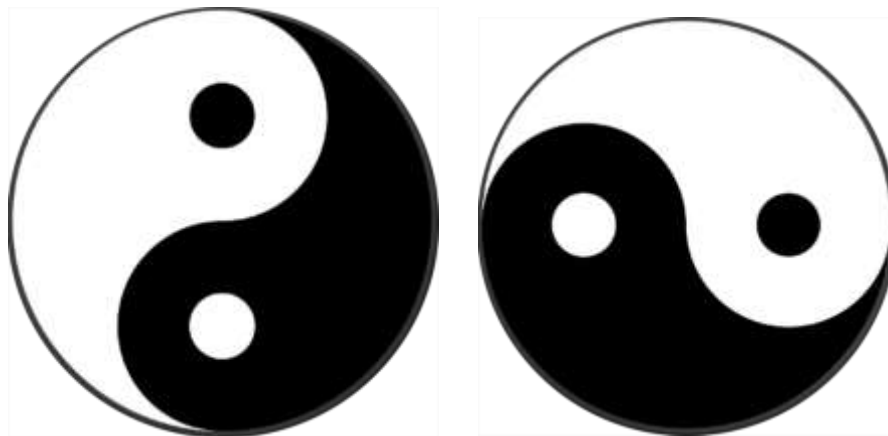




Consciousness Expansion – Self-Evolution using the S2 Model.

The Tao Cycle

The S2 model gets its name from the double oscillation of the Tao. The vertical and horizontal renditions of the Tao are shown below:



The demarcation between the light and dark sections takes the form of a reflected S curve as the flow appears to move in a clockwise direction. The dots in the middle of each flow represents the idea that each flow contains in itself the seed of the reverse flow.

Envisioning the Tao as the union of the forward and reverse flows is expansive to our understanding of how the universe works. We look at the sunlight we receive during the day as the source of energy for humanity, and in fact for all life and even our weather cycles. Yet, during the night an amazing thing happens. The excess heat accumulated during the day is radiated away into space, mostly as invisible infrared radiation, cooling down the earth - so that we can partake again in the sunlit bounty of the next day.

Those of us who have studied electrical circuits know that the outgoing charge must have a path to come back to the source for a circuit to be completed, only then can useful work be done. The blood that flows into the organs from the heart needs a reverse flow to get back to get recharged with nutrition and oxygen. One complete cycle of the heart, we also know as a heartbeat, can also be described as an oscillation. Many oscillations in an ongoing fashion form a vibration.



Being able to expand our consciousness from a narrow part of the cycle which might look random, to experiencing the whole cycle; and then on to experiencing the pattern of the cycle repeating itself is very liberating. As mentioned, a pattern that has a repetitive time element to it can be thought of as a vibration. Over time, there might be patterns evident in the vibration itself, like beats, and even music.

Yet, time is not the only dimension in which patterns repeat – there is also location. Day and night chase each other across the face of the earth on a daily basis, and the seasons change in reverse in the Northern and Southern hemispheres. Using the insights of Einstein's General Relativity, we know space and time are but expressions of the same phenomenon, also known as 'space-time', which between them can contain a host of different vibrations.

Moving from Relativity to Subjectivity, we encounter the Tao again. Our consciousness, which defines how we perceive ourselves, the awareness of self and our surroundings – is also referred to as Subjectivity. Our consciousness itself keeps a rhythm throughout the day, and seems to take time off during deep sleep. In addition, the typical human being, over our life-cycle experience an increase, a sustained plateau, and then an inevitable decline in our mental capacities. The cyclic nature is also perceptible when we receive assistance from others (especially when we are young), become the net provider of assistance when in our productive years, and then again require attention when we become old.

For an individual, in isolation, it might appear to us that what we receive is most important – but to complete the picture it is equally vital to remember what it is we give away. Over time if we can envision a sustainable pattern of give and take, then we expand our understanding of both ourselves and our environment. This is the inspiration of the Tao, which we will use to build our S2 model.

Dual Oscillation of the Tao

One of the deepest mysteries of the world is the interconnected nature of Materiality and Potentiality. Rain falls in the desert (around Phoenix where we live) and overnight the ground changes from brown to green. Pretty soon wild-flowers are everywhere. Again, no rain for a few months, and all the vegetation withers away, but we know that the seeds are still there – waiting for the next cycle to start up. The potential of the 'seed', is given prominence as the eye of the Tao. Yet, for humans and for most animals, the seed that represents our next generation are but cells in our body that are invisible to the naked eye. Hence, as we diagram the Tao in this dual oscillation model, the eye can be thought of as vanishingly small, and invisible on the surface.

In the field of technology, descriptions for the most sophisticated objects can be coded into digital data that can fit into a tiny chip, or be transmitted wirelessly in an invisible manner. Here too, the seed is really tiny, yet it has the potential to become the next



generation technological marvel. This ultra-condensed genetic content is usually referred to as the 'genotype', and the fully materialized instantiation as the 'phenotype.'



