is nameless and beyond space-time generates the *One*, which generates the *Two* becoming the *Three*, generating the many of *ten thousand things* we now are. Yet sadly, many of these *ten thousand things* have forgotten the way back to the Dao, the Source of being. The way back home from multiplicity to realization of our underlying unity is the process of alchemy.

Transformational change as a concept does not mention whether the direction of the change is beneficial for Life as a whole. Alchemy, however, does have an implicit intentionality, namely to transform for greater bonding from unity—a marriage between spirit and matter, generating Spirit-Matter. Our quest in this inquiry shares the alchemical intention, namely to use our own consciousness as the resource through which a transformation of our time can emerge from the future to the now, to bring forth more of our underlying unity in the contemporary/concurrent time-space of our collective consciousness. We use ourselves as the bonding mechanism to marry the Spirit of our actualizable future to the Matter of our current space-time. This is the deep work of transformational change that is most needed now (Gidley, 2007). Anything else is playing with parameter settings of limited systems that are designed to collapse.

ALCHEMICAL RELATIONSHIPS

It is only when we transcend our differences, through collaboration, communication, empathy, and trust—when we are ready to co-create—that we can begin to design new types of relationships, new ways of being and becoming, and new ways of living. To seek the transcendence of our differences and to promote co-creation is a path toward higher complexity and wholeness. It is a syntony quest, that is, a creative aligning and tuning with the evolutionary processes of which we are a part, and as such, a contribution to the evolution of consciousness and the creation of new possibilities for the

future. This is lifelong learning. In the face of the planetary challenges of our time, this is our extraordinary common quest. (A. Laszlo, 2001, p. 312)

Although transformational change at the biological level takes place within us all the time, many are not conscious of how to work with this process to also transform parameter settings of their consciousness. For example, every act of eating is an act of transformation as we digest and transform our food into energy and information. We receive the energy from this alchemical process naturally without thinking of it to keep our body going. Yet do we also receive at the more subtle level the realization of the information and knowledge that is within our food (Steiner, 1923)?

As a first step toward being the systems we wish to see in the world, one of our greatest challenges as a species is to change the way we behave and act to live within the carrying capacity of our planet. This is only a first step since it leads to much needed survival patterns affirmed by processes of sustainability, but it does not yet engender the true potential of humans to express love, to create abundance, to celebrate life, and to embody the sacred in patterns affirmed by processes of thrivability—a step based on but beyond sustainability (Laszlo, 2018). This requires an entirely different way of thinking and perceiving from what has become common. It also requires that as agents for transformational change we need to play more consciously and effectively with the processes for which we aim to facilitate transformation (Russell, 2013). This requires that we acknowledge and explore where, on the one hand, we are part of the current structure of the system, and yet, on the other, we are positioned in the potentiality of the system of that which has not yet been realized. One could call this potentiality of the system a future state of the system. To effect change, and even by merely working with the intention for such, one already takes a slightly different position regarding the currently manifested state of the system. Yet, one cannot say one is not part of the current state of the system, since the question for change would not arise if one did not experience the current state of the system.

Holding this creative tension between that which has manifested from future-past potentialities, and that which is not yet visible and emerging from future-present potentialities, is one of the greatest practices of transformational change practitioners. This also includes the awareness that we do not exist within time: we manifest it. We are literally the bridge between Spirit—as future potentialities not yet materialized and matter—as future potentialities materialized. The state of consciousness of the one who works to effectuate transformational change is thus incredibly important and part of the transformation that is brought forth. Thus what becomes potentiated and actualized from within will influence what becomes visible and manifest from our futures into the present.

Working with systems change and transformation is working with alchemy. In essence, transformation is alchemy! In alchemy the denser materials and mental states are transmuted through a process of *Solve et Coagule*. *Solve* or *solutio* refers to the breaking down of elements and structures between

elements, and *Coagule* refers to their coming together into synthesis and unification. Accordingly the element lead becomes transmuted via a series of steps into gold, which is symbolic for the transmutation of our denser states of consciousness into a more enlightened state, represented by gold. This conscious working of our evolutionary process, by working with the raw source materials of the collective unconscious and transmuting them into more integral conscious states, is also what is at the heart of systems change and transformation. The famous psychologist and alchemist Carl Jung said about the collective unconscious, as quoted in Shelburne's (1988) book:

I have chosen the term "collective" because this part of the unconscious is not individual but universal; in contrast to the personal psyche, it has contents and modes of behavior that are more of less the same everywhere and in all individuals. (p. 29).

