Note: This is a modelling, done based upon analysis of existing facts and evolving reasoning, as to how the 'Government' and 'Constituents of Governance' are likely to behave and function 'influenced by normal human attributes' under different 'probable conditions' and does not imply projection or criticism of 'any particular government system in the world'. Any explanation in this 'coinciding with any working Government system' shall be an unintentional coincidence only.

Knowledge spheres and Governance

AAR-Act and react; MAEF (Measure values, analyse, evolve, set direction-forward); Dead- domain without dynamism- DWD; Lower intelligence domain-LID; Higher domain of intelligence-HDI

The time is a universal phenomenon which leads to 'continuous change' and 'decay'. This 'continuous change' brings in 'uncertainty' and 'apprehension towards something troublesome' may come up. And human would have to get prepared for survival. They need to analyse the present and prepare plans for the future. Their brain would capture 'information' from occurrences, examine and evaluate and 'generate' knowledge.

There are many fields of knowledge in this world. The knowledge pertains to the happenings in this would. The concept of knowledge comes up out of curiosity of mankind and more precisely, human brain, to work out reasoning and explanations to what was happening around. The **human brain initially would have tried to acquire knowledge about happenings around to understand its 'threat' potential**, in order to ensure safety and once ensuring that there was no 'threat' to self, **further the brain would have explored as to how the outside happenings can be put to its use to extract benefits and support**. So **brain would have interfaced with the environment for two objectives**:

(i) **Understanding environment to enhance its (human/self) survival.**

(ii) Exploring environment to develop support from it for advancements with time.

The human brain when interfacing with the environment would need the following attributes:

(i) Analysis- To analyse the environment /occurrences for objectives quoted above

(ii) Foresee-ability- To develop acumen to foresee and assess of environment in advance vis-a-vis objectives so as to be well prepared for any eventuality.

The human brain will 'act and react' (AAR) for serving the objectives mentioned and would need the attributes which are also noted above. These are the first hand attributes which are needed as obvious requirements for human alignment with the moving time.

Analysis: The **analysis attribute would depend upon the (i) knowledge level** about environment/ happenings whatever acquired and updated (ii) **Experience based ability to assess 'action and reaction'** to the intermediate results of environmental interface.

One need to understand that **there are only two 'truths' in this world, remains unaltered irrespective of people, circumstances, options, interests, emotions etc. These are 'Time' and 'Mathematics'. Anything explained in terms of time and mathematics, is 'rational, conclusive and real'.**

Time is a stream in which everything is flowing and someone deciding not to go in this stream, would only leave its own-self irrelevant, incognizant and backward.

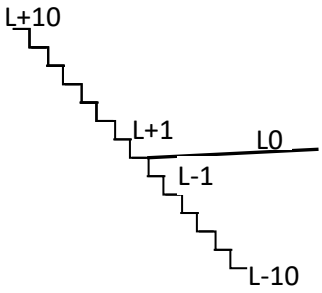
This case can be understood well by analysing the evolution of stairs. There are two points or levels which are different in terms of their energy level, in case of stairs its height, say L10 and L0 and L10 is the goal which is to be achieved and L0 the place to start from. L0 is the

level at which brain is at present and L10 is final result of continuous sequence of interface, action and reaction.

Stairs/ Ladder model

At position L0 the brain or the inquisitor, not aware of all about the L10 **but need to move up with the time.**

Say for example L0 is the ground level and we have to reach L10. The path is not made and not available. What would be done to proceed further?



Let we split the space into three level to enable to review the proposed actions and intermediate strategies. The base level is L0. One level below is L-1 and one level up is L + 1. The objective is to move up from L0 to L10. There are two directions in which a step can be taken, upward or backward.

The path is not made nor defined but direction is set both ways. In this particular case, height is the reference scale and parameter. Though the L10 may be accessible from L0, but direct access is not possible because the **difference is too much to jump up or cover in one step.** What would one should do?

One would take a step say step 1 and assess or measure the distance of L+1 from present position. There are two possibilities, either the step has been taken upward or it is downward. If the step has been taken upward the distance with L10 would reduce or if the step has been taken downward, the distance of L10 with L-1 would increase. If the distance with L10 has reduced, then the direction is correct or otherwise it need to be reversed if the distance has increased. The **direction is now known. Take another step and assess the distance again and compare with the preceding assessment.**

The direction if to go upward or downward, is known now.

The other issue would be if we are going to reach L10 or L-10. After taking few steps the relative distance of L10 and L-10 from present position would be assessed and likewise in subsequent steps one need to ascertain that L10 becoming closer and L-10 is going farther.

This is the ladder model in which even though the target is far away, not possible to take a leap and reach there directly, but the **target becomes reachable and accessible by taking smaller steps, taking intermediate measurements, comparing it with the preceding measurement towards the target and taking corrective action** if it is required. This technique is very useful but need the following faculties in the brain:

(i) Analysis, continuous

(ii) Assessing relative values, higher or lower; comparison.