The first oscillation of the Tao is between Potentiality (seed) and Materiality (fully realized). This cycling between the Potential and Material is clearly evident in living organisms, and can also be extended to anything that is imagined, designed and implemented by humans. The amazing threshold that we cross with self-evolution is that we humans now get to participate in consciously evolving ourselves, especially our next generation. This applies equally to who become as humans individually, and also what we develop into as the composite human civilization.

The Second Oscillation

The second oscillation of the Tao goes to the root of our sense of identity and consciousness. As noted earlier, our consciousness (also referred to as Subjectivity) itself goes through daily cycles. The I, the self, the observer, will also go through much larger, life-scale expansion and contraction cycles - oscillating between the Individual and the Universal.

Roughly the first quarter of our life is spent on developing our sense of identity, and getting to know our inner selves. Through the first two years of development, studies have shown that the "Theory of Mind" typically does not form in humans. Test have shown that lacking a Theory of Mind the infant assumes that anything she knows is also



known by everybody else. Once the theory of mind sets in, children can now distinguish what others could be expected to know based on their subjective point of view. If Mommy asks “Who left the front door open?” the 18 month old might say “oops” assuming Mommy knows. The five year old might respond with “not me” having surmised that Mommy wasn’t there to observe the kids when the door was left open.

Human babies are born surprisingly defenseless and incapable of surviving independently. It is not only the mother, but the family and society at large that takes on the responsibility of feeding, clothing, educating and skill-building – so that the youngster can now survive on their own, and become fit for society. Physical and mental fitness also peaks in the late teens and early twenties, and establishes us as the person we have become. In a Darwinian sense, the individual is now fit – in a manner so as to procreate and pass on their genes to the next generation.

Individual fitness may lead to dominance amongst animals and even amongst primitive societies of humans, but is just the beginning for humans living in a complex social structure. Studies have shown (Scientific American, Sept 2014, The IT Factor), that some great apes (e.g. Chimpanzees) come close to humans in the traditional IQ tests, and do develop a basic theory of mind. Where humans pull away is in the Social Cognitive skills, which includes language and the ability to envision what we can achieve via social cooperation. The middle half of our life can be seen as working in ever wider social contexts, to benefit not only us, our families, but also the overall society around us. This part of the second oscillation that moves us away from Individuality and towards Universality.

Universality



Individuality

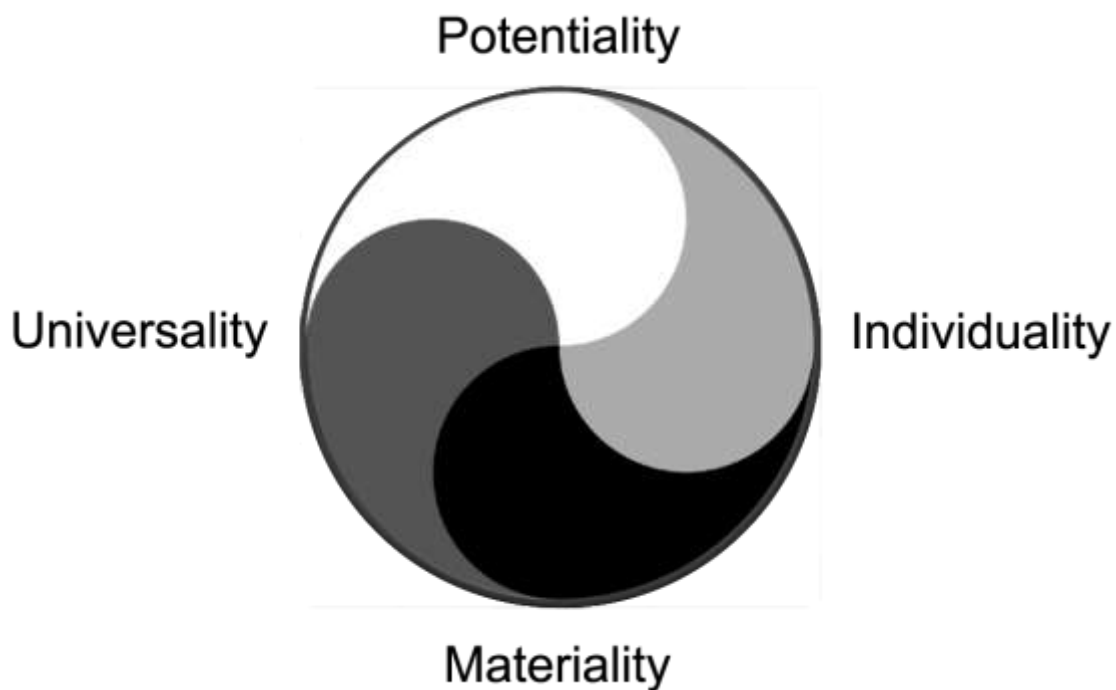
The reverse flow back from Universality towards Individuality, can be thought of as the last quarter of the typical human existence, when we can no longer keep up with the vast symphony of worldly activities, and often start concentrating on the essential, the



spiritual aspect of what existence is all about. We disengage from the torrent of daily happenings to focus more on the potential - the alignment of possibilities that define what 'could be,' but is hidden from us; and also what is now ripe to 'come into existence.' To be deeply creative in a self-evolution context, it is necessary to step back from the routine of daily existence, and do an intensive search of the best possibilities that lie in wait at our next level of our existence. This isolation and introspection is almost a necessity for us to be able to unlock the best potential there is for humanity via self-evolution.

