Institutions in the Age of Mindcrafting Bionomics Annual Conference San Francisco, California October 22, 1994

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It's certainly a pleasure to be with you this morning to share a few thoughts about organizations.

One can scarcely think of organizations these days without stubbing a toe on what many seem determined to sweep under the rubric of science, the understanding of complex, adaptive organizations. If one is to consider such things as mind, body, the economy and human institutions as complex adaptive systems, as some now do, and if the study of complex adaptive systems is really a new science, as some now claim, then we have indeed shattered boundaries and created semantic difficulty. Countless theologians, philosophers, humanists and leaders, having invested a few thousand years attempting to understand the nature of people, organizations and society, will be surprised to learn that their work is new, or that t is science as traditionally defined. However, it is not my purpose to engage in disputes about what is or is not science, or whether mathematics is the best language with which to understand complex systems. All such discussions are much too mechanistic and Newtonian for my tastes, and largely irrelevant.

Before we begin, may I beg a small indulgenceLanguage is only secondarily the means by which we communicate; i t is primarily the means by which we think. The word "complexity" seems much too vague to describe self-organizing, adaptive complexes, yet I find it cumbersome to either think or write about them in the long string of adjectives by which the work is so often described. After grubbing in various lexicons for roots, meanings and a more suitable word, it seemed simpler to construct one. Since the knowledge pursued is believed to lie in the phase between Chaos and Order, the first syllable of each, <u>c-h-a</u> from chaos and <u>o-r-d</u> from order, was borrowed and Cha-ord emerged.

By Cha-ord, I mean any self-organizing, adaptive, nonlinear, complex community or system, whether physical, biological or social, the behavior of which exhibits characteristics of both order and chaos. Or, more simply stated, a Chaord is any chaotically ordered complex.

Via derivation comes chaordology, chaordologists, biochaorodologists, chaordogenisis and a host of others. The principal charm of the word is that t is simple enough for ordinary folk like me, yet derivatives aremultisyllabic enough for the most discriminating academic. It has become mildly addictive so, for a short while, please humor me with its use.

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My purpose this afternoon is to introduce you to a particularly rich, robust Chaord and relate it to technology, social change and the future of organizations. To do so requires weaving a rather complex tale from filaments of history, biography, philosophy, experience and serendipity.

The VISA card had its genesis four decades ago as a California service of the Bank Of America called BankAmericard. Concerned with possible erosion of their customers, five California banks jointly launched Mastercharge in 1966. In turn, Bank of America franchised its service. Other large banks quickly launched proprietary cards and offered franchises. Action and reaction were soon rampant. Bank after bank mass issued cards with little regard for customer qualifications, while television screamed such blather as, "The card you won't go berserk with," a challenge the public accepted with enthusiasm.

By 1968, the infant industry was out of control. Operating, credit and fraud losses were believed to be in the tens of millions of dollars. Life magazine ran a cover story depicting banks as Icarus flying to the sun on wings of plastic, beneath was a red sea labeled losses, into which banks were soon to plunge, wings melted, and drown. In the midst of the mess, Bank of America called a meeting of its licensees to discuss operating problems. It quickly disintegrated into acrimonious argument. In desperation, the bank proposed forming a committee of seven, of which I was one, to propose solutions to the more critical problems, which the bank would then attempt to impose How I came to be there has relevance, so a bit of biography.

I was born, the youngest of six, to parents with but eight years of schooling in a small mountain community. At an age too young for memory of the source, came a passion for reading and necessity to pursue it unencumbered by guide or mentor. With school and church, came awareness of the chasm between how institutions professed to function and how they actually did, along with stubborn refusal to accept orthodox ideas be persuaded by authoritarian means or seek acceptance by conformity.

A dean at a local college put me in the way of the classics and awareness of both the power and limitations of the human mind. At the same time, conflict with that institution inflamed a growing preoccupation with the paradoxes inherent in organizations and the people who hold power within them.

Thus at twenty, newly married, eager to learn but averse to being taught, absurdly idealistic and naive, emerged the ultimate Lamb hunting the Lion of life. It was quick to pounce. The Lamb fell into a job at a small, floundering branch of a consumer finance company. Six months later the manager departed and his lot fell to the Lamb. Protected by remoteness, anonymity and insignificance, four people, whose average age was twenty, ignored company commandments and did things as conditions,, common sense and ingenuity combined to suggest.