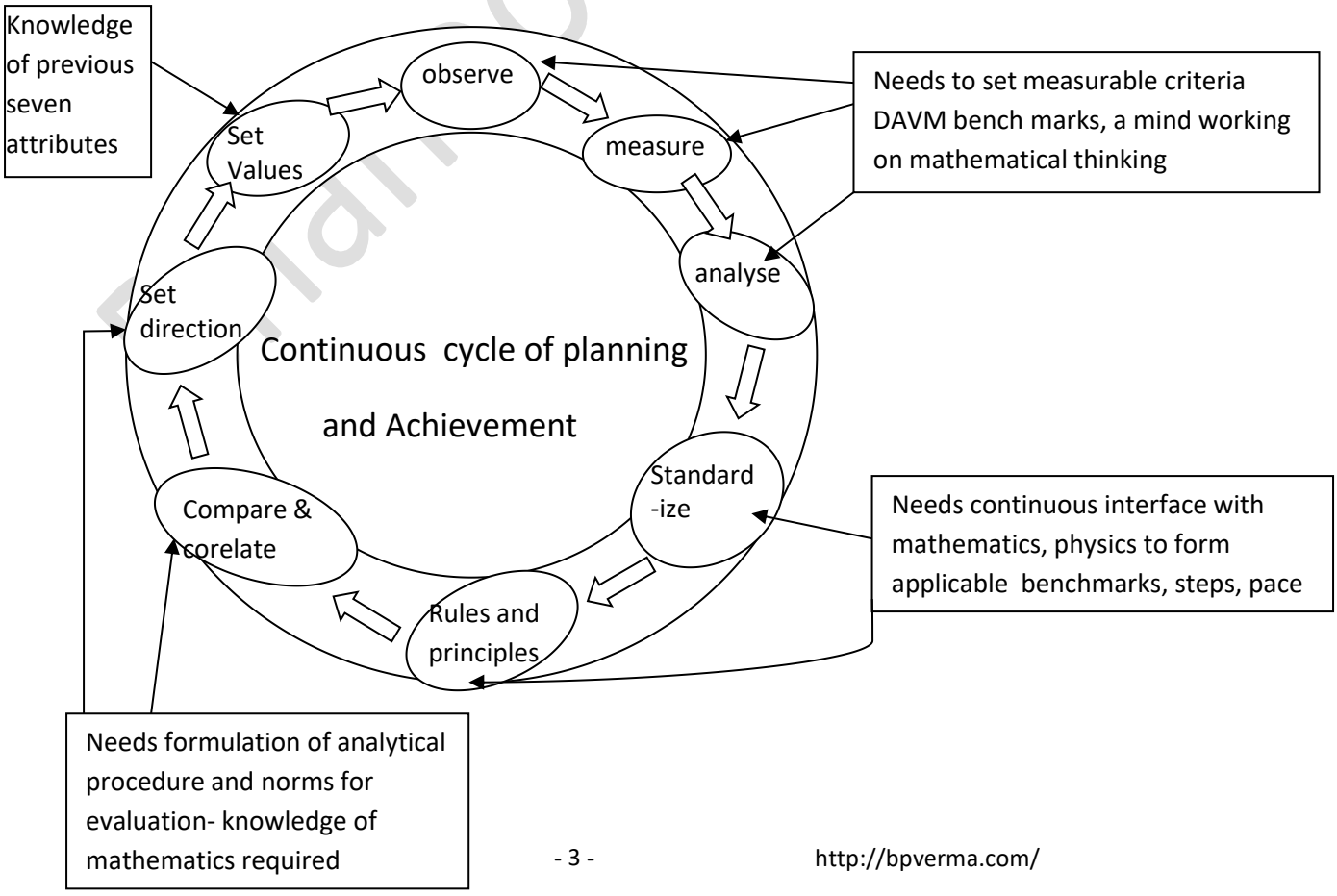
(iii) Measurement, continuous

(iv) Formation of logic for setting a direction.

Thus 'Action and Reaction' by brain depends upon continuous measurements, working out relative values, and analysis to set direction MAEF (Measure values, analyse, evolve, set direction-forward). **All these are mathematical operands and mathematical functions**. The natural observations would always be how much, how far, how near, relative positions, fast/ slow, up/ down, small /large and everything would be 'measured conclusively' in 'mathematical terms'. So brain must have been programmed, encoded and trained in the fields of 'mathematics'. **Without having such capabilities of 'mathematical analysis' developed in the brain, human shall be 'incapable' of AAR operations of measuring values, analysing, deciding next, setting direction and reaching the 'goal'.**

These attributes are required to develop foresee-ability which is must for planning. Planning happens to be the most useful and meaningful skill for purposeful development and development warrants standardization and specifications. Rules and Laws emerges out of standardization and procedures provide link between rules, laws and the environment, thus defines not only the enforcement, but channel of consistent feedback to review the changes in rules and laws and procedures with time.