The same principle applies to systemic transformation processes. There is always the unconscious layer of the system, which in the system's literature has also been referred to as the system archetypes, the mental models, and the structure of the system (Meadows, 2011; Senge, 2006). This unconscious and more structural layer of the system gives rise to patterns of behaviors that become visible via the behavior and interaction patterns of the elements of the system. When working with systemic change and transformation, the start position is often one whereby an event or outcome reveals how somehow behaviors are generated by and from within the system that are not desirable. The question of change arises when we want different kinds of outputs and patterns of behaviors and events, compared to what we see is happening. There are many layers and factors that give rise to a pattern of behavior, and our perception of that behavior also influences how we in turn respond to it. By seeing, observing, and then labeling, one becomes a conscious, purposeful, and intentional part of the system in which this behavior takes place.

Although in some of the reductionist schools of psychology it was previously believed that behavior could change by applying our *will* to this change (i.e., making the volitional decision to act differently), we now understand that this view is too simplistic. Only when we work with the deeper structural levels of the system, individually and collectively, does new behavior emerge from within the changed parameter settings of the system. Anything else is merely tending to the event levels of the system and facilitates at best a temporary surface change. That is why simply giving people verbal instructions about values and desired behaviors and outcomes is not sufficient for producing these outcomes. If it were that easy, this research would not have been needed and our world would not be in the kind of crisis it is in today. Meadows (2002) expressed this elegantly in the following way:

The idea of making a complex system do just what you want it to do can be achieved only temporarily, at best. We can never fully understand our world, not in the way our reductionistic science has led us to expect. Our science itself, from quantum theory to the mathematics of chaos, leads us into irreducible uncertainty. For any objective other than the most trivial, we can't

optimize; we don't even know what to optimize. We can't keep track of everything. We can't find a proper, sustainable relationship to nature, each other, or the institutions we create, if we try to do it from the role of omniscient conqueror. For those who stake their identity on the role of omniscient conqueror, the uncertainty exposed by systems thinking is hard to take. If you can't understand, predict, and control, what is there to do? (pp. 1–2).

When we work with transformational change, there is always an interchange and transfer from unconscious to conscious. It is in the unconscious that the archetypes are said to be present (Jung, 1969). In Systems Thinking we call this the structure of the system that produces the patterns and behaviors (Meadows, 2011; Senge, 2006); the invisible layer in the iceberg model that is below the surface. This structural level of the system has also been referred to as the mental models. When we facilitate a systemic transformation process, we are always in contact with the collective unconscious, even if we are not aware of this. The term *collective unconscious* is here referred to as described by Carl Jung (1969):

A more or less superficial layer of the unconscious is undoubtedly personal. I call it the personal unconscious. But this personal unconscious rests upon a deeper layer, which does not derive from personal experience and is not a personal acquisition but is inborn. This deeper layer I call the collective unconscious. I have chosen the term "collective" because this part of the unconscious is not individual but universal; in contrast to the personal psyche, it has contents and modes of behaviour that are more or less the same everywhere and in all individuals. It is, in other words, identical in all men and thus constitutes a common psychic substrate of a suprapersonal nature which is present in every one of us. [...] The contents of the personal unconscious are chiefly the feeling-toned complexes, as they are called; they constitute the personal and private side of psychic life. The contents of the collective unconscious, on the other hand, are known as archetypes. [...] The archetype is essentially an unconscious content that is altered by becoming conscious and by being perceived, and it takes its colour from the individual consciousness in which it happens to appear. (pp. 3–5).

THE RELATIONSHIP OF STRUCTURE

To formulate an alchemical theory of transformational change, we first need to enquire more deeply to what we attribute causality and whether causality is a mental construct that we project onto life. In the field of System Dynamics, causality is attributed to the structural levels of the system. These structures are seen as dynamic and arise from the way the elements in the system are interconnected and the nature of the feedback loop systems that drive the flows and processes in the system (Meadows, 2011). In most of the different religions and faiths, causality is attributed to a larger Being, Deity, or Unity that is seen to be the cause for all that has evolved from it. Jung, who was also an

alchemist, attributed causality at the level of the archetypes in the collective unconscious, which he regarded as psychic structures. These archetypes were seen to drive how this larger Being makes itself expressed through and as us. In both cases, irrespective of whether this is based on modern scientific understandings or ancient philosophies, causality is defined as the structural dimensions of our phenomenal worlds. The question was, to what do we attribute causality? In order to progress in our exploration, let us assume for now causality can be attributed to a large extent to the structural dimensions, which can be made more visible by looking at how energy and information flow and are distributed in the system. This brings us then to another question, namely what do we mean by *structure* (Emery & Trist, 1965)?

