Using the Balance Model for Planning and Prediction

"The major problems in the world are the result of the difference
between the way nature works and the way man thinks."
Gregory Bateson

Introduction to the Balance Model

Exponentially increasing rates of change in the 00's make it imperative that futurists' planning and prediction models adapt accordingly. The solutions best prepared to work with the coming seismic changes are those that mirror the behavior of balanced natural systems: highly decentralized with changes initiated from the ground up, interdependently networked with attenuated global control, continuously adapting to the flux of changing conditions.

Inspired by this natural brilliance, the balance model reframes human-made systems as being in or out of balance and devises solutions to efficiently and elegantly bring systems out-of-balance into balance. This model's prime tenet is that a state of balance naturally inheres in complex systems, which ineluctably seek to maintain or regain that state as part of their natural function.

Futurists using this model can mold human-created open systems to arrive at states of optimal balance by skillfully discerning the rates at which the key balance-effecting factors are waxing, efflorescing, and waning, and synergizing the unceasing flux of their interplay. The goal is to enable systems to eventually manifest the autonomic characteristics shared by balanced systems: self-regulation, self-organization, even self-healing.

The balance model functions effectively in situations of ceaseless change by creating conditions that *allow* balanced outcomes or circumstances to manifest. The time of imposing uniform measures on unique local conditions is over, and it is increasingly fruitless to try. Solutions based on such linear and deterministic "control" paradigms are losing ground over time due to the rising surfeit of data and conditions beyond the control—and oftentimes, the awareness—of any centralized entity.

This model instead evaluates situations in terms of how to effect balance by understanding the factors that conduce to and obstruct the state of balance, and augmenting, transferring, transforming, or removing them accordingly. The resulting dynamism allows systems to better envelop and conform new conditions as they emerge.

What Sort of Balance Is This?

This state of balance is organic: in constant flux and more an absence of imbalance than something that can be intentionally imposed and maintained through intervention. This distinguishes it from means of effecting balance that take the form of balance and counterbalance: scales, where two or more elements (or sets of elements) are balanced out in a largely static manner (the most static point being the most stable point); or

"saddle points," where the aim is to balance the forces of attraction and repulsion, or any other dichotomous forces. Nor is this the balance of walking a tightrope, where actors maintain balance through intention. In all such cases, balance is imposed.

The type of balance spoken of here is closer to what has been known as "internal steady state": self-regulating cybernetic systems stabilizing themselves by responding to information through negative feedback loops. With organic balance, its opposite is imbalance only as a linguistic convenience; in fact, balance is the original state, the state to which complex systems return given suitable conditions and the evaporation of impediments. It exists innately and is merely allowed to manifest; it is fully dynamic, continuously in flux around a set point, and not dependent upon arriving at stasis—stasis being intrinsically less flexible than dynamism.

Balance is is-ness: the quicksilver intersection of emptiness and form, of past and future, of order and chaos. It can be pointed to but not grasped, does not exist as a thing in itself, and can be detected only through the interactions and characteristics of that which it coalesces, like planets known only by their effect on the motion of stars.

Balance interweaves the continuous, centrifugal thread of order—without which all would dissipate and collapse—with the disintegrative randomness of chaos, which allows space and material for new life to arise. It is well symbolized by the ancient Yin/Yang, with its circle of light within the dark, and vice versa: the chaos that permeates order, and the order that permeates chaos. This ceaseless dance takes care of itself in well-balanced systems.

Absence and Interdependence

Absence is the name given in this model to all that is not-form and not-time. When the model is mapped for any given system, four quadrants representing various aspects of form and time surround the *Absence*, or space, that lies at the center. *Absence* is manifest only through the forms, or elements, of the four quadrants. *Absence* and the elements are inextricably interdependent—as are the elements themselves—and balance is where they intersect. Without the invisible cohering effect of balance, systems where to varying degrees everything affects everything else would not be manageable; methods conducing to optimal balance in systems enable this web of interdependence between elements to flourish in the healthiest ways possible.

If the elements are thought of as points in space (in *Absence*), then because there are no fixed points in space—nothing can be in space without referring to some other part—the center is everywhere and nowhere. As the choreographer Merce Cunningham said, referring to stage space: "Wherever you are is the center, as well as where everybody else is."

