

**LIMITS OF ANALYTICAL METHOD:
A PERSPECTIVE FROM THE BHAGAVAD GITA
FOR HOLISTIC SOCIAL SCIENCE RESEARCH**

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When we see the wholeness of a thing from afar that is the true seeing; in the near view trivial details engage the mind and prevent us from seeing the whole, for our powers are limited.

- Rabindranath Tagore¹

There is a story of a Ph.D. student newly enrolled in a university, who took her parents from a village to show her new educational institution. After seeing all the buildings – her department, hostel, library and so on, her father asked the daughter, ‘You have shown us so many buildings, but where is the University?’ This typical error in thinking is known by the phrase ‘missing the forest for the trees,’ and is also illustrated by the *Panchatantra* fable of the elephant and the nine blind men. We tend to miss the whole, while being obsessed too much with the parts.

This is less a question of nature of reality but more of understanding or approaching it. Yet both questions are linked with each other. Approach to knowing reality is tailored to the theory of reality, and yet a theory of reality may well be the outcome of the approach. In India, the Nyaya–Vaisheshika school of Hindu philosophy believed in the whole or wholes being a distinctive reality, created by putting together of the parts, and yet distinct from the parts taken together (Matilal, 2002: 5). On the other hand, according to the Buddhist schools of philosophy, the whole is not distinct from its parts taken together. Even if conceptually different, the

whole has no separate existence apart from its parts taken together (ibid.: 6). In early Hindu philosophy itself, there were two distinct schools, one with a pluralistic view of reality (Nyaya-Vaisheshika), and the other with a holistic view. Bhartrihari contributed to the latter, where reality was an undifferentiated unity, but language sliced the whole into parts resulting in concepts (ibid.: 30, 359). Bhartrihari's view corresponds to absolute monism of Shankara, according to which there is only one absolute reality, and everything is Brahman, though its appearances or manifestations may be many. Later Hindu philosophy developed two further schools of thought on reality – Vishistadvaita of Ramanuja and Dvaita of Madhva. These two views, in some respects, could be considered as variants of the basic Nyaya-Vaisheshika school. While the Vishistadvaita school is both holistic and pluralistic, Dvaita school is purely pluralistic. The former could be said to be a theory of unity in diversity, where diversity is not conceptual but real or ontological.

The Bhagavad Gita (the Gita) is an important scripture of Hinduism, which, in addition to being a moral guide to day-to-day living, is also recognized as a source of teaching on the nature of ultimate reality and of realizing it. But its teaching can be interpreted not in one unique way but in a way as to derive support for all the three views of reality referred above – Advaita, Vishishtadvaita as well as Dvaita. The three eminent *acharyas* associated with these three schools have all drawn support from it. It all depends how one approaches reality or the methodology of deriving knowledge. Even when apparently the same methods of knowledge are used by two persons, their perceptions may differ resulting in different views of reality. According to the Gita, there is a unity or consistency between knowledge (*jnaanam*), object of knowledge (*jneyam*) and of the knower (*parijnaataa*), just as there is such a coherence between

the instrument or the means of action (*karanam*), action (*karma*) and actor or agent of action (*kartaa*) (ch. 18.18). They influence each other. Since reality can be perceived differently by different knowers/actors, there is need for some guidance in assessing the relative merits of different perceptions, in which the teaching of the Gita elaborated in this article can be of some help. A very interesting aspect of the teaching of the Gita is that it can be applied to pursuits of knowledge which are mundane and not necessarily to only spiritual knowledge or knowledge of the ultimate mystical reality. The Gita's teaching can be relevant to the methodology of social science research too!

The key to the understanding of the Gita's approach to either knowledge or action is its teaching that they are to be assessed according to three levels of quality – *trigunas*. This need for assessment applies not only to approach to knowledge or means of action but also to the knower and actor. There is a fairly lengthy discussion of *trigunas* in the Gita, especially in the 14th and the last two of its chapters – the 17th and 18th.² The three levels of qualities or *gunas* are *saatvik*, *raajasik* and *taamasik*. *Saatvik* is morally at the highest level; it means virtuous, free from sin, good, gentle, detached, sage-like, wise, and is associated with happiness (‘*sukha-sangena badhnaati*’, Ch.14.6). *Raajasik* means emotional, passionate (‘*raagaatmakam*’), born of desire and attachment (‘*trishnaasangena samudbhavam*’, Ch 14.7), clever, active, energetic, dynamic and outgoing. *Taamasik* means dismal, indolent, dull, born of ignorance (*ajnaanajam*), illusory, prone to committing mistakes (Ch. 14.8). While the outcome of *saatvik* is happiness and enlightenment, *raajasik* provokes action, and *taamasik* masks knowledge and leads to mistakes or wrong-doing (Ch. 14.9). The Gita is emphatic that the quality which leads to knowledge is *saatvik* (*satvaat*

sanjaayate jnaanam, Ch.14.17). That is why both the knower and actor also have to be *saatvik*, equipped with detachment and free from selfishness, prejudices, and from likes and dislikes (Ch. 18.23). Though detached, they have also to be at the same time courageous and enthusiastic (*dhṛityutsaaha samanvitah*’, Ch. 18.26).