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Within two years, the office led the company in growth and profit. Anonymity was gone and the inexorable fists of hierarchical power and orthodoxy were pounding for conformity. The Lamb escaped to open a new office in a small, Oregon town. There, the pattern repeated itself. A year and a half later the Lion and the Lamb came fac,e to face in the corporate headquarters. The Lamb responsible for nationwide marketing and determined to change the company; the company determined to control the Lamb. It was simply no contest. Within the year, no longer a Lamb but no less a Sheep and badly mauled, it was out the door much wiser in the ways of linear, hierarchical systems and the people who hold power within them.

You shall be spared details of the next fifteen years of guerilla warfare between a Sheep irrevocably committed to iconoclastic, innovative methods and the success they brought, and three different command and control organizations, each time the sheep determined to change the company, the company to corral the sheep, and with the same inevitable result: Another hunk of unemployed mutton, bruised and bleeding on the sidewalk. (As an aside, | am delighted to inform you that only one of those companies now exists.)

Throughout the years, the Sheep continued to read avariciously, including much organizational theory, economics, science and philosophy. The preoccupation with organizations and the people who held power within them became an obsession.

Why, the Sheep asked time and time again, are organizations, whether governmental, commercial, educational or social, increasingly unable to manage their affairs? Why are individuals increasingly alienated from the organizations of which they are part? Why are commerce and society increasingly in disarray?

Today, it doesn' t take much intelligence to realize we are in the midst of a global epidemic of institutional failure. Even then, they were everywhere if one cared to look. It has much to do with compression of time and events. Some of you may recall the days when a check might take a couple of weeks to find its way through the banking system. It was called float and many used it to advantage. Today, we are all aware of the incredible speed and volatility with which money moves through the economy and the profound effect it has on commerce. However, we ignore vastly more important. reductions of float, such as the disappearance of information float.

As the futurist, James Burke, pointed out, it took centuries for information about the smelting of ore to cross a single continent and bring about the Iron Age. During the time of sailing ships, it took years for that which was known to become that which was shared. When man stepped onto the moon, it was known and seen in every corner of the globe 1.4 seconds later. That is hopelessly slow by today's standards.

No less important is the disappearance of scientific float: The time between the invention of a new technology and its universal application. It took decades for the steam engine, electric light, or automobile to attain universal acceptance. It took years

for radio and television. Today, countless devices utilizing microchips sweep around the earth tike the light of the sun into universal, instant use.

This endtess compression of float, whether of money, information, technology or for that matter anything else, can be combined and described as the disappearance of "change" float. That is, the time between what was and what is to be; between the past and the future. Only a generation or so ago, the present seemed to stretch, relatively unaltered, from a distant past into a dim future. Today, the present hardly exists at all, everything is change, *with one incredibly important exception.* There has been little loss of organizational float.

Although their size has greatly increased, there has been virtually no new idea of organization since the concepts of corporation, nation-state and university emerged a few centuries ago.

Newtonian Science, along with the machine metaphor to which it gave rise, was the father of those concepts. It has dominated the whole of society and the mass of our thinking for more than two centuries, to an extent none of us fully realize. It declared that the universe and everything in it, whether physical or biological, could best be understood as a clock-like mechanism, composed of separate parts acting upon one another with precise, linear laws of cause and effect. We have since structured society in accordance with that perspective, believing that with ever more reductionist scientific knowledge, more efficiency, more hierarchical command and control, we could pull a lever at one place and get a precise result at another, and know with certainty which lever to pull for which result; never mind that human beings must be made to perform like cogs and wheels in the process. For two centuries, we have been designing and pulling those levers, all the while hammering people to behave in the compliant, subordinate manner one expects from a well-trained horse. Rarely have we gotten the expected result.

It has given rise to what it amuses me to think of as a Sheep's law of the universe: Everything has both intended and unintended consequences. The intended consequences may or may not happen; the unintended consequences <u>always</u> do.

Just as Newtonian Science was the father of today's organizational concepts, the Industrial Age was the mother. Together, they dominated the evolution of all institutions. The unique, variable, individual processes by which products and services had been handcrafted were abandoned in favor of vertical, hierarchical organizations, which, in order to produce huge quantities of uniform, products, services, knowledge, and people, centralized authority, routinized practices, enforced conformity and amassed. resources. This created a class of managers and professionals expert at reducing variability to uniform, repetitive, assembly-line processes endlessly repeated with ever-increasing efficiency. Thus, the Industrial Age became the age of managers.