The center here is *Absence*, the realm of not-time—the now—indivisible from all events and forms that play out in time. In this *Absence*, the future is now, the past is now, everything is always happening *now* and events in all of the quadrants are seen through this lens, recognizing "past" and "future" as but conceptual formulations. (Nor is the

"present" now. If past and future do not in fact exist, nor can the present; these "three times" are illusory.)

Absence is also the realm of a nexus of intangible and invisible qualities that give systems their unique attributes, like rhythm, momentum, and flows of energy. While form wields solutions, *Absence* is where solutions arise, in the way of the Tao Te Ching: "Benefit comes from what is there, usefulness from what is not there."

And just as the center is everywhere, *Absence* exists in each of the system elements in equal measure. At all times the system being worked with must be seen *as a whole*.

Absence and the Four Quadrants

The northwest and southwest quadrants—named *Memories* and *Artifacts*, respectively—represent "the past," while the northeast and southeast quadrants—named *Futurescapes* and *Visions*, respectively—represent "the future." In all of these quadrants (described below), the forms of the past and the future are either manifest or to-be-manifest, and thus quantifiable. Form predominates in the two past quadrants, with *Absence* less dominant; in the two future quadrants, *Absence* predominates, with form inchoate and less dominant.

Each quadrant contains qualities of each of the others, as symbolized by the Yin/Yang. (Only the primary Yin/Yang's between the *Memories* and *Visions* quadrants—named *Nascences* and *Heterodoxies*, respectively—and between the *Artifacts* and *Futurescapes* quadrants—*Blueprints* and *Ductiles*, respectively—are discussed in this paper.) Because of this interdependence, no part of any quadrant stands alone, though for presentation purposes they are separated as such. Everything is interwoven—including the past/future dichotomy itself.

Memories Quadrant

The *Memories* quadrant, mapped in the northwest, is home to information seen and interpreted primarily through the lens of what has passed, particularly as distilled into accepted facts, conventional wisdoms, and operating paradigms: trends, statistics, polls, history books, biographies, scientific orthodoxies, current and dated technologies, traditions, etc.

Trends, statistics, and polls, which measure and embody the past, are analyzed to determine their operative paradigms, their track record in yielding accurate predictions, and their degree of relevance to effecting the desired balance point or outcome.

In this quadrant lie "true zones" of knowledge, the etching of "what is known" into the collective mindscape, like the grooving of a frequently traveled path, with radiations outward where fewer have passed. The grooves are like conventional wisdoms, traditions, stories, and much-referenced data, the ever-less traversed areas like margins of error and less august data, and the areas least frequented, where virtually no marks can be detected at all, like anecdotes, individual datum, and autobiographies.

Heterodoxies is this quadrant's Yin/Yang with the *Vision* quadrant, and is home to contrary or eccentric data, ideas, and theories that do not corroborate accepted norms and orthodoxies, including scientific theories yet to be substantiated.

Visions **Quadrant**

The *Visions* quadrant, mapped in the southeast, is home to information seen and interpreted primarily through the lens of what is to come: projections, intuitions, visions, and speculations—extending to the global scale and millennia hence—including any that may run counter to paradigms or conventional wisdoms in futurist thought.

This quadrant includes scenario planning for the full range of potentially chaos-producing events, particularly unprecedented and widely unanticipated changes, events, and situations, and far-from-equilibrium conditions. Here also is scenario planning for the individual trajectories and confluences of envisioned, emerging, and established technologies, including those possible in theory but not yet proven or in wide use, including those sure to have revolutionary effects when introduced: quantum computing, helium-3 from the moon (speculated to yield one million times as much energy per pound as a ton of coal), flying "cars," etc. Incorporated here are the plans and current actions of clients and their competitors (and potential competitors), including mergers, technology acquisitions, and expansions into new markets.