Structure is often associated with something tangible and solid, that on which other things are built. Structure is also associated with the inner design of something, the architecture. In some mystical traditions, God was seen as the prime architect, and God as architect and architecture was thus seen as present in everything and everyone. Accordingly, to study the structure, as in the architecture of life and the universe, was considered to be the primary path for coming closer to God. However, what if structure is not a thing or set of things, but rather a set of principles and relationships between principles? For example, in alchemy there is a relationship between three principles, which act as a unity that is also called a trinity (i.e., a unity with three aspects). The relationship whereby three aspects always act as one and one becomes two, can be drawn structurally as a triangle. In their book What is Reality Laszlo and Laszlo (2016) expressed that it appears that what we have come to call "space and time" seems to originate from a ground of pure geometry; in a deep dimension that is not in space-time, but in-forms space-time—what they call "the Akashic Dimension." This dimension in-forms space-time and thus also informs structure (p. 22). Let us therefore take the same line of questioning even further: to what do we attribute structure?

If we attribute structure to relationships between elements, and we attribute relationships between elements to universal principles, then is there also an organizing principle that influences how these various principles are connected within and among themselves? Is this organizing principle that generates coherence, order, and structure perhaps what we could call intelligence and consciousness? According to David Bohm, Ervin Laszlo, Fritjof Capra, and many others it is here that we become aware of the universe as consciousness. Let us again go one step further. If these higher-level organizing principles are essentially relational, in the sense that these principles do not exist independently and separately from our phenomenal world, it then follows that wholeness itself is the organizing principle. If we now apply this to our exploration about causality it opens a much richer view, one whereby wholeness is causality. In this view, there is not one thing that acts on and causes the effect on other things. Wholeness self-causes change through the interdependencies and interconnections of all that is, and operates as a trans-temporal and non-local holographic field (all that we think of as the Cosmos) that in-forms and gives rise to manifest reality (all that we know as the Universe)—potentially and actualized.

The notion of the *planetization* of humanity—in contradistinction to the politico-economic push toward globalization—may offer a pragmatic framework for the embodiment of this type of consciousness. The term was originally coined by Teilhard de Chardin (1959/2002) in his work "The Phenomenon of Man" to describe the level of integration in human, planetary, and indeed cosmic relations wherein "the outcome of the world, the gates of the future ... will only open to an advance of all together, in a direction in which all together can join and find completion in a spiritual renovation of the earth" (pp. 243–245). Chardin believed that this would occur only when humanity would reach a level of syntony such that it would be possible to connect "directly, centre to centre, through internal attraction ... through unanimity in a common spirit" (p. 112).

EMERGENCE FROM SYSTEM WHOLENESS

OM! That (the Invisible-Absolute) is whole; whole is this (the visible phenomenal); from the Invisible Whole comes forth the visible whole. Though the visible whole has come out from that Invisible Whole, yet the Whole remains unaltered. OM! PEACE! PEACE! (Paramananda, Isavasya Upanishad, 1919, p. 25)

This view of wholeness also includes the invisible dimensions of Life and those dimensions that are not yet expressed through or in any form. By virtue of space in the room, furniture can be placed. Without space there would be no objects. Since everything is not a thing but a set of potentialities and relationships, all is always in an ongoing dance of emergence, transformation, transmutation, and dissolution. In a world where all is interdependent and interconnected, each movement and impulse contributes to (although does not necessarily cause) another movement and impulse. Nothing exists in isolation, nothing exists outside the wholeness. All co-arises in an ongoing conversation of attraction, which in essence is what allows for any relationship to inhere.