It also became the age of the physical scientist, whose primary function was to reduce diverse ways of understanding to uniform, repetitive, laboratory processes endlessly 14. 14. A.

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repeated with ever-increasing precision. In time, the university obtained a virtual monopoly on the production of both classes. It has led to one of those immense paradoxes of which the universe is so infinitely capable, which is having profound societal effect. The higher levels of all forms of organization, whether commercial, political or social, now form an interchangeable, cognitive elite, interwoven into a mutually supportive complex with immense self-interest in preservation of existing hierarchial forms of organization, and the ever-increasing concentration of power and wealth they bring. At the same time, that same complex is spawning an incredible array of scientific and technological innovation, immense engines of social change, which, in turn, demand radically different concepts of organization in which power and wealth are more widely distributed and more commonly shared. Thus, we are "hoist by our own petard".

The essential thing to remember, however, is not that we became a world of expert managers, but that the nature of our expertise became the <u>creation</u> and <u>control</u> of constants, uniformity and efficiency, while the need has become the <u>understanding</u> and <u>coordination</u> of variability, complexity and effectiveness.

The Sheeps incessant questions and sixteen-year guerrilla war led to several convictions:

First: That the greatest danger to people and civilization was not the hydrogen bomb or degradation of the environment, but greater and greater concentration of power and wealth in fewer and fewer hands.

Second: The real consequence of emerging science and technology was not gadgets, whether hydrogen bombs or silicon chips, but radical, social change; ever-increasing diversity and complexity in the way people live and work. Which, in turn, demanded radical organizational change.

Third: Industrial Age, hierarchical commandand control pyramids of power, whether political, social, educational or commercial, were aberrations of the Industrial Age, antithetical to the human spirit, destructive of the 'biosphere and structurally contrary to the whole history and methods-of physical and biological evolution. They were not only archaic and increasingly irrelevant, they were a public menace.

Fourth: Just as the human body is organized around a neural network so complex as to defy description, so, too, were electronic communication systems emerging and interconnecting into an equally complex, economic and social neural-network, around which institutions would be forced to reorganize.

Fifth: The so-called Information Age could best be understood as the Age of Mindcrafting, since information is nothing but the raw material of that incredible Chaord we call mind .and the pseudo mind we call computer, and software, the tool with which we shape and manage that information, is purely a product of the mind. Sixth: The most abundant, least expensive, most underutilized and frequent/y abused resource in the world was human ingenuity; the source of that abuse was archaic, industrial Age institutions and the management practices they spawned.

The Sheep publicly argued those convictions at every opportunity. Those who would listen smiled and yawned. Along the way, the Sheep swore a thousand oaths that were he ever to create a flock, things would be different; easy oaths to swear, for the possibility simply did not exist. Sick of hard walls and a bloody head, the Sheep decided to engage in that favorite American pastime, retirement on the job, selecting as his victim a bank, where a modest living could be had at the cost of a pleasant demeanor, conformity and a fraction of one's ability and effort. It was not to be. Within the year, the Lion pounced again. The bank took a card franchise from Bank of America, the Sheep was driven into management of the program, thus his presence at the meeting and appointment to the committee.

The Sheep thought the committee an exercise in futility and privately said as much to the BofA representatives, suggesting, instead, that the committee consider the sole question of how to create an orderly method of addressing all problems. They agreed, but concerned it might be suspect if proposed by them, insisted the Sheep put it before the meeting. The audience, in the way of all disorganized groups faced with a proposal creating the illusion of progress but requiring no money or effort, readily assented. The meeting disbanded. The committee met and the Sheep was elbowed into the chair, with no intent but to do a bit of civic duty.

Within six months, a complex of regional and national committees had been formed, which had but one redeeming quality, it allowed organized information about problems to emerge. They were much worse than anyone had imagined, far beyond possibility of correction by the existing organization. Losses were not in the tens of millions, but in the hundreds of millions, and accelerating.

And suddenly, like a diamond in the dirf, there it lay. The need for a new organization and a precarious toehold from which to make the attempt.