Nascences is this quadrant's Yin/Yang with the *Memories* quadrant, and is home to inchoate data, events and opinions projected to coalesce into future paradigms, conventional wisdoms, and accepted facts. *Nascences* is the realm of omens and portents—functioning as sensors by detecting movements, trends, or events that otherwise would be "beneath the radar"—and of un-manifested trends: intuiting and sensing what *will be* tradition and history in time, what *will form* the basis of future statistics, etc. Historical events, data, and viewpoints can be investigated for fractal self-similarities with the project under consideration, potentially indicating the presence of un-manifested trends or yielding insights regarding similarities and differences of paradigm, rates of technology absorption, etc.

Aggregate trends that can be detected include the changes in movement known as "sea changes" or "groundswells." Also critical to discern are turning or breaking points, the decisive points at which strands of events coalesce and take on trajectories that lead, sometimes ineluctably, to particular results. Other clues to help discern the upcoming Zeitgeist may be found by observing the behaviors, values, interests, and technology usages of young people and the works of prominent artists.

Aggregated information of this type can reveal emergent paradigms, markets and human behaviors, including rates of technology adoption, the point at which a particular new technology will reach the market (and market saturation), resistances like anti-technology and anti-social-change rebellions, etc.

Artifacts **Quadrant**

The *Artifacts* quadrant, mapped in the southwest, is home to the current structure of the system: areas of stasis, stability, durability, contraction, degeneration and decline. This quadrant also includes obstacles and rigidities in the system, impediments to change, areas becoming closed off, and resistances to energy flow or to the ingress of new elements.

Events just past leave behind wakes, an intermediate stage before coalescing into structure. These traces are the chaotic side of stability; on the other side are dying and dead structures with a surfeit of order and stasis. Dead structures are the detritus of existence with form but no vitality, have little effect except as potential compost for living structures, and are cleared away where possible.

There is an art to correctly identifying and working with obstacles—defined as that which inhibits the manifestation or return of balance in a system. The balance model is particularly suited to working with obstacles since balance naturally occurs in the absence of obstacles. In generic terms, obstacles are analyzed by their degree of distorting effects upon balance and optimal energy flow in any system (which art entails knowing what balance looks like). Recognizing the presence of obstacles is analogous to noting the human behavior of *Schadenfreude*—pleasure at another's misfortune: the degree to which it is experienced reveals the depth of obscuration, the ignorance of our natures as Love.

Portending imbalances can be wisely preempted by removing hindrances. Related methods include extracting obstacles from their place of origin to another context so that they effect rather than obstruct balance, and changing their function from blocking to facilitating by literally transforming them wherever possible; since obstacles are essentially trapped energy, it is more beneficial in these instances to allow the erstwhile obstacles to remain in the system, since when released from encasement they have strong force that can be readily assimilated by systems they are indigenous to. In other cases, the parts of obstacles that do not conduce to balance can be cleared away, as with ore that is smelted to separate the impurities from pure metal.

Discerning judgment is needed to ensure that obstacles and not durables are removed. Areas of stasis and stability—those that have relatively more durability, longevity, or inertia in them—are oases of ballast and order, providing a conservative effect that permits the whole system to proceed forward without coming apart at the seams.

Ductiles is this quadrant's Yin/Yang with the *Futurescapes* quadrant, and is home to existing areas and structures of flexibility and adaptability, good energy flow and propitious structure in the system, and unobstructed portals for the ingress of new elements. Included here are durable structures that conduce to positive energy flow; durables that inhibit this are represented in this quadrant as obstacles.

Futurescapes **Quadrant**

The *Futurescapes* quadrant, mapped in the northeast, is home to potential structures of systems: new adaptations, openings, areas of growth, regeneration, expansion and efflorescence, and ingresses for elements outside system to enter—in particular, those

that have the potential to introduce chaos or form areas of quickening (areas that catalyze and hasten the force and influence of new inputs: the opposite of obstacles).

Seams or cracks in the system are indications of structure-in-potential: here change is breaking through, creating openings for renewal, revitalization, and the transformation or clearing away of superfluous and outmoded system structures and elements. By understanding the nature, speed of entrance, and trajectory of the elements entering through seams—and accurately projecting the effects, particularly disruptive ones—pre-emptive applications can be administered.

This quadrant is home to one of the most highly dynamic segments in the model: the continuous re-mapping of the potential system structures currently projected, given the anticipated changes and the evolving condition of the system overall—like an adaptable architectural drawing.