The Superposition

When we superpose the two oscillations together, we have the composite that looks as follows:



The flow is still clearly clockwise, and a full cycle round the clock would represent a typical journey for a self-evolving entity. We now have black, white and two shades of gray, dividing our development into four equal quadrants. For a person who lived for 100 years, each segment would nominally be 25 years, but will vary significantly from person to person.

At this point let us superimpose on this four quadrant system, the twelve hour clock face. This helps us envision how a human life cycle might develop in the context of the dual oscillation of the Tao. In addition to the four extremities of Potentiality,



Individuality, Materiality and Universality, we now also have the four quadrants, Q1 → Q4, and each quadrant is divided into three 'hours', which we can use to further describe our journey through the self-evolution cycle.



The S2 inscribed inside the circle, hold between the two letters the heart symbol. The two caressing touches at the top and bottom - also have special significance. The heart is the symbol of love, and the emblem of someone who works tirelessly for the benefit of the whole. The two soft touches at 12 o'clock and 6 o'clock represent existential discontinuities which take special effort and discipline to overcome. These significance of the top caresses we will discuss further in a future chapter.

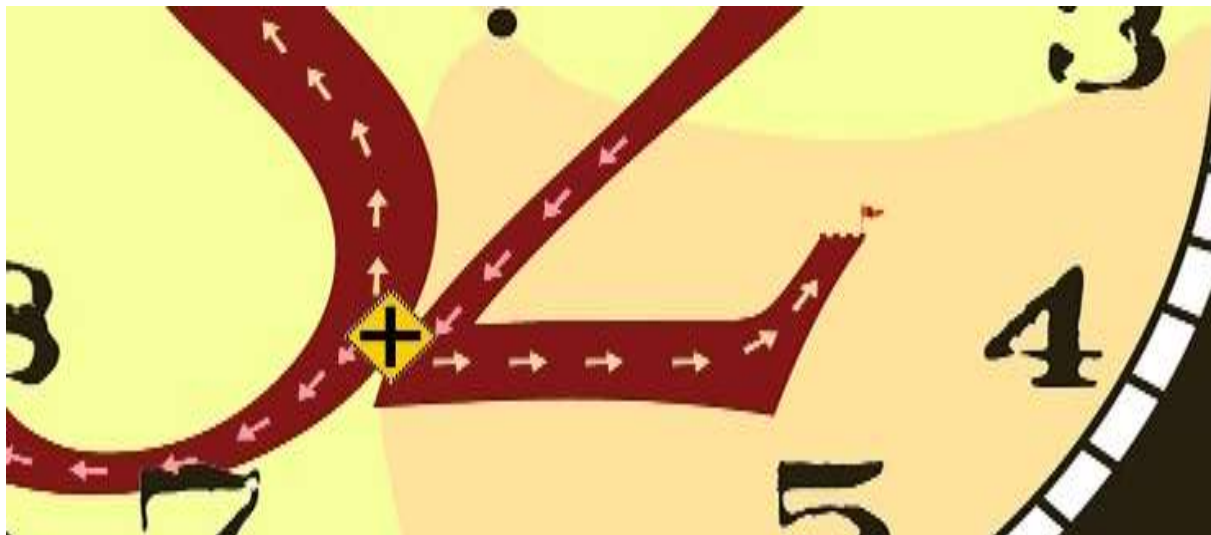
The Bottom of my Heart

Let's imagine, once more, the life of a person who has successfully made it through the first two quadrants. In Q1, he built himself up, and became a productive Individual. In Q2 he took his productivity to new heights, raised a family and provided for them. He was able to save enough for later years, and finds that the economic imperative that drove him during the Q2 years has begun to lose its allure. By two widely acclaimed measures of success, genetic and economic, he is on top of the world. He is at the apex



of the material footprint, and wonders if there is more to life than genetic procreation and asset accumulation.

Across the fence, at the bottom of the 'S' she can spy the beginning of Q3. Going across the bottom would involve losing more of the individuality and taking on more of the universal struggles we face as humans. Q3 is the realm of Social Consciousness, and becoming aware of wider opportunities within which we can be of service. This is the time of giving back, and utilizing our economic footprint for the greater good. Yet, this is not for everybody.