All the 'Yes' now so popular--reorganizing, reengineering, reinventing--were the wrong 'Yes, "for they imply yet another version of that which is. It was necessary to *reconceive* in the most fundamental sense, the concept of bank, money and credit card; even beyond that to the essential elements of each and how they'might change in a microelectronic environment. Several conclusions slowly emerged:

First: Money had become nothing more than guaranteed, alphanumeric data recorded on valueless paper and metal. It would become data in the form of arranged electrons and photons which would move around the world at the speed of light, at minuscule cost, by infinitely diverse paths throughout the entire electromagnetic spectrum,) (許)

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Second: Credit card was a misnomer, a false concept. It must 'be reconceived as a device for the exchange of value in the form of arranged electronic particles. The demand for that exchange would be global.

Third: Whatever organization could best globally guarantee and exchange data in the form of arranged, electronic particles would have a market, every exchange of value in the world, that beggared the imagination.

It became clear that no hierarchical corporation could do it, no nation-state could do it. In fact, no existing form of organization could do it. On a hunch, the Sheep made a calculation of the resources of banks worldwide. The total dwarfed the resources of most nations. Jointly they could do it, but how?

It was beyond the power of reason to design an organization to deal with such complexity, and beyond the reach of the imagination to perceive all the conditions it would encounter. Yet, evolution routinely tossed off much more complex Chaords with seeming ease. It gradually became apparent that such an organization would have to be based on biological concepts and methods. It would have to evolve, in effect, to invent **and** organize itself.

The Sheep asked three others to join him to address a single question based upon a single assumption. If there were no constraints whatever, if anything imaginable was possible, what would be the nature, not the structure, of an ideal organization to create the world's premier device for the exchange of value.

They isolated themselves in a small, remote hotel. There followed a week of intense, night and day, discussion. Slowly, a dozen or so very simple principles emerged, more than enough as it proved to be. Let me give you some examples.

It must be eauitably owned by all participants. No member should have intrinsic preferential position. All advantage must result from individual ability and initiative.

<u>Power and function must be distributive to the maximum degree</u>. No function should be performed by any part of the whole which could reasonably be done by any more peripheral part, and no power vested in any part which might reasonably be exercised by any lesser part.

<u>Governance must be distributive</u>. No individual, institution, and no combination of either or both, should be able to dominate deliberations or control decisions.

<u>It must be infinitely malleable yet extremely durable</u>. it should be capable of constant, self-generated, modification of form or function without sacrificing its essential nature or embodied principle.

<u>It must embrace diversity and change</u>. It must attract people and institutions comfortable with such conditions and provide an environment in which they could flourish.

The struggle to develop those principles gave rise to the Sheep's second law of the universe *Nothing can be made simpler without becoming more complex.*

It took six months to perfect and gain acceptance of the principles. There followed an intense, year-long effort involving a great many people and disciplines. The principles were gradually enlarged into a concept, the concept into a theoretical structure, and the structure fitted into the interstices of law, custom and culture. In June, 1970, the VISA Chaord came into being.

It remains difficult to describe that community, but you should know a few things about what happened when Chaordic principles were applied, power distributed and human ingenuity released.

Twenty-four years ago it was no more than a vague concept. Today, its products are created by 23,000~financial institutions and accepted in more than 200 countries and territories; 355 million people use those products to make 7.2 billion transactions exceeding \$650 billion annually -- the single largest block of consumer purchasing power in the world economy.

In the legal sense, VISA is a non-stock, for-profit, membership corporation. In another sense, it is an inside out holding company in that it does not hold but is held by its functioning parts. The 23,000 financial institutions which create its 'products are, at one and the same time, its owners, its members, its customers, its subjects and its superiors, It exists as an integral part of the most highly regulated of industries, yet is not subject to any regulatory authority in the world.

It is a Chaord, the totality of which, <u>excluding</u> thousands of affiliated entities, would, if converted to a stock company, have a market value of \$150 billion. Yet, it cannot be bought, traded, raided or sold, since ownership is held in the form of perpetual, non-transferrable, membership rights. However, that portion of the business created by each member is owned solely by them, is reflected in their stock prices and can be sold to any other member or entity eligible for membership, a very broad, active market.

It espouses no political; economic, social or legal theory, thus transcending language, custom, politics and culture to successfully connect institutions and peoples of every persuasion. It has gone through a number of wars and revolutions, the belligerents continuing to share common ownership and never ceasing reciprocal acceptance of cards, even though they were killing one another.