If we consider that wholeness *is* the underlying creative principle for emergence, it then follows that mutuality and reciprocity is the syntony language of vibrational clusters of coherence within the Web of Life, and not cause and effect, or input–output relationships. The implicate order (Bohm, 1980) that we can find within the wholeness comprises a cosmic dance. The implicate order of this cosmic dance, codes for the structure of living systems within a dynamic ever-evolving universe. This wholeness view is important to consider and can avoid a simplistic cause-and-effect view that is common in popular thought. Basically, when we view reality from the perspective of wholeness we become aware that all phenomena are a continuum of an unfolding process of relational dynamics, within a field where emergence unfolds through a dynamic interchange (Smitsman & Corbetta, 2010). Each of these principles exists in complementary relationship to one another. The concept of an

attractor has been most highly developed in Complexity Theory and Dynamical Systems Theory, known more popularly as Chaos Theory, and is most widely used in nonequilibrium thermodynamics to model the stochastic behavior of complex systems over time. The easiest way to think about an attractor is just to focus on the obvious: an attractor is something that attracts. But unlike the magnetic attractors we are all familiar with, this broader category of attractors is not limited to metal objects, nor is it limited even just to electromagnetic force-fields. A whirlpool that forms in the currents of the ocean is an expression of an attractor, and so is the pattern of movement of cars in a traffic jam, and even the way in which a powerful idea shapes society. The point is that attractors are what describe the dynamic behavior of complex systems, so that one type of attractor describes, for example, the pattern of behavior of a crowd of people who are just standing around, perhaps listening to someone or something; another type of attractor describes the behavior of that crowd as it cycles through states of calm listening, buzzing agitation, excited shouting, back to calm listening, then perhaps straight back to buzzing agitation again, and so on; and a third type of attractor describes the behavior of the crowd turned tumultuous riot. In each case, the type of attractor (from the static to the periodic to the chaotic) portrays the dynamics of change of the whole complex system and therefore can be understood as "a pattern of behaviour that [the] system moves toward over time" (Goerner, 1994, p. 212).

With affordances we mean to refer to qualities inherent in a situation or in an object's sensory characteristics that permit specific kinds of uses. For example, a button, by being slightly raised above an otherwise flat surface, suggests the idea of pushing it. A lever, by being an appropriate size for grasping, suggests pulling it. A chair, by its size, its curvature, its balance, and its position, suggests sitting on it. In analogous ways, anything that serves as an "invitation" or state attractor for organizing behavioral patterns can be thought of as an affordance. The first law of thermodynamics states that energy can neither be created nor destroyed; rather, it can only be transformed from one form to another in accordance with the law of conservation of energy. The energy potentiality that is mobilized by the attractor and supported by the affordances in the system, transfers from one state to another. When the system replies to its activation, the initial energy is transferred and received, which gives rise to the next activation and impulse. The energy potentials that become activated by the initial attractors act from within the same energy field as those that become the embodiment for these activations.

Our sensory organs, including the brain and heart, have the capacity to transceive between the implicate order and the explicate order of the systems. In this way the human being as a living system within the larger universal systems acts as a transducer, manifesting the codes from the "matriz" in forms that can be embodied and enacted. The term "matriz" relates to the notion of an embedding or nurturing and potentiating ground state out of which emerges the self-actualized potential of the systems it nurtures. According to the Chilean biologist and systems scientist Humberto Maturana, "[...] it makes

reference at the same time to the condition of origin of human beings in the biology of love (matrix = uterus [in Spanish]) and to the relational weave (matriz = pattern of relationships) characteristic of the interplay of emotion and reason" (Maturana & Verden-Zöller, 2008, p. 1).²

Through this syntony dance of attraction and transduction in the nurturing context of the cosmic matriz, the system brings itself into being and regulates the actualization of its potentials. Cause-and-effect concepts constrain our innate sense-ability to remain in tune with the underlying dynamic process of emergence (Laszlo, 2015, pp. 165-173). The notion of living in a sterile universe governed by mechanistic laws of cause and effect that determine the patterns of interaction among all physical objects is a billiard-ball model cosmology: every action is both the cause of other actions and the effect of previous actions. Where is the space for creativity, for life, for spirit, beauty, insight, awe, and vitality in this formulation? The fact is that it is not there—it is not part of the classical models of the cosmos where the evolutionary topgraphy is ruled by laws of cause and effect. What if those laws were simply patterns of emergence so closely correlated as to appear inextricably coupled? And what if they actually were inextricably coupled—in ways quantum physicists would describe as entaglement and macro-sociologists would describe as intertwinglement?³ It would then be possible to describe the evolutionary topography in terms of fitness peaks and troughs based on relational attractors.