Blueprints is this quadrant's Yin/Yang with the *Artifacts* quadrant, and is home to stable and entropic yet-to-be structures: those elements projected to stabilize and be durable, as well as those projected to rigidify, corrode, contract, close off, disperse, degenerate or die—including new elements resulting from changes to the system.

Potential and just-now-manifesting obstacles offer further opportunities for wise preemption, where precise applications now can obviate significant expenditures of energy, time and money. Classified here also are elements projected to cause contraction and degeneration (or to contract and degenerate or die themselves), and that are characterized by decadence, senescence, and ossification—any of which may herald an imminent bursting forth of new approaches and ideas, often noted by a sense that something is "in the air." Situations of this sort almost literally "call forth" the new approaches, like yearnings of the collective unconscious that continually seek freshness and novelty as a counterbalance to the known and comfortable. This is how the lifeforce operates, and it is what brings forth every new thing, desire and aspiration.

Systems Evaluation

This model is as much an adaptable mapping as it is a model: there are few hard-and-fast rules. The overarching goal is always to find ways of effecting optimal outcomes or divining authentic scenarios by allowing the natural balance already inhering in systems to manifest.

The first step is to understand a system's Zeitgeist: its dominant operational paradigms, its structure and present degree of balance, the relationships between key elements, the interactions of large-scale factors (like momentum and magnetic influence, discussed below) and the key inductors of balance, among other considerations.

Using the outcome or scenario as endpoint, the most salient elements and factors are mapped out in the quadrants, estimating their capacity to induce or block balance, and to what degree; degree of influence on other elements; trajectories, etc.

It is essential to develop the art of recognizing, analyzing, and wisely working with the elements and factors that can most fundamentally help effect balance. This endeavor is greatly helped by understanding a system's elements and processes in terms of their analogs with those of nature. (Subsequent applications are often suggested by various methods and devices devised throughout history for working with elements and forces of the natural world.)

While there are no set answers—each situation calls forth new approaches to understanding a system's true nature—balance-inducing elements tend either to have, or to cause to exist, some of the characteristics exhibited by balanced systems in nature: self-organization, self-regulation, self-regeneration. Working with far-from-equilibrium conditions is no exception: no system remains far-from-equilibrium for long, and good applications hasten the arrival at the new, more complex (or less aggregated) state of balance.

Once the key balance-effecting elements and factors are identified, they are closely analyzed to determine their stages and rates of expansion, efflorescence or contraction. An additional key consideration is the rates at which new factors are entering the system and being absorbed, how they are projected to operate when absorbed, and how this is expected to affect the system—including the effects of any die out or decrease in utility of in-system elements that may result.

In dynamic and interdependent systems, change to one element affects all the others to varying degrees, so good applications foster conditions that allow the natural intelligence of systems to self-organize many of the variances that result. The deeper the insight into the nature of the key inductors and obstructors of balance in systems—as well as their trajectories and interplay—the stronger and longer-lived will be the effect of corresponding solutions.

The ballistic integrities of both key factors and proposed solutions can be mapped, estimating the tenacity of their effects and trajectories over time. Especially acute insights unladen with unconscious biases can hold largely true throughout myriad changes in circumstance, obviating the need for continual and interruptive altering of systems. And while desirable, it is not essential that the behavior of less critical factors be scenario-planned (or sometimes even that their existence be known), in order for solutions to have the desired effect.

Key elements are analyzed to estimate the degree of control the client has over each, and proposed solutions are made congruent, to the greatest degree possible, with elements and factors beyond the purview of clients. (Control over the results of applied solutions, by contrast, is relinquished to balance). Using the scenario-planned trajectories towards balance, a future-backward "history of the future" can then be created.

Qualitative Factors

Good solutions and scenarios within the balance model are also based upon insight into systems' qualities that are unique to the moment. Elements, or whole areas within

systems, may take particular forms or positions during certain stages of their existence, and different ones at another; or their states may change abruptly, like morphing from ice to water under the influence of heat. The conditions that would cause these states to change need to be considered.