It is a Chaord which, in less than five years, transformed a troubled product with a minority market share into a dominant market share and the single most profitable

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consumer service in the financial services industry, while at the same time reducing by more than *50%* the cost of unsecured credit to individuals and merchant cost of handling payment instruments. It has had no less than twenty and as much as fifty percent compound annual growth for a quarter century, through the best and the worst of times.

It has multiple boards of directors within a single, legal entity, none of which can be considered superior or inferior, as each has irrevocable authority and autonomy over geographic or functional areas.

Its products are the most universally used and recognized in the world, yet the organization is so transparent its ultimate customers, most if its affiliates and some of its members do not know it exists or how it functions. At the same time, the core of the enterprise has no knowledge of, information about or authority over a vast number of the constituent parts. No part knows the whole, the whole does not know all the parts and none has any need to. The entirety, like all Chaords, including those you call body, brain and biosphere, is largely self-regulating.

A staff of around three thousand scattered in twenty-one offices in thirteen countries on four continents coordinates this two-thirds of a trillion dollar business, providing product and systems development, global advertising, and around-the-clock operation of two global electronic communication systems with thousands of data centers communicating through nine million miles of fiber-optic cable. Those systems clear a greater number of electronic financial transactions iti a week than the Federal Reserve wire system does in a year. Their capacity is 1,100 transactions per second at a cost of less than a penny each.

Its employees received mediocre salaries by commercial standards, could never be compensated with equity or acquire wealth for their services. Yet, those people selected the VISA name, completed the largest trademark conversion in commercial history in a third the time anticipated, and built the prototype of the present communications systems in ninety days for less than *\$25,000*.

Time and time and time again they demonstrated a simple truth which we have somehow lost sight of in Newtonian, mechanistic organizations: That given the n'ght circumstances, from no more than dreams, determination aed the liberty to try, quite ordinary people consistently do extraordinary things.

The Chaordic concept of organization is immensely more powerful than even the success of VISA might suggest. There were weaknesses in VISA's version of the concept, as well as external conditions it could not overcome.

Commercial law did not anticipate, thus could not prevent, but, none-the-less, did not fit the concept. Like a dead tree falling on a sapling, the law continually warped and constricted the natural evolution of the organization in ways beyond correction. Today, the law is beginning to understand and accept Chaordic concepts.

Although the core and concept of VISA were Chaordic, members remained mechanistic and linear, without ability to fully understand and exploit the concept, and with continual inclination to reimpose archaic structure and management practices on it. Today, many organizations are beginning to understand and practice such concepts.

There existed no pool of potential employees familiar with Chaordic concepts and no place where they could be educated. The immense cultural change required to fully exploit the concept simply could not be achieved in the time available or magnitude required. Today, such cultural change is emerging in many places.

Had those three constraints alone not existed, the VISA community could easily be quadruple its present dimensions. By the turn of the century, such restraints will scarcely exist. The opportunity for Chaordic organization continues to beggar the imagination.

Fifteen years in the midst of such paradoxical complexity gave rise to the Sheep's third law of the universe: *everything its opposite.*

If you're having trouble with those three sheepish laws, be careful -- <u>Newton has his fingers in your brain</u>..

Enough of VISA history and philosophy. What about the future? Ten years ago, the Sheep severed his connection with VISA for a life of anonymity, thinking to grow wooly with books, nature and uninterrupted thought. Which proves that Sheep are dimwitted indeed, for the Lion was again poised to pounce.

In 1993, the Sheep stumbled across the book <u>Complexity</u> The concepts in the book were not surprising; they seemed like old, familiar friends. What was surprising, was that they were now beginning to emerge in the scientific world, the last place the Sheep would have expected such synthesis to emerge. Curiosity compelled him to a few dozen more books and visits to the Santa Fe, Foresight, and Bionomics Institutes. During those visits, he became acquainted with people at The Joyce Foundation in Chicago, and they with VISA and its Chaordic concept of organization.

The people at the Foundation shared many of the Sheep's fife-long concerns about the nature of institutions and the risk of their collapse. They thought the principles which gave rise to the VISA community might have great applicability to social and political, as well as commercial organizations. They intruded into his idyllic pasture to engage in a dialogue about the future.

They refused to accept the Sheep's conviction that the epidemic of institutional failure must inevitably become catastrophic, arguing that if such radically different organizations asVISA and Internet could emerge, equally radical change must be possible elsewhere. They posed an irresistible question. What would it take to greatly

accelerate institutional change throughout all aspects of society? After considerable research and thought, the Sheep suggested three things:

First: At least five or six large, extremely successful, new examples of Chaordic organization, similar to VISA and Internet, would have to evolve. Ideally, they would span such diverse areas as education, government, social services and commerce. Organizations ready and willing for such change must be sought out and resources provided to keep them through the process.