These attractors govern the dynamics of all processes of emergence and replace the explanatory construct of cause–effect relationships. They make it possible to see the universe as a living set of relationships, a conversation among all its constituent parts, from the smallest to the grandest scale. As biophysicist Mae Wan Ho (1998) put it so eloquently, it's like seeing everything as an integrated organic orchestra in which all players produce the harmonies of this cosmic symphony:

To give an idea of the coordination of activities involved, imagine an immensely huge superorchestra playing with instruments spanning an incredible spectrum of sizes from a piccolo of 10–9 meter up to a bassoon or bass viol of a meter or more, and a musical range of 72 octaves. The amazing thing about this superorchestra is that it never ceases to play out our individual songlines, with a certain recurring rhythm and beat, but in endless variations that never repeat exactly. Always, there is something new, something made up as it goes along. It can change key, change tempo, change tune perfectly, as it feels like it, or as the situation demands, spontaneously and without hesitation. Furthermore, each and every player, however small, can enjoy maximum freedom of expression, improvising from moment to moment, while remaining in step and in tune with the whole. (p. 55).

With this way of interpreting the interdependence and mutual co-arising of all processes of emergence in our extraordinary ordinary creative cosmos, we find ourselves all of a sudden inhabiting a universe that is alive, that is a living conversation or an improvisational jam session, expressing the underlying *anima mundi* of all things. But such a view is only attainable once we eschew

the sterility of the mechanistic and reductionist perspectives derived from a cause–effect framework to explain the nature of relationships among all things.

Based on this dynamic understanding of emergence, actualization, and embodiment, we can say that the future is the attractor for the present, the present the affordance for the future, and we the embodiment of the future in the present. Accordingly, the process of emergence and becoming is a process from potentiality into actualisation. In material alchemy, the principle of sulfur constitutes the dissolution and disintegration of former structures to liberate the higher potentialities via the principle of mercury through which it is re-united in stronger bonds, which are made manifest through the principle of salt. Sulphur, mercury, and salt each exist as potentialities within one another, and they act together in a trinity relationship.

The next question to explore is, can we as human beings influence the process of emergence and manifestation? If, as Jung mentioned, the collective unconscious and its inherent archetypes (i.e., psychic structures) are always working through us and are beyond individual human choice, can these archetypes be changed by humans by attracting into being different potentialities from the future? Or can we merely become conscious of how these archetypes work out through us. In the field of Evolutionary Systems Design (see A. Laszlo, 1999, 2001), the premise is that we can change the structure of our social systems and thus effect different outcomes by doing so. Yet this raises again another question; namely, whether this change of structure is not in itself the action of a deeper underlying archetype. The archetypes of Jung as the psychic structures of our collective (un)consciousness cannot be equated to mean the same thing as the system archetypes such as described by, for example, Meadows (2011). Returning to Jung, by working with the collective unconscious one is changed by it. If that change results in an increase of awareness, then one's ability to consciously work with the potentialities of the layers in the collective unconscious also increases. This, consequently, can accelerate and influence how the potentials of the collective unconscious are expressed from within and through the person.

By exploring the questions above, it also raises the fundamental question of how reality is perceived. Whether reality consists only of changeable transient components (i.e., change is the constant factor), or whether reality consists of both absolute (unchangeable) and relative (changeable) qualities. In the Buddhist traditions, reality is defined as having absolute and relative qualities (Khenchen Thrangu Rinpoche, 2003). The absolute aspects are seen as universal principles and qualities that are not influenced by temporal dimensions. The relative aspects are seen as interdependent qualities in the phenomenal world that are always transient and constantly changing. Depending on how we perceive *that* which changes and thus *what* reality is, it also influences how we see our role as co-creators with(in) the universe and all the potentials it contains. This search for causality as a means to control outcomes makes way for a much deeper and richer understanding of ourselves as the Syntony Dance through which the universe makes itself manifest. This relational awareness

can then also be applied to how we perceive the structural dimensions of our inner and outer worlds. Going back to the old teachings of alchemy, from an alchemical perspective structure is not a thing, it is relationship between various principles that are a unity (Dubuis, 2007; Steiner, 1923). These principles always show up as the underlying conditions for the events we observe in our phenomenal worlds. As such the alchemist Sigismund Bacstrom said: "[...] one in essence, but three in aspect. In this trinity is hidden the wisdom of the whole world", (Bacstrom, 1977).

