III-22.   Keeping Viable Options Open

If perceptions guide decisions and judgment-calls, Nay reasoning calls for identification of doubt and contradictions.

Certainly, precious little can be done if we believe that we already know what we ought to know or need to know. Humans understand the world around them, and use parts to decisions. We try to identify and understand assumptions and constraints of the contingencies between the events. Purpose of *Nay* reasoning is to avoid self-reference and related sources of contradictions, regress and irreversible actions. It is with the goal to keep the search consistent with the real world behavior. Ancient works on this approach for reality-based affirmative reasoning are to be found elsewhere on this site.

In the Nay approach, for an individual utility of the effort is maximized in incremental steps in a variety of ways:
(a) Tools and devices (identification, definition, description, organization, and categorization) facilitate grasp of the accessible world.
(b) Prior information and behaviors provide a starting point for the criteria-based approaches (analytic and synthetic) to facilitate the search.
(c) With a decision to act, the observer-observed interactions are guided by a need to find what is missing in order to create a seamless whole from the parts.

These stages are interdependent and nested. The search is guided by tentative (*syad*) inferences. Perfection is not elusive, but a better approximation of validity evolves with practice in stages.

Consideration of viable alternatives (*anekant*) keeps the search going farther.

An individual does not have all the necessary resources, at least on the real-time basis. It places an extraordinary demand on a need to develop reliable but tentative perception. This is to minimize contradictions, distractions, random disorder and chaos. Possibly, the assumption here is that the reality-based alternatives emerge as our decisions and actions move forward towards the states of increasing reliability.

Key assumptions of Vacch-Nay or Reasoning with word constructs are summarized below (and developed further in the Nay Section on this site):

Premise: A key difference between a healthy living body versus the dead is that only one asserts *I am, I exist, I will, It is so.*

-        By examining the content and context of such aspirations and assertions it should be possible to get insight into the nature of the "I" (*atm*).

-        Mind has tendency to hijack words. Refrain is a necessary part of validation of assertions.

-        Evidence from sense inputs and their word constructs play are part of assertions, their validation, and use of inference. Significance and relevance do not validate but provide insights.

-        The content and the context of a word construct are influenced by intentionality. The quality of interaction of the content and context of a word construct depends on the perceptions of the listener. Caution and care is also necessary to reason with word constructs, or to arrive at a better construct that is consistent with external evidence as well as cognized experience.

- Sense inputs from unchangeable reality are captured through the language of conventions, so also the changeable complexity and inputs from mind.
- Such influences also pose challenge of evaluation of word constructs as evidence. With varying degrees of emphasis on the validity of what one knows and how it is perceived by others it is possible to evaluate validity of word constructs.
- Constructs based on numbers are rooted in reality. Such constructs are logical because they obey the logic operators. Thus mathematics is *tark-nay* (or deductive logic).
- Zero and infinity do not obey all the rules of logic operators. Zero can be forced to do so only within certain conventions.
- Word constructs that do not obey such real world behaviors are likely to self-referential or contradictory.

Nay formalism. As developed elsewhere on this site formal Nay methods of reasoning with doubt and alternatives to peel identified layers of uncertainty go back at least 2600 years. Following the lead of Mahaveer, Gautam and Bharbahu and Kundkund, Samantbhadr (ca 200 CE) reviewed and summarized criteria-based formalism to evaluate evidence (*paman*, *praman*) to arrive at empirical inferences or hypotheses (*naigam*). Unlike any other ancient system of logic (III-23), it entertains only the direct and immediate positive evidence to affirm an assertion. Negation is through affirmation of a negative assertion such as *God does not exist* (III-1). Implications are accepted provisionally as circumstantial evidence. The way their belief system evolved they did not resort to violence and remained vegetarian, and took activist stance against cruelty against animals. In their belief to avoid irreversible actions or dead-ends of dogma and absolutes

did not use force for conflict resolution. By remaining true to their belief that doubt is inherent in all inferences these practitioners of Nay formalism did not see a need for God, omniscience, or creator.

Strategy of Vacch-Nay

- All concerns about a subject are formulated with orthogonal overlapping or independent assertions, each of which can be affirmed by independent evidence.

- Inference from each of the affirmed assertions is used to reconstruct the concern as a valid concern.

- Liabilities inherent in any of these steps introduce limitations and liabilities in the final construct.

The main concern of *vacch-nay*, that later emerged as Nyay (III-23) is to facilitate evaluation of assertions as word constructs. Key assumptions are summarized below. :

1. Assertions are validated by the external reality. It may be complex but it always obeys rules, is not self referential or contradictory.

2. It is a limitation of words that both real and imagined can be expressed by words. As such word constructs do not have reality of their own, not do they identify contradictions and inconsistencies, nor do they confer validity. Consistency with the rules of logic does not necessarily validate a construct, but an illogical construct is invalid.

3. Independent evidence and discourse facilitates validation if the word construct brings out the awareness of the same content and context.

4.   Other methods to identify inconsistencies and rationalize assertions include intuition (*anubhav*), guess-estimate (*anuman*),

analogy (*upman*), testimony (*shabd*), ad hoc assertions (*arthpatti*), and lack of suitable counter example (*ababhav*).

5. An inference validated by evidence provides a basis to explore other concerns if the same invariance and concomitance exists.

As developed in the next chapter appreciation of liabilities built into the parts and assumptions, as well as methods of verification is key to the relevance of validated inference for successful behaviors.

Against Gods and Humbug