Second: Sophisticated, three-dimensional, physical models of such structures would have to be created, so that people have something tactile to examine and relate to existing organizations. Computer models would have to be created, graphically demonstrating how such institutions could self-organize, evolve and link in new patterns of twenty-first century society. The models would have to be supported with an impeccable, intellectual foundation. The economic, scientific, political, historical, technical, and philosophical rationale for such organizations would have to be documented. A considerable amount of such work has already been done; however, it is far from complete and lacks coherence and clarity, nor have the language and metaphors necessary for massive dissemination and understanding yet evolved.

Third: A global organization would have to emerge, whose sole purpose would be the development, dissemination and implementation of new, Chaordic concepts of organization, linking in a vast web of shared learning, information and ownership, people and institutions of all persuasions committed to institutional reconception. It must be organized on the principles it espouses.

The Sheep insisted that the odds of the three happening were too small to calculate; that massive institutional collapse was inevitable. The Foundation argued that masses of people had lost all confidence in existing institutions and were eager for new concepts. There was growing desperation about seemingly intractable problems which, in the absence of constructive model's for change, was turning to destructive behavior. In their view, society was preparing itself for radically different ideas of community and organization.

They posed anotherprovocative question. If The Joyce Foundation was willing to break with tradition and make their first grant to an individual, would the Sheep contribute a year of his time to investigate as freely and broadly as he liked, whether the three objectives were indeed, impossible; and if not, what would be required to set them in motion? The Sheep refused, arguing that it was a waste of time and money. They insisted they were willing to accept the risk.

For five months past | have been on an odyssey more improbable than VISA, and incomparably more important and interesting, traveling extensively to search out people concerned about such problems and committed to doing something about them. It has led to dozens of fascinating, brilliant people deeply committed to institutional change in such diverse, often unlikely places as the US Army, a

Netherlands Bank, the Gulf States business community, ghetto self-help organizations, the cutting edge of science and technology, institutes of many persuasions, Japanese industrialists, Native Americans, authors, entrepreneurs and corporate magnates. Although the way is far from clear, there are enough dedicated people who share the same convictions that it is impossible to be discouraged, even though the odds against success are no less formidable. The seeds of Chaordic thinking are sprouting everywhere.

It is my personal belief, although I would be hard pressed to prove it, that we are at that very point in time when a four-hundred year old age is dying and another struggling to be born; a shifting of culture, science, society and institutions enormously greater than the world has ever experienced. Ahead, the possibility of regeneration of individuality, liberty, community and ethics such as the world has never known, and a harmony with nature, with one another and with the divine intelligence such as the world has ever dreamed.

'There isn't the slightest doubt in my mind that Chaordic we are, Chaordic we will remain, Chaordic the world is and Chaordic our institutions must become. It is the way of the world in the centuries ahead, as life evolves into ever-increasing levels of complexity. The only question is whether we will get there through massive institutional collapse, enormous social carnage and painful reconstruction, with the distinct possibility of yet another regression to that ultimate manifestation of Newtonian concepts of control, dictatorship.

Or have we, at long, long last, evolved to the point of sufficient intelligence and will to discover the concepts and conditions by which Chaordic institutions can find their way into being? Institutions, which have inherent in them the mechanisms for their own continual learning, adaptation, order and evolution and the capacity to coevolve harmonious/y with all other living things to the highest potential of each and all?

I simply do not know, but this I do know. At such times, it is no failure to fall short of realizing ail that we might dream. The failure is to fall short of dreaming all that we might realize.

It is heartening to discover such places as the Bionomics Instituite and a privilege to participate in such a conference. Thank you for inviting me and for your patience and courtesy while listening.

Addendum to Bionomics Annual Conference Address

It is a common mistake to think of a company as having tangible physical presence such as one finds in a person or building. When anyone within the VISA organization began to talk or act as though the company had such reality, I would assure them that it was a fiction, that it did not exist. Most would argue vociferously that it certainly did. Asked to touch it and reveal whether it was hot or cold, hard or soft, they would agree it could not be so perceived. When asked to look at it and reveal the color, taste it and describe the flavor, listen to it and repeat the sound, smell it and describe the odor, they would eventually accept that it could not be perceived by any of the senses, that it had no reality save in the mind.

