

WHERE DOES POWER COME FROM?

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I. The Question

It was more than twenty years ago. I was working on my PhD thesis and consulting at the World Bank when I asked that simple question: “Where does power come from?” I had no idea of the repercussions that would come from the answer. It would change and challenge everything: my most fundamental thoughts, feelings and beliefs. It would fly in the face of four hundred years of science.

At the World Bank, their projects were failing at a rate as high as 65%. I was using Emery and Trist’s model of environmental relations (1965) to persuade the Bank to go beyond their current—almost exclusive—focus on design of a project’s *internal environment*. We designed processes that focused equally on their *transactional environment*—credit banks, beneficiaries and other third parties who exchanged goods and services with the project—and on their *contextual environment*—the more general social, political, or economic factors affecting the project.

We were applying these concepts to a major rural development project in the north-east of Brazil when the project officer, Gus Schumacher, complained that he could not use terms like “internal,” “transactional” and “contextual” in the field. Farmers and peasants couldn’t understand.

I knew from my linguistic background that these abstract terms had to be translated into action words. So, what do we do in each of those environments? Within twenty minutes I had answers to the first two: We *control* elements in our internal environment and *influence* elements in our transactional environment. It took three months to find an appropriate term for the contextual environment. I borrowed *appreciation* from Vickers (1966) who in turn derived it from the British military. Military strategists carried out *appreciations* of the enemy’s whole situation and position. We *appreciate* that which we cannot influence or control.

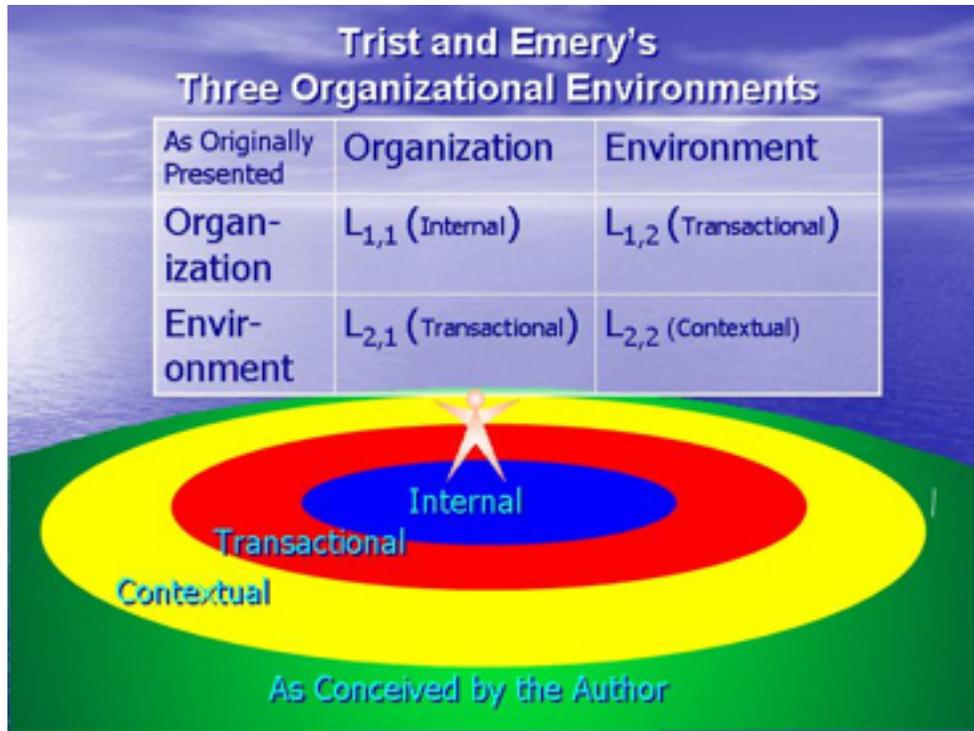


Chart 1

Soon after that, on a beautiful summer afternoon, I was working in my study overlooking the garden. Suddenly, all the ideas started to come together in one burst of energy that had me pacing my room, through to the house and into the garden:

1. Appreciation, influence and control are *power* words...
2. Environmental relationships are, then, power relationships...
3. All system environment relationships, by definition then, are power relationships...
4. But just about everything can be described as a system...
5. Everything can be described in terms of appreciative, influence and control relationships...
6. Appreciation, influence and control are *power fields*...