Observe-measure-analyse-standardize-rules and laws and principles-set values-relate/compare

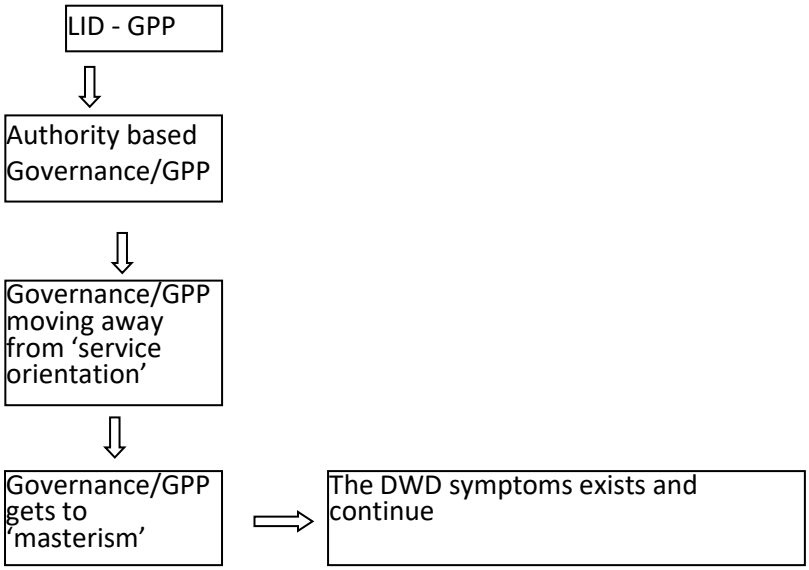


Therefore, **for a human based domain, which is dynamic, to correct itself taking continuous feedback, the knowledge of science subjects based upon primarily mathematics and physics is very essential, and with application skills**. If the human domain, whatever it is and wherever it is, including government and its organs, does not have brains supported by these attributes, it would present itself as a 'dead- domain without dynamism' (DWD) and the rules, laws, procedures, systems, their 'actions and reactions', periodical analysis, directional assessment, right or wrong, and evolution, regular updation with objective of betterment, improving efficiency, bring down the consumption of time and energy and effort, **would be missing to a great extent**. Thus a governance stream stagnated and passive would result.

The government of a nation is the most important entity and having direct impact on the lives of millions and billions. The 'planning' is the most important 'outcome' of a government and planning is 'advance action'. And **for 'sensible, progressive and advance' planning, the human must have brain 'well-tuned and programmed' for the 'science related fields' mainly 'mathematics and physics'. And the knowledge of these, in application mode' evolves as the 'fields of engineering'. Thus these would be the most important prerequisites for the 'human brain' suitable for the 'governance of a nation'.** A human brain 'other than this' would not be able to take the nation ahead of others and consequently shall result the nation trailing to others. Thus knowledge of 'mathematics, physics' and eventually 'engineering' shall signify the 'knowledge sphere' necessary for 'governance of a nation'. Not surprising that the people in these fields viz mathematics, physics (and chemistry for specialized fields) and engineering shall be leading in the overall environment almost everywhere, unless the 'government norms' are structured to push these back. Thus these are likely to be identified as 'higher domain' of intelligence-HDI. The opposite shall be the 'lower intelligence domain'-LID

It is also brought out in other chapter that the 'governance people and entity' in LID shall 'create hierarchy of authority and power' to deal with the 'environment/outside sphere' which is at HDI. And thus government people shall turn into 'authority mode' getting away from 'service mode'.

And a domain backed by such brains which would be non-science based brains, the results would obviously be a stagnation, inefficiency, not proving to bring down time, energy, efforts and resources. If the other Government set ups have these in their systems, a visible difference of economical and social status shall come up as evidence. In this world, there are countries which may be the 'seekers' and on the other hand, there are countries which are 'provider' attaining the status in the same time period, because of attaining the capability of MAEF. These countries would be much higher in capability providing support to others who would lack this, for their development. These would also provide articles of development to others who would lack the background of science.



Looking around, we find our lives being facilitated by the engineering means like motor vehicles, railway systems, solar vehicles, aeroplanes and other aeronautic means, cycle, computer systems, data management, networking, bridges, roads, electricity, Power stations for electricity, houses, house construction materials, procedures and equipments, space exploration equipments and means, health diagnostic equipments, ECG, EEG, robotic surgery equipments, laser technology for health and research etc. For evaluation of any parameter of any attributes, the mathematical numbers and values have been universally taken as standard measurement and accepted through out. It is not very difficult to understand that the 'experts' with sufficient exposure to the relevant application and working stream but having brain trained in 'Engineering attributes', would be best suited for a 'government system' if it is based upon rational and welfare for all, working philosophy, since it would need to have strong foreseeability, measurements, corrections and thus ability of setting correct direction in advance.

It is also elaborated in other chapter that the 'Government/Government people with LID attributes would 'turn to masterism' and the presence of symptoms as brought out in 'Games of masterism' like social backwardness, low CEAK, social evils, crimes, low level of public amenities and low citizen empowerment, higher GPP authority etc shall be not only visible but continue over. **Thus lack of such skills and knowledge and application experience is likely to lead to DWD with symptoms mentioned above.**