Discerning the rhythm of systems correctly is essential for the appropriate timing of interventions: too soon, and the results will not be those desired; too late, and the opportunity may have passed—it may still be possible to get the desired results, but only at a cost. Good timing is especially important in the planting of "seeds": proactive introductions of resources that yield results over time. The art here is in knowing which seeds should be planted where (in what context), and in correctly estimating how they will grow and interact with other system elements.

Knowing when to apply not only what, but how much and where, is also critically important: just as "the dose makes the poison," even potentially beneficial interventions may lead to harmful results if the interventions are not proportionate and timely.

Other aspects of rhythm are the myriad momentums within any given system. Consonance with the speed, direction, and state of waxing or waning of momentums—and their cousins, groundswells—enables more timely and elegant applications.

Other invisible factors giving systems their unique characters are entrainment and entrancement: the capacity of some elements to coalesce and magnetize others around them, like whirlpools and gravity fields. Analysis of these factors includes consideration of which factors are causing these effects, and which are being affected by them, and to what effect—and likewise for the forces of repulsion and diffusion.

All of these qualitative attributes are analyzed in terms of their relationship to the desired outcome and the ultimate invisible factor, balance. Insight into the nature of these and other "invisibles" in systems aids the elegant application of client resources and creates workable solutions with less time, money and effort.

Chi, or Energy Flow

The potential for optimal balance to arise is enhanced by the presence of ever more players, increased dynamism, and rates of change in systems. Such accelerated fusing of conditions sets the stage for working with what might be termed the "inborn lifeforce" of complex systems: qualities like vigor and spirit.

This lifeforce is the chi of the Orient, and to understand its play in any system and how to direct it is to become a master of balance. Chi is the lifeforce that pervades the whole of the cosmos and every truly complex system's "body," making the dance of balance possible. Knowing how to work with chi in systems allows the balance model practitioner to move energy in ways conducive to balance (as in *chi gung*), to correctly place assets and players in harmonious relationship (*feng shui*), and to penetrate through the events of the day with oracles (*I Ching* and others).

The flow of chi, or energy—including areas where it is blocked and rendered ineffective—can be plotted for systems in ways similar to architectural drawings. Systems are made more vigorous by propitious placement and grouping of key elements in relation to one another in ways that permit optimal energy flow. By examining the current structure of the system and envisioning the trajectory towards a balanced structure at outcome—with consideration of new elements as they arise—the structure can, within the parameters of control, be adapted and morphed into these more advantageous placements. Even small changes of this sort in the service of balance can yield large benefits.

Mapping and Monitoring the System

After systems have been fully analyzed and mapped, the applications resulting from consensus are implemented. Contingency plans are laid out, identifying the structural factors that need to be closely monitored and describing scenarios for steps to be taken as specified conditions arise. The effects of applications are continuously monitored and adjusted as conditions change in the service of attaining or regaining balance; close monitoring of the system in this way actually reduces the imperative for predictions. Key signposts for identifying the emergence of balance in systems—as a gauge of the effectiveness of interventions—are instances of self-regulation, self-organization, and self-regeneration.

Outcomes in the Balance Model

When applied to situations where clients require fixed-endpoint solutions, balance model applications create the conditions that will allow those specific results to manifest, which have the nature of "balance points." For open-endpoint situations (consequences of particular client actions, effects of a given technology's emergence, etc.), solutions create the conditions that allow states of balance to arise for clients' overall systems.

Gauging Applications

Relevant information, assets/resources, and technologies, as well as proposed solutions, are given numerical values estimating worth vis-à-vis potential to effect balance. The number representing the potential overall is placed in *Absence* (on a 1–100 scale, with an estimated margin of error). Corresponding valuations are assigned to each of the other quadrants: in *Memories*, a gauge of degree of reference and relevance to the present situation; in *Visions*, projected reference and relevance to the situation at desired outcome; in *Artifacts*, degree of accuracy in relation to the present situation (including any biases or vested interests of information sources); and in *Futurescapes*, degree of accuracy in relation to the desired outcome.