The implications of being able to describe every system, material, human and intellectual in terms of AIC relationships were just sinking in when the question came: If system environment relationships are really power fields then...

Where does the Power come from?

The answer came instantly as though it were the most natural thing in the world:

Power comes from Purpose.

The gentle response belied the burst of implications and questions that followed:

1. If purpose is the source of power, then every purpose no matter how big or small creates a power field.
2. Then, the bigger the purpose the more the power.
3. The real source of power is not knowledge, authority, wealth or military might.
4. The path to empowerment is through purpose.

A thousand other questions, implications, thoughts and feelings kept flowing. They imbued everything with a new meaning, a new context, a new color and flavor. The resonance would not and has not stopped since.

II. The Basic Purpose Power Concept

Eventually I made enough sense of the turbulence to produce an actionable model and process of organization. The process enables project stakeholders to move from a passive, adaptive approach to one in which they co-create their environments. The source of their power is not in their control of or adaptation to their environments. Purpose creates their relationships of control, influence and appreciation. They create a larger self—they *are* their relationships to what they control, what they influence and what they appreciate. *Chart 2* shows how we integrate purpose with relationships and power to create that larger whole.

1. Appreciation encourages us to seek our highest level of purpose: our *ideals*. It informs us about that part of the whole power field that affects our purpose but which we can neither control nor influence. We use our intuitive and sensing capacities to open our minds and spirit to appreciate new possibilities.
2. Influence helps us select from the whole the parts and relationships that will have most *value* in pursuing our ideal. We use our thinking and feeling capacities to evaluate different priorities and relationships.
3. Control gives final form to our purpose. We close down the process to create a *goal* with fixed parameters for implementation. We extravert our purpose and reflect on the results of implementation.

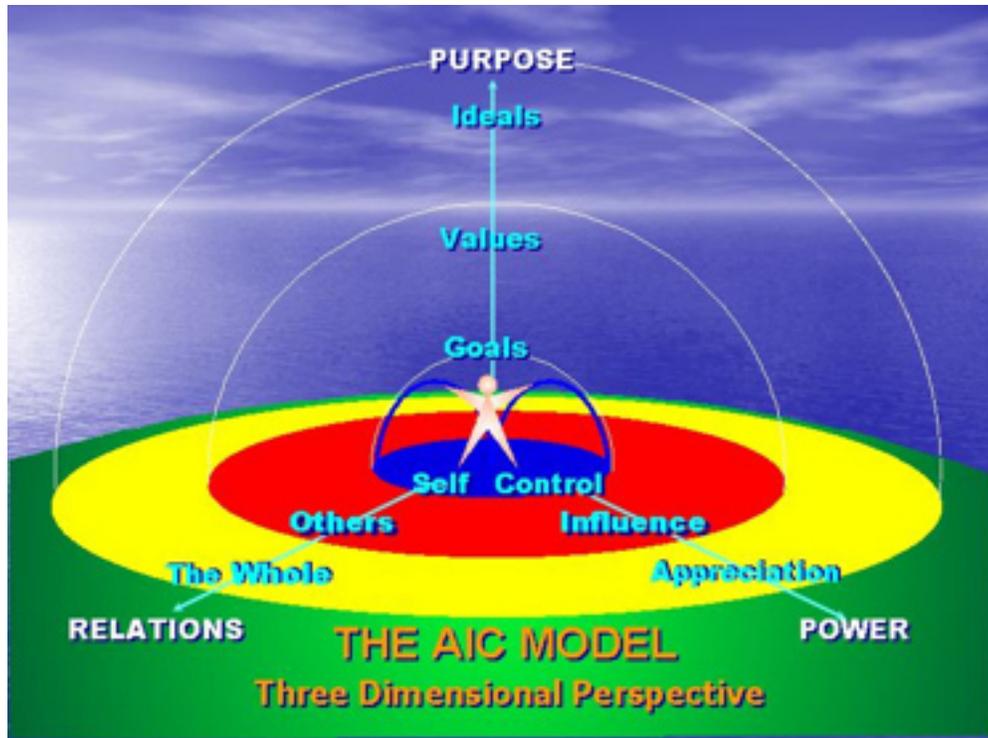


Chart 2

We have built an organizing process—called AIC—on these principles and have successfully applied it to policy development, institutional design, organization and leadership transformation in many parts of the world.

