IV-12 Hearing to Listen and Looking to See

Wisdom of *do not get caught up in your own image* echoes in *King of jesters is also Jester of kings*. Voltaire noted the irony of a trickster as: *God is playing comedian to people who are too afraid to laugh*.

Origins and significance of the word interactions lie deep in the human condition. It facilitates grasp of reality in stages where blinders of cognitive biases prevent realization of the obvious. Context for the organization of relevant information is also provided by social and personal interaction. Virtually all languages have redundant inputs. Often the search goes on for a while before one knows what one is looking for. Yet elaborate expressions for the not-seeing, not-listening, not-responding, and not-caring behaviors attest to the blinders that we have to shed before interactions become meaningful to change quality of perception. Operational ideal is: More honest we are with our understanding, as individuals more effective we can be.

Goal of all searches is perceive particulars in relation to the rest of the universe. Through the opposites of evil and good, we cherish and yearn to establish degrees of deeper connectivity with the experience. Lasting understanding comes from the more inclusive solutions, and not from winning or loosing, or from making a point based on facts or ideal. In such searches heroes of fairy-tales often find themselves at forks where the third branch of the undecided outcomes is juxtaposed against the branch of favorable outcome and the other that threatens the survival.

Opportunities lie in-between.

E**xploration of intended, formalist, and evoked.**

As play tools words have self-imposed and external sense of boundary as in: *Faith is believing in something you know damn well ain't so. Lack of faith not to believe in things you know damn well are so! Theory determines what you see.* Perceptions are shaped by web of motives inherent in principles, beliefs, ideals, idols, dogma and taboos. Man styles himself in such images. Yet sooner or later such universals crumble: *If reality is grand, the grandiose is unreal.*

Search for the hidden through generalizations:

* Levels of meaning as through jokes
* Elaborations, definition and elucidation of the problem
* Taking liberty: Anything goes for exploring feasibility
* Modeling for developing optimal criteria
* Value for maximizing the pay-off above a minimum (min-max)
* Dealings with a novel experience
* Successive approximation applied to older concepts to find trouble and then discern the pattern (*rat in a maze*)
* Interactions with reality are influenced by wide-ranging purposes. It is a critical consideration if the experience is to be accessible to all for real-time use without reliance on experts and agents-of-insights including variations of family, educational, church, political and scientific enterprises where the decision-making power is wrested upon *those who know*.
* Curiosity helps in exploring the physical limits and beyond as in: *If the universe has limits, what is beyond the boundary*?
* Often used in large general sense but words may still have special meaning. Precision helps in defining the hidden areas that may be neglected otherwise. Restricting the domain of validity produces a gain in universality.

- Inquiry into nature of matter is domain of science, and into things that matter to heart is the domain of arts. Arts strive for the universals of the personal knowledge of the phenomenal world. The sciences strive to develop shared knowledge that brings together the phenomenological diversity. Both are painstaking, absorbing and continuing creative processes of discovery, each with their own media, crafts, techniques, aesthetics, peer scrutiny, and utilitarian appeal. Both strive for dispassionate perception of world. Both influence and are influenced by the environment. In both cases market forces influence not only the medium and the craft but also the content to serve the interest groups. Both range from hack to high and sublime. In both cases, plurality of experience invites comparisons to discern universality, although arts may dwell on the worlds that converge for the moment. Probably because the individual identity is so strongly valued in arts, orgies of individualism and personal quests for novelty invite variations on a theme by changing strokes or word order in poem or lyrics. Variations on a theme are also part of the archival stage of the sciences that also serves the purpose of independent verification.

Skeptics: Viable alternatives from agnostics and skeptics are at the core of rational practice that thrives on challenges of new inputs. Both arts and sciences benefit from skeptics. They make us aware of traps set up by our representations. To the extent we are slave of the language that we use, we pay limited attention to precision. Our rational conviction is often clouded with motives. Precision to language accorded by knowledge of semantics aspires for meaningful formulation of statements with respect to their verifiability. Perseverance and persistence also leads to meaningful deductive and inductive abstractions with a full acknowledgement that images and ideals are neither absolute nor

ultimate. Doubters and hard-balls keep the search on track through the worlds and values created through practice of reason.

Dionysian impulse. One fanaticism brings forth another to counterbalance the intellectual duality. In this environment of two-cultures, Dionysian impulse of passionate abandonment challenges hope that given time science can solve all problems (scientism). Such romanticism is inherent in the guises of the world populated with heroic individuals, in rejoicing as the motive for the arts, in the denial of reality outside the mental construct, and in the post-modern deconstruction.

Explanations. Scientific descriptions are about regularities. Such explanations help us understand things by way of a common answer to a series of questions often posed in the form of assertions built around a hypothesis in the context of established knowledge. Explanation of individual events is also given on the basis of prior knowledge and in the context of other events. Such descriptions, explanations or assertions invoking a cause do not necessarily evolve to the level of physical laws and theories. This is because causality implied by the descriptive terms is not always meaningful.

- Phenomenological regularity implies an intrinsic, whether or not we have identified it. In a scientific explanation such intrinsic is operationally used to deduce the pattern of events: Kepler's laws of planetary motion led to the more fundamental Newton's laws of motion and gravity, and so on. Such explanations and relations inevitably hold within the constraints of the observed world. Recognizing patterns of behavior and changes are part of explanation because they help us identify things that remain to be explained. Therefore, it is also necessary to distinguish whether an event is an accident or an outcome of a pattern of behaviors.

Choices by analogies. Identifying the change and difference

consists of many levels of processing. Word choices relate to incidental versus the essential quality of events and relations. Clues, if not keys, to word choice are provided by perception of stimulus to category of idea, process, and information. As cognition and choices evolve from simple to syntactic to semantic levels, with degrees of sprouting and pruning of perceptions to draw on the available inputs awareness is transformed to interest and knowledge.

Combinatorial jungle. All conclusions (guesses) are fallible simply because the evidence is never complete. Good guesswork requires efficient use of all the available information by enabling variations of rashness and caution to be distinguished from variations in the amount of the available evidence that is used. Such threshold criteria (values, culture, apathy) are key factors for resolving signal from noise for versatile, creative and efficient guessing. As a first step one must devise or identify codes for reducing redundancy.

Acceptable methods deal with relations in the real world. We habitually deal with (logical) functions that are more than simple conjunctions of two or more events. As the number of possibilities rises rapidly, finding a path through such a complex combinatorial jungle is not just a matter of detecting this association or that association. It is a formidable task that requires knowledge of the associative structure of a large body of information. A machine searches for the programmed goal.

Spotting serendipity and taking charge is both an art and a craft. It is a common experience that things happen in unexpected ways at unexpected places and unexpected times. What is unique is that sometimes they fall in place. What we make out of such insights creates value. It is not the premise for deja vu but an equation for the future.

Ideas do not come out of the blue yonder. The search space of ideas is multi-dimensional, and imagination is knack for alternatives including variations on a theme. Ideas self-propagate by spawning new ideas that cohere in a framework as precursor for change and vehicles for logical integration of content and form.

Room for Doubt