Inevitably, there will be some of us who can't come to terms with the reduction in Individuality and Materiality. These are the people who would withdraw from the caress, and go back deeper into Q2 activities. Marriages may break up and new family units formed. Or one might immerse themselves in scaling new heights of economic accomplishment. This is the 'flat' section at the bottom of the '2' that goes back towards 5 o'clock. Surely enough, with the increased accumulation of wealth, the need arises to protect it. The individuality that is being protected now is the 'Tribal' identity, and the spur going back from 5 o'clock to 4 o'clock can be thought of as building a fortress. A tribe can be thought of as any collection of individuals who share a clear sense of identity, and it is clear and un-ambiguous - who is included vs. who is excluded.

For others still, we find that society is under siege, and moving further towards Universality risks losing the very foundational structure that defines our way of life. Here too, the urgency of fortifying and defending not just our wealth, but also our 'way of life' takes on a paramount importance. Inevitably, the end result is the same, the fortification of the current 'way of life' and the building of the fortress spur going from 5 o'clock towards 4 o'clock.



Throughout much of history, mankind has lived primarily in the Q1 and Q2 segments, dividing humanity into the 'haves' and the 'have-nots'. Our fortresses took the form of city states and even nation states with significant barriers to entry. This is the story of the rich, who seek to protect themselves and their wealth; and the powerful, who seek to plunder and bolster their own wealth. The rise and fall of civilizations are based on this basic idea, and history has gone through many repetitions of the same theme. Yet, this is only half of the human story. Our true potential starts when we willingly decide to bridge the gap at the 'bottom of our heart' and enter the third segment (Q3).

If Q1 is thought of as the development of Individual Consciousness, Q2 is the development of Tribal Consciousness, then Q3 is the realm of Social Consciousness. Crossing the divide means putting more emphasis on the connected nature of our existence, and less on the individual and isolated. In a tribal environment, or its economic counterpart, the corporation, it is easy to see how all members materially benefit by working together. Yet, in Q3, when the society at large benefits from our efforts, that connection to personal material benefit is no longer apparent. Our rewards now come from items near the top of the Maslow's hierarchy of needs, things like 'esteem' and eventually 'self-actualization'. When we reach that last step, we no longer need any external appreciation for our efforts, and satisfaction and motivation both come from within.



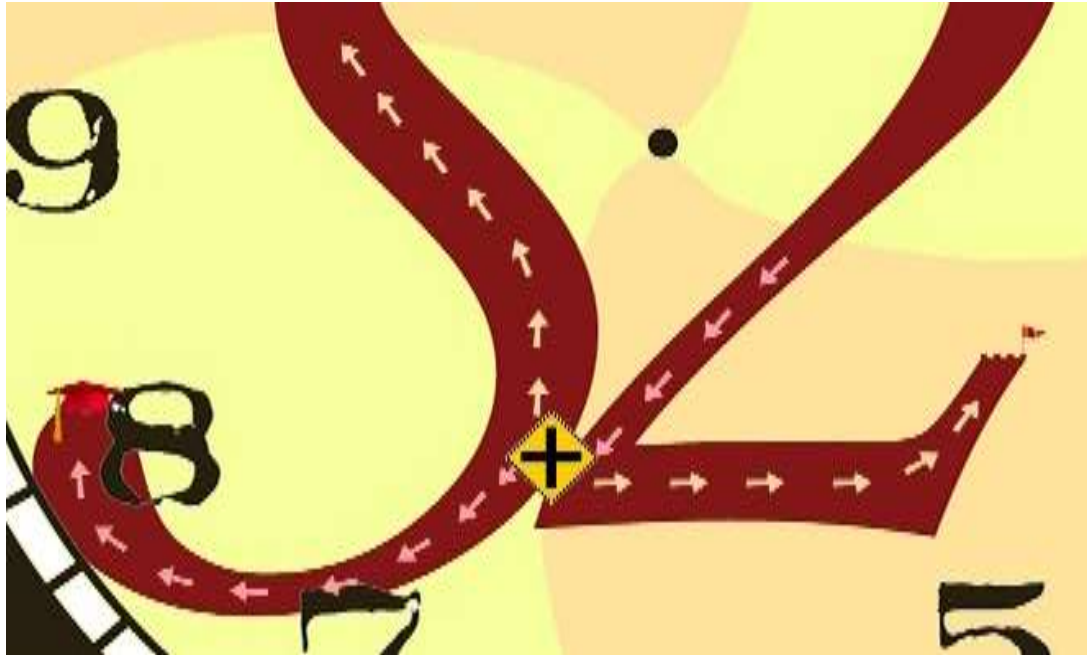
Figure: Maslow's hierarchy of Needs

Once we bridge the bottom of our heart, we are now free to devote our energies to enlarging our circle of 'caring', which might develop as follows:

Individual → Family → Tribe → Nation → Civilization → Humanity → All Life

Entering Q3 – a fork in the road

At this point it is necessary to caution the reader that the cross roads represented by the Q2 → Q3 transition is more than a juxtaposition of two smooth alphanumeric characters. In a later chapter we will uncover the mathematical basis for this critical Q2→Q3 transition. Simple mathematical descriptions can generate some very elegant patterns, and the heart shape is one of them. Suffice it to say that the S2 pattern conveys the cross-roads idea sufficiently well to continue with our discussion on the Q3 segment.