In spite of the simplicity of the concept, we still have not found another source that identifies purpose as the source of power. We constantly look to other systems, both to find the common origins of the purpose-power pattern and to improve our understanding and practice of it. The search leads naturally to two of the most significant sources of information about purpose and power: Religion and Science.

III. Purpose and Power in Religion

I studied the five major religions—Buddhism, Hinduism, Islam, Christianity and Judaism—from the perspective of what they revealed about ultimate purpose and its relationship to power.¹ All five religions make some distinction between what the Greeks called *ousia*, the “essence” of God—the source of all purpose and power—and the manifestation of that power, *energeiai*, in the world (K. Armstrong 1993). There is surprising similarity across religions about the essence of God and how that is accessed.

¹ This synthesis owes a great deal to K. Armstrong, D.T. Suzuki, R.L. Wing, W. H. Calvin, J. Jaynes, M. Harris and A. Bozeman.

The AIC Power Pattern in the Major Religions

	Religion	Ousia Purpose		Energeiai Power	
		Essence of God	Appreciative	Influence	Control
A	Buddhism	The Tao	Yin	Yin/Yang	Yang
A	Hinduism	Brahma	Wisdom	Love	Action
I	Islam	Al-Lah	Transcendent, Indescribable	The Koran, Word of God	The Word, Manifest in the World
C	Christianity	God	The Holy Ghost	The Son	The Father
C	Judaism	Yahweh	Transcendent, Indescribable	The Torah, The Word of God	The Word in Action

Chart 3:

As *Chart 3* illustrates, each religion has a trinity through which it expresses the *energeiai*. There is considerable agreement about the appreciative part of the *energeiai*—our whole relationship to God: It is receptive (yin) transcendental, incapable of description but susceptible to experience; it is the source of all wisdom. There is also considerable agreement on the form, or control part of the *energeiai*. It is made manifest through action (yang), and we access it through the word or the spirit of God in each of us. It is in the middle level, the influence part, of the *energeiai*—our relationship to God's power and the world around us—that there is violent disagreement. How do we relate to God?

1. As a human image—the Son of God?
2. As an authoritative voice of God in the Torah or Koran?
3. As the universal spirit of Love?

How do we relate to the institutions that link us to knowledge of God?

1. Are they the embodiment of God?
2. Are they the authority of God—translators or facilitators?

It is this influence part of the *energeiai* that has most contributed to religious wars and unresolved ethnic conflicts that have existed for thousands of years.

Not only do the major religions have a fundamentally similar view about the essence of God and the way the power of God is made manifest on earth, it seems there is an underlying wholeness to the manifestation of religion as developed in the Axial Age.²

² The Axial, or Axis, Age was the pivotal age from approximately 800 to 200 BC during which there were similar revolutionary concepts of religion and philosophy spawned in Persia, India, China and the Occident.

Looking at the development of the major religions as a single process for all of humanity, we see the three different *energeiai* manifest with different emphasis in the major religions:

1. The Eastern religions provide the *appreciative-centered* emphasis. They are the most open and free from dogma. They do not deny other gods and in some cases include the worship of other gods.
2. Islam is the most *influence-centered* religion. Mohammed was both a prophet and a very successful politician. The moral imperative to build a just and equitable society is an integral part of the Koran. The Muslims voraciously opposed the worship of multiple gods but were open to other religions believing that they all served the same one God.
3. The Jewish and Christian faiths are the most *control-centered*. Theirs is the God on the throne, God the Father, the God of command who must be obeyed. They too are very adamant about not worshipping other gods.³

Religion, then, provides a key origin and insight into the nature of the purpose-power pattern; and the variety in its practice provides a constant source of comparison and learning.

IV. Power in Science

Science makes no attempt at understanding the *essence* or ultimate purpose and has serious questions about the validity of the concept of purpose in nature. As Guiseppe Sermonti (1998) notes, the concept of “purpose” was barred from science in order to purify it from imprecise, metaphysical or anthropomorphic implications.⁴ In science the closest we can get to the “essence” in the center of the circles of power, is to acknowledge that the first nano-seconds of the Big-Bang is the big “unknown.”