A commercial company, or for that matter any organization, is nothing but a mental construction, a concept, an idea to which people and resources are drawn in pursuit of common purpose. All organizations are merely conceptual embodiments of a very old, very basic idea, the idea of community.

They can be no more nor less than the sum of the belief of the people drawn to them; of their character, judgment, acts and efforts. Without the moving force of the minds of people, all assets are just so much inert mineral, chemical or vegetable matter, by the law of entropy, steadily decaying to a stable state.

Since the strength, even the reality, of any organization lies in the sense of community of the people who have been attracted to it, its success has enormously more to do with clarity of a shared vision, common principles and strength of belief in them, than to assets, expertise, operating ability or management competence, important as they may be.

When an organization loses its shared vision and principles, its sense of community, it is already in process of decay and dissolution, even though it may linger with the outward appearance of success for some time. Businesses, as well as races, tribes and nations, die out not when they are defeated or suppressed, but when they become despairing and lose excitement and hope about the future.

Most Industrial Age managers have an instinctive uneasiness, a revulsion of sorts, for such thoughts, for they sense the ground slipping from. beneath their feet. If a corporation is nothing but the sense of community of people, how can it be controlled and managed? They seek the answer in techniques of the Industrial Age; rules and regulations, paper and procedures, petty manifestations of power to be obeyed under penalty of banishment from the community. The Industrial Age manager is, above all else, loyal to his training, his skill and the procedures by which they are practiced.

It is the wrong answer. The proper one is far more elusive and difficult to achieve.

Reflect a moment on group endeavors of which you are an observer rather than participant. If your interest runs to ballet, you can undoubtedly recall when the corps

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seemed to rise above the individual ability of each dancer and achieve a magical, seemingly effortless performance. If your interest runs to sports, the same phenomenon is apparent. Teams whose performance goes beyond the ability of individual players, which seem unable to lose. The same phenomenon can be observed in the symphony, the theater, in fact, every group endeavor, including business and government.

Every choreographer, conductor and coach, or for that matter, corporation president, has tried to distill the essence of such performance; to divine, explain and reduce to a known, repeatable process that which causes the phenomenon. It has never b e e n done and it never will be.

It is a mystique, easily.observed, universally admired and occasionally experienced. It happens, but cannot be deliberately done. It is rarely long sustained, but can be repeated. Some organizations seem consistently able to do so, just as some leaders seem able to cause it to happen with consistency, even within different organizations.

To be precise, one cannot speak of leaders who <u>cause</u> organizations to achieve superlative performance, for no one can <u>cause</u> it to happen. Leaders can only modify conditions which prevent it, perceive and articulate a sense of community, a vision of the future, a body of principle to which people can become passionately committed, then encourage and assist them to discover and bring forth the extraordinary capabilities which lie trapped in everyone, struggling to get out.

Without question, the most abundant, least expensive, most underutilized and frequent/y abused resource in the world today is human ingenuity.

Which leads me to management. Over the years, I have frequently had long, unstructured discussions with people at every level in the organizations of which I was part about any subject of concern to them. The conversations most often gravitated to management, either aspirations to it, dissatisfaction with it, or confusion about it. To avoid ambiguity, I would ask each person to describe the first and most important responsibility of any manager. The incredibly diverse responses always had one thing in common. They were downward looking. Management inevitably had to do with handling of those over whom it had authority. That perception is completely wrong.

The first and paramount responsibility is to manage one's self. One's own integrity, character, wisdom, knowledge, time, temperament, words and acts. It is a complex, never ending, incredibly difficult, oft shunned task, yet one without which no person is fit for authority no matter how much they acquire.

The second responsibility is to manage those who have authority over us. Bosses, directors, regulators ad infinitum. Without their consent or support, how can one follow conviction, exercise judgment or create an environment in which others can achieve?

The third responsibility is to manage one's peers, those over whom we have no power and who have no power over us. In this group, one must include associates, competitors, the entire environment if you will.

The fourth responsibility is then obvious, for there is nothing else left. It is to manage those over whom we have authority.

The common response is that all one's time will be consumed managing self, superiors and peers, leaving little or no time to control subordinates. Exactly!

One need only employ good people, introduce them to the concept, induce them to practice it, then stay out of the way. If subordinates properly manage themselves, you and their peers, and if they replicate the concept with their subordinates, what have you to do but see they are properly recognized and rewarded.