The first path involves a rapid decrease in our material footprint, along with a corresponding increase in Universality. In the olden times this used to be the path of the hermit and the monk, featuring expansive (high) thinking and simple living. This path typically involves cutting off the family relationships, and dedicating ourselves to service and spiritual self-determination. As evident from the S2 diagram, this path moves us rapidly towards the final quadrant, Q4, and can be referred to as the Buddha path. This is in honor of Gautama Buddha, the originator of Buddhism, who showed the path to Nirvana or 'oneness with the universe'.

The second path also involves a move towards universality, but the material footprint does not change much. Our effort is used in wider and wider contexts to match our ever wider circle of caring. This is the path of the servant leader, the person who dedicates herself to the betterment of life overall. These Q3 servant leaders could end up wielding far more power and influence than they ever did in Q2. The use of this power and influence, however, is tempered with the 'servant leader' attitude. Here the goal of dedicated service to society, and leading via example, are clearly visible in all we do. Demographically, if we take 100 years as an approximation for a full human lifespan, the Q3 years would be 50 – 75 years of age. If you look at the available resources (money, influence) in the world today, much of it is concentrated in this very age group.

Many of today's leaders, whether in Government or in Industry, also belong to this demographic. What is important to remember is that it is possible to carry on our given responsibilities with the utmost diligence, while cultivating the values of service and

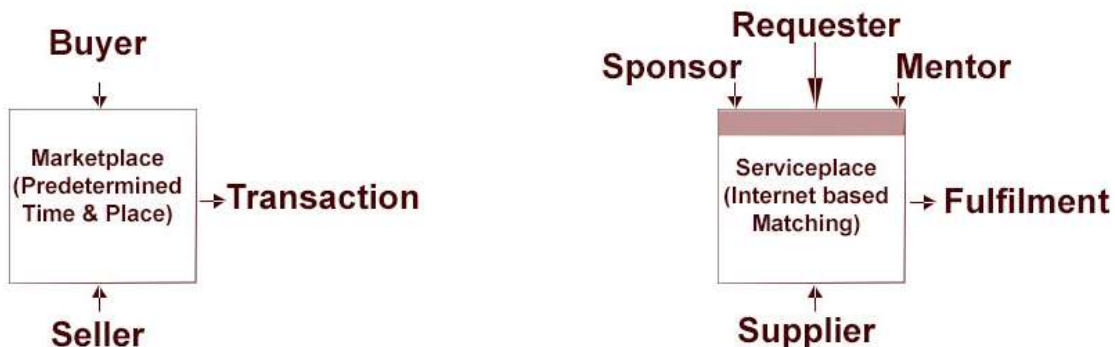


universality. This mingling of values from the Q2 to the Q3 segments is built into the S2 model as the gentle bulge leading from one quadrant to the other.

There remains a huge opportunity to get the Q3 quadrant equipped for maximum benefit to humanity. The principles of economics today serve the requirements of Q2 wealth building quite well, but falls significantly short in Q3.

Serviceplace Economics

The Marketplace of Q2 works reasonably well because of its simplicity – all that’s needed is the meeting of a buyer and a seller at a predetermined time and place to complete the transaction. With the advent of the Internet, even a predetermined place and time is not necessary – orders can be taken and fulfilled asynchronously. By contrast, the Q3 Serviceplace has a few more players. First, there is the person or organization with an identified need (requestor). Then there is the person or organization with the capability to service the need (supplier). Third there is the organization or person with the financial capability to meet the expenses (sponsor), and finally we need somebody from the Q3 segment who takes a personal interest in the project, and seeks synergies with other similar efforts (mentor).



In the extreme case, several roles can be consolidated, for instance the Sponsor, Mentor and Requester could be the same entity, in which case the Serviceplace Fulfillment reverts back to a Marketplace Transaction. If the Supplier, Sponsor and Mentor are the same, the Fulfillment now mimics a charitable organization.

In the Serviceplace system, the Mentor role takes on a special meaning. The key concept underlying the Serviceplace is that Fulfillment does not happen in a vacuum. Synergies are developed in some of the following ways:

1. Requestors facing similar needs are consolidated for economies of scale
2. Suppliers with resources locally available are consulted for efficient use of resources
3. If the need fulfilled is ongoing, time synergies and resupply pipelines are set up



4. Environmental impact is considered, and the overall project made socially and ecologically sustainable

In turn, the mentors don't operate in a vacuum. Mentors organize and communicate amongst themselves as part of the Serviceplace Mentor Network. When a critical mass of resources and funds are available, the mentor might initiate a new project. This does not take away from the people whose emerging needs have been anticipated and met, even before it becomes a big issue for them. Examples might include organizing soup kitchens in places where people go hungry, and not wait for hungry people to knock on your door.