Science, especially physics, does attempt to understand the field of forces—the *energeiai*—that created the universe we know from that “unknown” point. That history of our understanding of the relationships between gravity, the electromagnetic force and the two nuclear forces I have come to understand as the history of power fields and dimensions.

³ This cultural perspective is supported by an insightful presentation, *The Philosophical Aspects of Cultural Differences* given originally in 1976 at the University of Ibadan, Nigeria by Dr. Nichols, now the Chief of the Staff College of the National Institute of Mental Health.

⁴ This synthesis relies heavily the work of M. Kaku, A. Goswami, R. Penrose and the participants in the 1998 Prague conference. It also draws on the work of D. Bohm; D. Deutsch; K. Pribram, J.D. Barrow; D. Zohar; A. Young; L. Margolis and D. Sagan.

Michael Faraday first introduced the concept of fields in the nineteenth century. He visualized a field as a space filled with lines of force. In the case of magnetism and electricity, he measured the strength and direction of those lines of force at any point in the space. A collection of numbers can be calculated for every point in space that completely describes force at that point. He demonstrated that all the forces of nature can be expressed as a field.

Faraday's field calculations worked fine in the three-dimensional space of Euclidean geometry but were not adequate for the natural world of curved space and non-linear relationships. It was Riemann in the 1850s who—through sheer brilliance—found a way to measure the force at any point, in any space with any number of dimensions. Single-handedly, he broke open the limitations of Euclidean three-dimensional geometry and paved the way for the break from Newtonian Science to Einstein's four-dimensional relativity.

Riemann's discovery completely changed our concept of what a force is. Up until then scientists believed a force was a relationship between two objects. Riemann made his breakthrough by declaring that "force" was a function of geometry, not action, at a distance. Force had no independent qualities of its own. The apparent effect of a force came from the surrounding geometry. This meant that the curving, bending and crumpling of our three-dimensional universe in an unseen fourth dimension causes all electricity, magnetism, and gravity. From this insight Riemann went even further to intuit that light itself was not a force but a series of vibrations in five-dimensional space (M. Kaku 1994).

Einstein used Riemann's work to produce the elegant simplicity of the light and matter in the second half, the " mc^2 " part, of his famous $E=mc^2$ equation. The "E," the "energy" side of his equation, had no such elegance. To complete that work he had to include gravity in his equations. The current knowledge was summed up as a mess of sub-atomic particles that seemed to keep multiplying the more they were studied.

It is ironic that Einstein, having twice turned to the concept of higher dimensions to produce his theories of special and general relativity, should fail to produce the field calculations for gravity because he did not move to a higher dimension. In April, 1919 he received a letter from an obscure German mathematician, Thodr Kaluza. Kaluza demonstrated how to combine Einstein's theory of gravity with Maxwell's theory of light by moving to the fifth dimension. Einstein was so shocked that it took him more than two years to reply and eventually send the article for publication (M. Kaku 1994).

Today we have a theoretical resolution of science's view of energieiai: string theory. It unites all the forces of nature with the same symmetries. It is still a theory; no

one has yet been able to develop a set of field equations to express its functioning. These symmetries exist in either 10 or 26 dimensions depending on the assumptions used. Edward Witten (1998), the current leading physicist, acknowledges the simple power and beauty of string theory:

String theory is extremely attractive because gravity is forced upon us. All known consistent string theories include gravity, so while gravity is impossible in quantum field theory as we have known it, it's obligatory in string theory.

V. The AIC Philosophy

By drawing on the patterns of relationships between purpose and power in religions, and by understanding the dimensional nature of the power fields in science, we are able to confirm, build on, improve and even generalize the AIC pattern that links purpose to power.

Purpose is the source (the essence) of power. Purpose provides potential power while the management of the three fields of relationships—appreciation, influence and control—provides the energetic or kinetic power. As purpose itself is a whole it too consists of three parts.

1. **Appreciative purpose is open.** This openness allows for infinite evolution by including new possibilities and allowing for new potential. The ultimate expression of open purpose is an *ideal*: a purpose that can be successively approximated but never achieved. (Ackoff, 1972)
2. **Influence purpose is partially open and closed.** It is manifest in relationship to others' purpose. It operates as a *value* that is used to select from the whole what we believe will have most leverage in achieving our ideals.
3. **Control purpose is closed.** It is no longer open to others or to the whole. It is purpose in final form. It is expressed as a *goal*.