A PERFECT STORM OR CONTRACTIONS FOR BIRTH?

We started this article by stating that: Our intention for writing this article is to inspire and remind the reader how to become a state-attractor for the future potentialities that are currently untapped within our local human dimensions. The direction of the transformational change that this article is focused on concerns our collective thrivability. When we consider the growing impacts of climate change, economic systems that continue to drive our eco-systems to the point of collapse, growing uncertainty in our economic and financial systems, political polarization combined with increasing tensions between various nuclear powers that can quickly lead to widespread escalation, we seem to have all the ingredients for a perfect storm. Yet, these same symptoms could also be interpreted as the prelude to our collective birthing and next rite of passage, in the same way that the expecting mother goes through many practice contractions prior to the ones that produce the birth and final push. Collectively, we too are experiences various states of contractions, which can at times be violent and chaotic. The question of how we can become a stateattractor for the future potentialities of our collective thrivability and our next stage of being seems never to have been more pressing than it is now.

In the book chapter "Living the New Paradigm: Syntony and Spark in Life, Being and Becoming," Alexander Laszlo describes a state-attractor of supercoherence. It is precisely this state-of being that is required to transhift the destructive potentialities of this *perfect storm* into the dynamics toward *contractions* that ready us for birth. He describes five coherence domains for human thrivability, whereby supercoherence emerges when all these five coherence domains become coherently and synergistically aligned in daily practice:

- 1. The intra-personal dimension of coherence; thrivability within oneself.
- 2. The inter-personal dimension of coherence; thrivability with one's communities and social systems.
- 3. The trans-species dimension of coherence; thrivability with the more than human world.
- 4. The trans-generational dimension of coherence; thrivability with past and future generations of all beings.

5. The pan-cosmic dimension of coherence; thrivability with the deep dimension of immanent consciousness in the cosmos. (2018, 69).

As alchemists for thrivability it is precisely this fifth state of supercoherence where our attention is focused. It is said that quantum entanglement (or intertwingularity) and coherence are two fundamental qualities of nature that arise from the superposition principle of quantum mechanics (Qiao et al., 2017). The superposition principle from a quantum physics perspective states that particles are considered to exist across all the possible states at the same time. In this way it is said that a particle can be in two places at once. It is another way of seeing the trinity principle at action, what appears at a lower level to be a duality or even a polarity, is at a higher level united. ⁴

The superchorence domain, which we call here the fifth state, is the praxis and portal through which we become the state-attractors for our future potentialities. In this fifth state, past–future–present are within the same domain, and the earlier four coherence states integrate and syntonize. Most of the time human beings operate at lower coherence levels or in absence of coherence, which makes it difficult for people to access the potentialities that this fifth state affords us. People who are coherent with(in) themselves, their relationships, their environment, and the greater reality of Life are able to effectuate coherence in others simply through their way of being. This ideal state is rare; the examples of people who have mastered this are few.

We have set the stage for our next rite of passage, the context and urgency is clear with growing pressures on our climate, and increasing risks in many of the most vital domains—food, water, air, and health. These growing risks, insecurities, and imbalances have also been bringing forth tremendous potentials for innovation, creativity, and collaboration (Wahl, 2016; Wood, 2017). How we rise to this occasion will determine in many ways whether we become the attractors for chaos and breakdown feeding the perfect storm scenario, or syntony and convergence bringing forth our collective birth into new stages of consciousness. As shared in the beginning of this article, the purpose and intention of this article is to contribute to our collective birth in this triple birthing process, whereby we act as midwife, the one giving birth, and are the baby being born—all three process states, simultaneously. To support this collective birth and to shift potentialities away from the perfect storm scenario there are a few barriers of systemic transformation process that we like to draw attention to. The analysis of these barriers results from the Ph.D. research conducted by Anneloes Smitsman since 2014. It is based, among others, on analysis of several case studies of organizational transformation processes in Mauritius. Smitsman identified the following barriers through this research (Smitsman, 2018):

1. Conflicting worldviews—mechanistic divisional worldviews have become the lens through which many people envision and carry out their goals.