Adopting the S2 model and Serviceplace concept would involve significantly extending the realm of Economics. Perhaps the most valuable of services today, the effort that parents put into raising their children, goes unrecognized today as an economic activity. The biggest resources we have on planet Earth, our air, our water and abundant sunlight goes unrecognized, unless there is a scarcity. The Serviceplace economics would be based on the concept of Abundance or Plenitude ([ref](#)), not scarcity. In the end, the goal is a much better representation of the economic activity and the true wealth of our communities. Only now, we recognize and value that which is most important to our survival and prosperity. In doing so, we will find that both wealth and economic activity now become definable in fundamental terms of resources, energy and human capital, and hence not as exposed to market manipulations and speculative pricing.

The key to getting Q3 to be effective for humanity would be to get the Serviceplace and Serviceplace mentors organized to enable its successful operation. The operation of the Serviceplace is a bit more complex than the Q2 marketplace, but well within the capacity of the fast evolving internet-based software tools. Early instantiations are already in place, but the potential remains for us to turn the Serviceplace construct into a much better resource allocation system than the current system based on Marketplace and Capitalism.

University and Universality

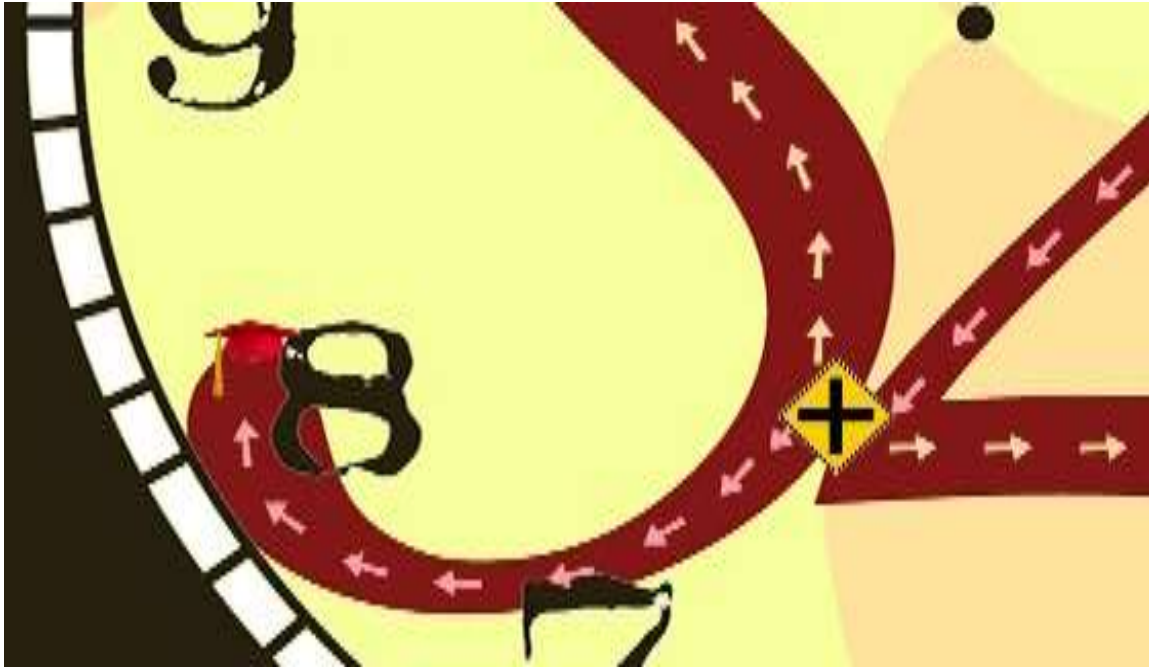
In addition to more conscientious resource allocation, Q3 is also the realm of accumulating wisdom, and packaging the wisdom for use at the appropriate time and location. The human institution that comes closest to accumulating the wisdom and working knowledge about our society is the University. As with most other human institutions, the meaning of 'university' itself has become diluted, with the altruistic pursuit of universal knowledge often overcome by the profit motive. We can draw inspiration from such ancient universities as Nalanda in Eastern India, where scholars came from all over the world to learn and to contribute to wisdom. The compilation of



hand written manuscripts at Nalanda is said to have been so vast that they burned for three months after the invaders set fire to the library.

In the S2 model, the University would have the following properties:

1. Be inclusive and universal in the approach to learning and wisdom.
2. Provide the environment and tools for improving our systems and capabilities.
3. Be a center for learning and skill building for people of all backgrounds.
4. Be a thought leader and a creative engine, allowing the accumulated wisdom and skills to be used for creative purposes in Q4 (more on that later).



With the successful accumulation of wisdom from the current universal context, and the mobilization of humans to develop through three quadrants, the stage is now set for Q4, the domain that leads to Potentiality. The consciousness being nurtured in Q4 is called Future Consciousness, and the attention turns to how we take the gems of wisdom from our current civilization and use it to seed the next steps of our cosmic inheritance.