Purpose is always present in its trinity of forms:

1. Understanding the open aspect helps us to link to its evolutionary quantum perspectives.
2. Its relative manifestation allows Einsteinian views: the dynamics of relativity and probability.
3. Its closed aspect allows for the classic Newtonian perspective.

This concept of purpose fits with conclusions from the 1998 Prague workshop (See

References) that purpose is contextual—it is open, relative or closed—depending on the environment that is appreciative, influence or controlled.

Purpose in the social field operates very much like mass in the gravity field. Gravity is proportional to mass and the AIC fields are proportional to purpose. Gravity has gravitons that are neither positive nor negative. Gravity always attracts and never repels.

Appreciative power is five-dimensional. It always attracts and never repels. It is beyond the positive, negative and neutral forces of the four-dimensional influence field.⁵

VI. The AIC Model

Incorporation of dimensional thinking into the AIC concept produces a model that requires at least five dimensions. The three-dimensional model equates with physical space, the fourth-dimensional with time-space and the fifth with mind-space.

1. The three-dimensional version of the model is illustrated in *Chart 2*. It is based on a spatial distribution of power created by purpose: a field of control, of influence and appreciation.
2. The addition of the fourth dimension, in *Chart 4*, converts appreciation, influence and control from spatial relationships into time phases. Each aspect of purpose—open, relative or closed (ideal, value or goal)—has its own time cycle.

Appreciation, influence and control become phases of those cycles. The cycle is split into two halves: *feed-forward* and *feed-back*. The first represents the Actor's power relative to the environment—the large letters A, I or C. The second half is the feedback from the environment and is represented by small letterers—a, i and c.

1. The appreciative phase provides the input, or more precisely, the “information” from the “whole.”
2. The influence phase provides the throughput, or more precisely, the “transformation” of information through the value systems of the parts (the stakeholders).
3. The control phase provides the output or “formation”—the ultimate expression of the purpose in action.

⁵ This places David Cooperider's popular notion of Appreciative Inquiry as appreciation in the fourth dimension. Appreciation for him is not the relationship to the whole but to the positive part of the whole.