VR and Computer Gaming-based Applications

Virtual reality allows futurists to dramatically amplify how they express scenarios for bringing systems into balance. It allows everything relating to balance to be symbolized, with participants experiencing the same scenario and outcome simulations around a table or around the globe—using 3-D virtual reality goggles or, soon, holograms. SIMS

(simulation of interactive mobile sentients)-like video gaming techniques can be used to create characters symbolic of the elements in systems—which symbols can include qualitative factors like rhythm and momentum—and allow them to evolve over time as they play out scenarios with other characters.

Characters can be made idiosyncratic and recognizable for immersive visualization participants by assigning them a range of attributes: the color of quadrants if they are associated with one—*Memories* is orange, *Visions*, blue, *Artifacts* red, and *Futurescapes* green; shadings of color to denote degrees of saturation with the attribute; varying speeds to represent rates of change and momentum; depth to represent degree of influence; evocative shapes and sizes, etc. By continuously streaming in new parameters and inputs to test for effect, futurists can derive valuable insights and predictions to enhance applications for systems of any size, up to the functioning of the global economy.

Elegance in Application

Properly done, these methods transcend bringing mere efficiencies into the system (and thus establishing high levels of functioning) to actually take systems to levels characterized by elegance, resonance, and effortlessness of operation: the natural byproducts of systems where energy flows are not obstructed or impeded. Wise cultivation of these qualities yields beneficial results more quickly and effectively with less cost in time, money and energy. The quest for effortlessness itself is a move away from the effort needed in strict control models; it implies not less work but rather less intrusion. Insight into balance allows the application of just the right amount of effort, by discerning the threshold point at which effort to create more order actually yields less and less accomplishment.

Elegant application also proceeds from deep insight into incipient trends, behaviors and conditions. The capacity to act at pre-effect stages—preventive placement of assets, or timely strategies to preempt the intrusion or diffusion of destabilizing factors and conditions (as do well-functioning immune systems)—is extremely valuable in futurist work.

Paradigms and Biases

Optimal solutions in this model always have some form of balance as their end-point, and envision the desired outcome as already existent. This entails anticipating, as closely as possible, the paradigms, milieus, assumptions, and conditions overall that will obtain at the time the desired outcome has arrived.

We normally view the past and future through the biased lens of the knowledge of how things all turned out, lending events a finality and resolution that they never had while they were unfolding, and skewing our interpretation of events that took place. We see the future through the lens of the lack of certainty of how it is all going to turn out. The former view gives the impression of omniscience (“hindsight is 20/20”), the latter of nescience; both are false impressions. Accelerating rates of change are awakening us with ever more urgency to the fact that the future is now in a very real way.

It is obvious that many of today's governing paradigms are indiscernible to most of us; we are all creatures of our time to some degree. With the global media matrix acting as a paradigm assimilator—more people than ever across the planet are on the same page—the challenge remains to see outside of outside the box. The most enveloping paradigms are the most intransigent to penetration: even the freethinking heretics of ancient Greece were a-polytheists, not a-monotheists. For almost a century, virtually all Europeans thought that California was an island, the error persisting on some maps for decades after the Jesuit Father Kino walked from what is now New Mexico to the California coast in 1705. To whatever extent possible, it is crucial to be aware of and to correct for biases or paradigms governing systems and their players, especially in virtual reality simulations that heighten the effects of ignorance.

The Role of Self-Knowledge

Judicious application of the balance model, and futurist methodologies in general, calls for the clearest possible understanding of oneself, and thus one's own governing paradigms. Any unconscious biases, social conditioning, predilections, and emotional knots—in a word, *ignorance*—will muddy intuition, lead to less elegant outcomes, and generally lessen the accuracy of futurist work. They quite literally obscure us: even when something lies within our operational paradigm, we may miss seeing it entirely if, subconsciously, it is not something we *want* to happen, or think *should* happen, or even *could* happen. Equally important is not attaching to the things we *do* see, the ways we see things, or the solutions and scenarios we devise as futurists.

The key attribute that self-knowledge and nonattachment establish is pliancy of mind. The more futurists are able to see through and correct for our own veils—the paradigms, conventions and knots that govern our thought processes—the better we can effect optimal outcomes. Ultimately, this balance model is about making the jump from knowledge to wisdom.

END

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