Q4 – Future Consciousness

The future is but one element of the unknown, but for the passage into self-evolution, it is probably the most important. The process of first discerning what is possible and desirable, and then having the means to align the key ingredients to evolve this desirable future into tomorrow's reality – this is the more complete definition of Future Consciousness.



For most humans, Q4 organizing principles might seem very counter-intuitive. For the Q4 principles to begin to make sense, we begin with two fundamental concepts, Superposition and Transcendence. Let us start with Superposition.

One of the fundamental insights of Quantum Mechanics is that nature does not like to be tied down into deterministic states. You might have heard of the famous thought experiment called Schrodinger's cat. In this thought experiment a random event occurs inside a sealed box, which results in the cat inside being simultaneously dead and alive – until a curious external observer opens up the box to find out what happened. The very fact of observation makes the system choose one of the two states – otherwise nature is happy to be in an indeterminate superpositional state. In many ways we humans are also superpositional entities.

A person can be a son, a husband, and a father – each with their own duties and expectations which might be in conflict with each other. Using the Q1 → Q4 model, internally each of us does a balancing act between the sets of values cherished by the different quadrants. Keeping our foremost priorities in mind, we still try to build ourselves up individually, be economically and genetically productive, be of social service, and still enjoy creative activities. It's up to the Q3 service leaders to keep the S2 flow going, knowing full well that sometimes there will be conflict between the quadrants. Similarly, it's up to the Q4 visionaries to grasp the superposition of what exists, the principles that make them functional, and what could now be creatively brought into existence. A powerful visionary pull, along with an abundance of creative opportunities to partake in self-evolution, forms the draw for successful Q3 individuals to transition out of Social Consciousness into Future Consciousness.





The visionary who has mastered the superpositional skills can be thought of as partaking in Future Consciousness. In ancient times, the great spiritual leaders were often described as clairvoyant and able to magically bring about desirable outcomes. At the brink of self-evolution, the new creative magic comes from wisdom, technology and a wide ranging imagination. To this very important skill, being able to envision our future as a supersposition of multiple realities, we must now add the skill of Transcendence.

To transcend is to go beyond barriers. To seek and answer the questions that are far disconnected from our day-to-day existence, that's what transcendence is all about. How was the Universe at the very beginning? How is it going to be in the end? What greater purpose does our existence fit into? Can we slip into the consciousness level of a single celled creature, or experience the collective consciousness of a spaceship making a multi-generational journey through space? And how does consciousness divide into multiple threads at a cellular level, and then coalesce again to experience a higher level of existence?

Spiritual leaders have tried to experience these levels of existence, and answer similar fundamental questions since the dawn of humanity. Yet, only with the coming of technology and information theory, we can now glean quantifiable measures to some of these questions. In this manner the heart of the Q4 transcendent master is similar to the small child, endlessly wondering and excited about the possibilities that are out there.

As mentioned earlier, the whole is greater than the sum of the parts. In an information theory sense, the information capacity of two equal parts with energy/mass and volume added together – will have significantly greater than 2x the original information capacity. The transcendent mind has the capacity to figure out the qualitative difference in existence that becomes possible as we cross certain critical thresholds. One thing we know for sure – the Universe at large is very different from how we are constructed as humans. The average density of the Universe is so sparse, that a human sized volume would contain about the same mass as a single atom of Hydrogen! Yet, in informational terms, that same volume in a connected Universe has the capacity to be extremely rich.

To make sense of our human existence in cosmic terms, Transcendence is a necessary skill. In addition to Superposition, Transcendence allows us to not only become Future Conscious, but to extend the thought modeling to its barrier-breaking logical extremes.

Transcendence, then, is the ability to transcend one's individual station in life. One's station in life can be thought of as having three dimensions:

1. Where we are in time: our Past, Present and Future
2. Where we are in space: our bodies, our sphere of influence, and everything else in the vastness of space



3. Who we are as a subject: our conscious selves, those we interact with, and all other conscious entities (subjects)

So why it is that the Q3 *Wisdom* and *Social Consciousness* must precede the Q4 *Future Consciousness*? The answer comes down to – what’s glorious for the individual is not necessarily glorious for the collective. The tragedy is, what’s glorious for the individual may not even be survivable for the collective. Take the case of an individual pre-cancerous cell – it could go one of two ways. One, it could detect that things are not working properly and self-destruct (process called apoptosis), or two, it could determine that it could perpetually reproduce (become malignant). This un-constrained reproduction is also known as cancer, and is often not ‘survivable’ for the collective entity (i.e. for humans).

Till now *Future Consciousness* was mainly the ability to discern the emerging patterns of the future. With self-evolution, we would now become a creative participant in this future-crafting. Before we go farther, let us define the four main aspects of *Future Consciousness*:

1. Ability to discern emerging patterns
2. Intuiting how to deal with the oncoming changes
3. Visualizing desirable futures, and
4. Crafting desirable futures by putting in place key & timely ingredients

Of course there is the corollary to 3 and 4 above, where we discern dysfunctional outcomes and chart a course to avoid them. Items 3 and 4 together with their corollaries constitute the field of *Future Crafting* which is the key enabler for self-evolution.