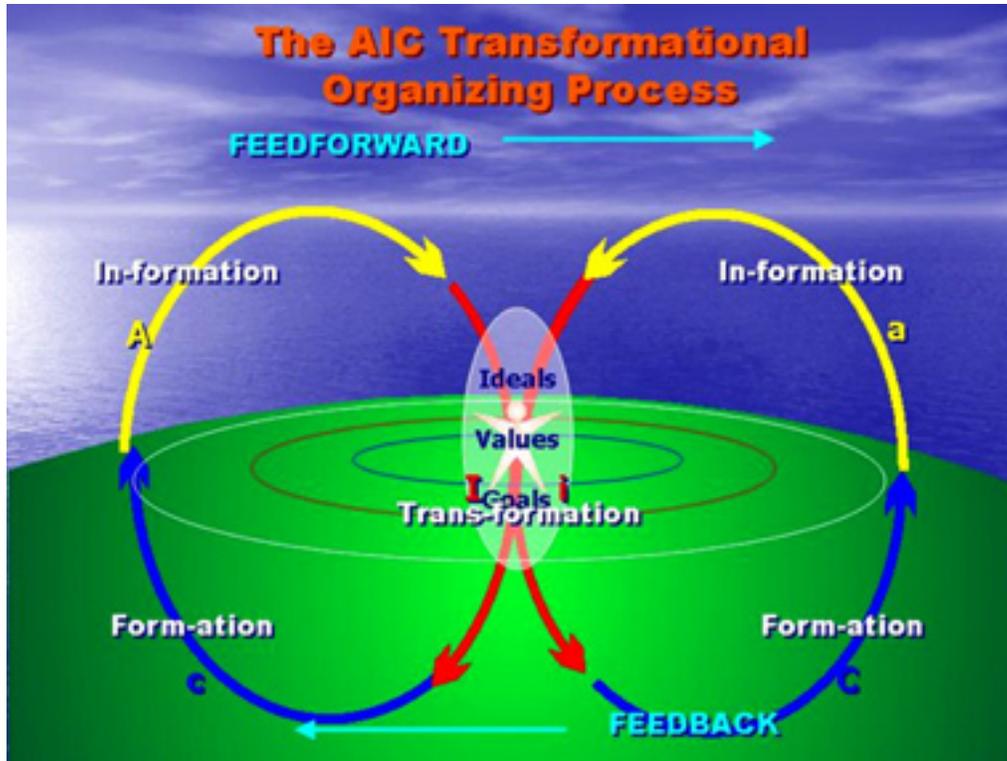


Chart 4

The environment's feedback is equally transformed by the actors' purposes (ideals, values and goals) to form new images of future

Chart 4 demonstrates that it is the red lines of influence—or transformation—that cross in the center; while in *Chart 2* the actor stands in the center of control, the small blue circle. The comparison shows, geometrically, that the physical space of *Chart 2* is control-centered and the four-dimensional time-space of *Chart 4* is influence-centered.

The Appreciative field adds a fifth dimension beyond time. The easiest way to conceive of this fifth dimension is as "mind-space." Our minds have the capacity to move beyond "time-space," to add a degree of freedom not constrained by time. Our minds are able to mix past, present and future events together with products of our imagination to create images and ideas that have never existed before. There is no center in the appreciative field. It functions holographically: The whole is in every part and every part is a center.

This holographic quality of mind-space is confirmed by Karl Pribram (1991). It accounts for the spiritual quality of appreciative-centered space. Spirit is infused in every part of the whole and makes every part of the whole feel centered—or resonant—with the whole.

Both the holographic nature of the fifth dimension and its connection to the dynamic phase relationships of the fourth dimension are confirmed by Mae-Wan Ho (1998). She describes how:

Organisms are nested, mutually entangling and evolving individualities that ultimately link all nature into a coherent whole.

She explains the “whole in every part” as a non-local property:

There is no time-separation within the coherence volume, just as there is no space-separation within the coherence time. Because the organism stores coherent energy over all space-times, it has a full range of coherent space-times, which are furthermore, all coupled together. Nonlocal intercommunication can thus occur throughout the system.

The linkage to the fourth, or influence-centered, dimension she describes as follows:

The energy, in effect, circulates among complex cascades of coupled cyclic processes within the system before it is allowed to dissipate to the outside. (Life is in the hesitation between coming and going.) These cascades of cycles span the entire gamut of space-times from slow to fast, from local to global, that all together, constitute the life-cycle. Cycles imply perpetual return, and that is one secret of organic stability.

VII. Conclusion

It seems that the flood of *in-formation* that came with the answer to my question “Where does power come from?” provided one of those key moments of *trans-formation* in which I saw the whole. Borrowing from Whitehead (1925), Mae-Wan Ho (1998) calls this *prehensive unification*:

Artists like scientists, depend on the same exquisite sense of prehensive unification, to see a pattern—a whole, or a significant form—that connects apparently disparate phenomena.

This whole AIC power pattern recurs so frequently that I believe with Karl Pribram, Mae-Wan Ho and Ervin Lazlo that it is in Nature. It mirrors a fundamental pattern of human brain functioning which in turn mirrors how the rest of the universe works.

Applications based on its principles achieve high degrees of success because they follow the laws of nature. Pribram has noted how the holographic functioning of the brain is run on laws of energy conservation. Mae-Wan Ho (1998) also notes:

Consequently, there is internal energy conservation as well as internal entropy compensation in the living organism. The whole system works by reciprocity, a cooperative give and take which balances out over the system as a whole, and within a sufficiently long time.

Because the pattern of relationship between appreciation and purpose so mirrors the relationship between gravity and mass; because gravity is the least understood of the four major forces, I speculate even further: Science will one day discover that, at the origin, purpose and mass are the same thing. There is, in Jantsch's word, a *religio* between our purpose and universal purpose that co-produces the *energeiai* that organizes all existence. It is not the "observation" that determines whether ultimate form is a wave or a particle; it is the *purpose* of the observer in the context of the *purpose* of the universe. We will discover that the "essence" is purpose and that truly *Purpose is the Source of all Power*.

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