The next question is obvious. How can one manage bosses, competitors and associates? The answer is equally obvious. One cannot. One can only understand them, persuade them, motivate them, influence them -- eventually the proper word emerges, <u>lead</u> them.

It is leadership this world so badly needs, and so-called "scientific management" it so sadly gets.

There is, however, an immense difficulty in this perception of things, for failure is constant and certain. If one's own conduct, intelligence and effort are deficient, as at times they inevitably must be, it is a failure of the first magnitude. If one fails to gain the confidence, consent and support of superiors, it is a failure of the second magnitude. If one is subverted by peers, dominated by competitors or hamstrung by mindless regulation, it is a failure of the third magnitude. If those over whom we have authority cannot understand, accept and practice the theory, it is a failure of the fourth magnitude. One must look to'self for every failure. There is no other excuse. None! Absolutely!

However, that is not to be feared, for success, while it may build confidence, teaches but one, indelible lesson: to have too high an opinion of self. It is from failure that all growth comes, provided .only that one can recognize it, admit it, learn from it and rise above it. Nor should one be discouraged by shortcomings. The concept presumes a standard quite beyond human perfectibility, and that is quite alright, for joy and satisfaction are in the pursuit of an objective, not its realization. The only question of importance, is whether one is constantly rising in the scale.



The Flow of Organizational Design Using Visa as an Example

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	Definition
Underlying Function	The basic social function that underlies the current form of organization and products. technological change may require that you change the you do something, but not alter the you need to do. For Visa, it was "exchanging value in the form of money."
Nature and Stimulus of Range	What is causing the need or desire to change to new ways of doing things (organization, products). With Visa, it was the advent of electronic communication and processing technology that was going to change the nature of "money" and how it was exchanged.
Scope of market	Tours a day, seven days a week, anywhere on the globe, and between any two or more ooints on the globe. Before the advent of electronic communication, it was impossible to be in all of these places at the same time; no longer.
Who? global	Everyone that would wish to participate in that market. For Visa, everyone on earth was a Possible customer.
Purpose	That which people see value in doing together. The purpose should transcend any particular way to achieve the objective. In fact, it should invite differences of opinion about how to proceed. For Visa, it was "create the premier system for the exchange of value."
Who? participant pool	Depending on the purpose, the <i>specific subset of people that are going to be eligible to</i> take <i>part in building the system.</i> In Visa's case, the basic member was a "bank" or similar institution, since its basic function was the "custody and exchange of money."
Principles	A statement of belief of the participants concerning how they will work together to achieve theirpurpose. Those things that they refuse to violate in pursuit of the purpose. There is no single way to define what a principle can or cannot be. It should at least include organizational principles (like those that define "open partnerships" plus those that state the nature and rights of "power"), but beyond that, it needs to be driven by circumstances. For Visa, there were important business principles (e.g., needed to be "infinitely malleable yet extremely durable") and principles that regulated the transition from one set of relationships among the banks to the next (e.g., no one could be left in a lesser position due to the transition).
Concept	What the nature of the organization that embodies these purposes and principles is. Remember that the "corporation" is a concept that embodies a different set of principles and purposes. In Visa's case, that was a "for-profit, non-stock, membership corporation, that was an inside-out holding company where ownership was held in the form of nontransferable defined membership rights"
Who? starting point	The subset of the participant pool who will agree to launch the organization. For Visa, it was the 300 licensees of BankAmericard
Structure	From here on, it is not nearly as linear or predictable a process. <i>Structure is a formally agreed upon means that assists in organizing joint action.</i> There are governance, operating and enforcement structures;.etc.
Product markets	Classes of things that are in competition with each other (within the organization). In Visa, these were things like credit cards, travelers checks, data transfer standards, etc. Usually the most important things to the organization are those you try to 'drganize competition around.
Who?	Those who join to produce or distribute products within product markets. This defines who
Practices	Is "in" at any point in time and has rights of participation. Means by which any particular area of the organization operates on a day-to-day basis. For Visa, these included decision-making procedures, transaction clearing policies, etc., any of which could be applicable to any or all levels within the organization.
Products	The things actually used by either internal or external customers, i.e., any <u>particular</u> credit card or standard
Structure	I add "structure" a second time because it is not only constructed out of the global agreements "down", but more importantly by the actions of individual members "up."