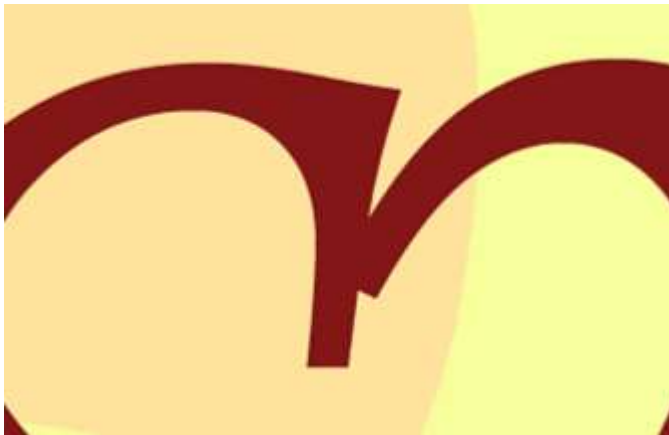
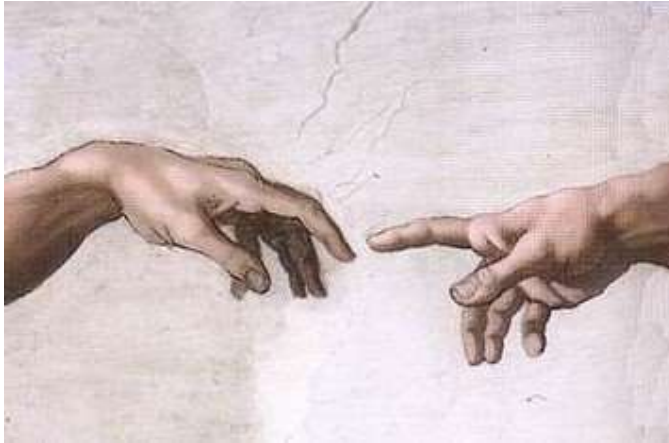
Scientific Spirituality

With Superposition and Transcendence, the case can be made that the primary differences between the Scientific establishment and the Religious portrayal of creation can now be reconciled. The similarity between the top creative caress of the S2 model, and the spark of life as depicted by Michelangelo might be coincidental, but they tell the same story. Self Evolution and the S2 model blurs the line between the creator and the created. Understanding the S2 model for humanity leads us to wonder if the same theme does not also play out in astronomically wider cosmic levels. Thus, with Superpositional Transcendence, there is no need to ‘determine’ one path over the other – at some level they may both be true. In the stretch towards self-evolution, we continue to be inspired by the grandeur and organizing capability of nature. Even the study of our own biological being harkens to a higher philosophy than we have been able to muster in our social organization, as summarized by Neitzsche.



There is more wisdom in your body than in your deepest philosophy.

Friedrich Nietzsche



The touch of creation, the gift of life, reminds us of Michelangelo's famous fresco in the Sistine Chapel. In the S2 model, the touch of creation is seen as the caress between the top end of the 'S' and the leading tip of the '2'. What makes life special is its simultaneous ability to aspire, and to be inspired. The interplay of the two, the aspiration and the inspiration, is what makes life so immensely exciting and creative.

Conclusion

Standing at the threshold of self-evolution, it is enormously helpful to have a development model that applies not only to ourselves, but to our human civilization and ultimately to our ability to make our mark as a cosmic aspirational entity. The same level of magnification, from the individual cells in our bodies to our composite human being; can play out five more times before we reach the edges of the universe – so there is plenty of space to grow.



The S2 model helps us identify many areas that we can improve going forward. The biggest enhancements appear in the Q3 space. This spans the gamut from truly representative Serviceplace economics, to a new level of inclusivity for our Universities. The Q4 concepts of quantum superposition and transcendence are indeed hard to master, but take us to the doorstep of self-evolution with practice and perseverance.

Even when we are in Q1 and Q2, knowing our aspirational trajectory helps us plan better for who we want to be longer term. Inculcating a balanced sense of self in our early years goes a long way towards building purposeful lives and a progressive aspiring society.

Epilogue

In many ways, this paper is just the tip of the iceberg. Much work remains to define and test the new economics of Serviceplace. The mathematical basis of the heart shape, and how it fits into the evolution of a higher consciousness, needs to be expanded and discussed. The Q4 realm of future consciousness, and the dual skills of superposition and transcendence can be modelled mentally, and also using computers. The request to the reader is – if you find within the S2 construct any area that resonates strongly with your personal interest do let us know. The Serviceplace Mentor Network is just an idea right now. Yet, when it comes into being, it has the potential to become the nervous system around which the other functional parts of a greater human civilization can build up and sustained.