- 2. Conflicting goals—mechanistic economic goals often drive educational and political goals. These goals tend to be based on methods of extraction and competition, designed for exponential growth and maximization. This produces behavior that prohibits collaboration, optimization, syntony, regeneration, and integration.
- 3. Artificial system boundaries—human-made systems do not acknowledge sufficiently our interdependencies and impacts on natural ecosystems and spheres of interconnectivity.
- 4. Dominant feedback loops in the system distort reality—indicators for feedback are often based on narrow fragmented perception of progress and development. What we measure and report on drives the worldviews and goals that are at the root of our current crisis.
- 5. Lack of capabilities for systemic transformation—there is a lack of competency and vision development for the necessary systemic transformation processes, at the scale and rate required now.
- 6. Lack of systemic support systems for transformational change—without a community of practice that shares the deeper values and goals underlying transformational change, people often find it hard to sustain the effort,
- 7. Becoming more conscious can be painful—when we truly start to realize what we are doing, why, and whose interests this serves, it can be very painful. People do not like to feel pain, hence many avoid going into the belly of our awakening where we come face to face with our collective shadow.

Transformation of these barriers is no small task and cannot be carried out by any single person or entity. Being conscious that these barriers exist is a first step. The coherence levels required to effectively dissolve and/or transform these barriers requires collective learning process between people, which are still largely missing. Changes in worldview and goals require new experiences of what it means to be human within our current context where our thrivability is very much at risk. Changes in experience also require changes in our worldviews and goals. As long as the current economic paradigm that is still largely fossil fuel–dependent does not change, this will continue to drive our human behaviors in ways that move us further and further away from flourishing and thrivability. The day-to-day experiences that many people around the world have make the SDGs set forth by the United Nations look like a wonderful ideal, yet often unattainable for the masses. And yet, still we have hope.

More and more people are opening to a paradigm shift, setting new goals that include deeper levels of syntony with themselves, others, and our planet. Our human-made systemic boundaries are starting to become more inclusive of our natural eco-systems, new indicators are being developed that redefine how we measure success with greater emphasis on happiness and wellbeing.⁵ There is greater emphasis on capacity and competency development for thrivability,

also within the private sector where profitability is no longer solely defined by the financial bottom line (World Business Council for Sustainable Development & The Boston Consulting Group, 2017). People are starting to form the learning eco-systems through which they can cultivate collaboration and co-creativity (GEF, 2014–2017). And finally, many people realize that even though awakening can be painful, to live in numbness and from disconnection is ultimately far more painful.

The alchemy process of our inner and outer transformation to a more conscious species has begun. The deeper transmutation is at work within the heart of our collective darkness. As by the principles of alchemy, we first move through a process of revealing and dissolving our impurities. Our blinders that prohibited us from having a whole worldview fall away (Currivan, 2017; Guillemant, 2014). Our ignorance gets combusted, making it possible to receive new visions. The alchemical process is an ongoing process through which we learn to integrate and embody all the various states of consciousness. The interconnected ways of seeing from the systems sciences with our focus on sustainability and thrivability help us better understand and prepare for the promised quintessence as a result of our alchemical transformation. This quintessence, as the alchemical gold of our new ways of being and relating, is being born from this painful birthing process. With the empathetic sense-abilities of the doula and mother, we understand that the contractions are still long and deep. Hopefully, soon the baby is ready to emerge, as a new expression of us.

NOTES

- Anneloes Smitsman is an external Ph.D. research candidate at the International Centre for Integrated Assessment and Sustainable Development at Maastricht University. Promoter is Prof. Pim Martens, co-promoter is Prof. Alexander Laszlo.
- Translation by A. Laszlo from Systemic Perspectives No. 94/95, retrieved from http://www.redsistemica.com.ar/articulo94-1.htm. Cf. Maturana and Verden-Zöller (2008).
- *"Intertwingled" is the term coined by Theodor Holm Nelson in 1974 that conjoins "mingled" and "intertwined" to indicate a state of deep and complex connectedness and interpenetration.
- 4. We prefer to use Nelson's term "intertwingularity" compared to "entanglement," since entanglement can carry with it the association that there is a form of entrapment, rather than just interdependence and interrelatedness.
- 5. The Organisation for Economic Co-Operation and Development (OECD) developed an Index that allows comparison of well-being across countries, based on 11 topics the OECD identified as essential, in the areas of material living conditions and quality of life. Retrieved from http://www.oecdbetterlifeindex.org/.

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