According to the Gita, it is not that one person is always *saatvik* , or another always *taamasik*. Persons are mixtures of all the three *gunas*, with one *guna* emerging as dominant over the other two depending on circumstances and natural inclinations. The Gita tends to apply the criteria of these three *gunas* more to things like work, food, charity, and approach to knowledge than to persons. However, the teaching is that every person should try consciously to be *saatvik* and avoid being *taamasik*. A person gets the attribute based on what or how he does or performs. For example, *saatvik* work is done without a selfish motive and with skill and commitment, and the doer of such works, thus, also becomes *saatvik*. Similarly, *raajasik* work is that which is done with a selfish motive, and *taamasik* work is that which is done with a malicious intention of harming others or work done unmindful of its consequences.

Interestingly, this three-fold criterion is applied not only to work, but also to the way of gaining knowledge and understanding. Three verses – 20th to 22nd – in Chapter 18 of the Gita provide a key to this. The first of these verses is as follows:

Sarvabhooteshu yenaikam bhaavamavyayam eekshate /

Avibhaktam vibhakteshu tatjnaanam viddhi saatvikam //(18.20)

It means: ‘Know that to be the highest or *saatvik* which sees the enduring unity in different things or the common (universal) in diversity’.

Knowledge that synthesizes, which views the object of knowledge holistically, and finds what is unifying, common or universal from the diversity of particulars, such knowledge is highest, according to the Gita. In other words, *saatvik* is a totalizing or philosophical knowledge, which finds the meaning that lies behind everything observed. It looks at the whole, as more than a sum of its parts. It is not necessary that the whole should exist as or should be seen as an organic unity in an undifferentiated way. It does not deny diversity. Nor does it have to declare diversity as false. In fact, the Gita declares elsewhere that Truth can be approached both as one and as of separate or manifold parts (*ekatvena prathaktvena bahudhaa vishvato mukham*, Ch 9.15). There are several other verses in the Gita which emphasize the diverse and pluralistic nature of Truth (Ch.11. 5 and 13; Ch.13.3, 27 and 30). But truth is fully perceived and knowledge emerges only when the unity in diversity is grasped, which is what the *saatvik* approach is about. The approach can even look at parts as wholes within a whole, each part having its own diversity and yet bound together either conceptually or ontologically in a unity.

Swami Vivekanand goes so far as to assert that knowledge results only when a particular is related to the universal, and there can of course be several universals. He asks, ‘What is meant by knowledge?’ and answers in his simple and yet profound way: ‘Destruction of peculiarity. Suppose a boy goes in to a street or a menagerie and sees a peculiarly shaped animal. He does not know what it is. Then he goes to a country where there are hundreds like that one, and he is satisfied; he knows what the species is. Our knowledge is knowing the principle. Our non-knowledge is finding the particular without reference to the principle’ (quoted in Vidyatmananda 2006:12).

Social Science research or most research, in fact, is essentially holistic in the sense that it seeks to find universals behind particulars. It is totalizing in essence. Explaining what real research is and how it is different from mere data gathering, Kurien gives the example of a crime scene to illustrate his point. A police constable may record all particulars of the scene of the crime, which may be necessary for investigation (research), but does not constitute research itself. Research is when a senior police officer has a look at the overall scene, studies all the particulars, forms hypotheses and tests them, seeing the larger picture and taking a holistic view of the crime (Kurien 1973). This may not be the end of the process, and has to be validated in a court of law by a detached judge, who also has to take a holistic view. In such a view, particulars are not ignored, but are related and totalized.

There are, thus, two distinct ways to holistic knowledge: one, conceptualizing the whole comprising several parts, yet finding the special features of the whole transcending its parts, without ignoring the parts, as in the case of studying a forest or an economy; second, deriving the general from the diverse particulars, finding what is common or universal among them, as in the case of studying a set of individuals making up a distinct society. Both are valid ways to holistic knowledge, in fact to any meaningful knowledge. An approach which stops at the particulars, without transcending them to get at the whole is considered by the Gita as a lower level of knowledge, which it calls *raajasik*.

The next verse (i.e. 21st) in the same chapter of the Gita deals with what it calls the *raajasik* knowledge. In this context, *raajasik* does not mean emotional or selfish, but simply a stage lower than the highest. If the highest knowledge is

totalizing, or holistic, the lower stage is disaggregating analytical knowledge, which the Gita calls as *raajasik*. While *saatvik* transcends particulars even while grasping them, the *raajasik* is focused on the particulars, and on the diversity, without seeking the connectivity between them. The concerned verse is:

Prathaktvena tu tatjnaanam naanaa bhaavaan prathak vidhaan /

Vetti sarveshu bhooteshu tat jnaanam viddhi raajasam //(18.21)

It means: 'Know that knowledge to be *raajasik*, which looks at different entities separately, treating each as different and separate'. There is no note of condemnation of this approach to knowledge here, and the concern for particulars may be necessary both in any plan of action and also in ascending to the higher approach of *saatvik*.

But the method has limitations, as can be seen from concrete examples given below.

Its major limitation is that it stops short of full, holistic knowledge, which may provide new insights, which may not come from being focused on the particulars.

What makes an approach to knowledge *raajasik* is not that it includes analytical techniques, but that it excludes a holistic vision or misses the larger picture. If it includes the larger picture, it becomes *saatvik*. In other words, *saatvik* may well include analytical categories or techniques, but by itself an analysis without a holistic vision or perspective, is narrow and may not be productive of new insights; on the other hand it may even be misleading. *Saatvik* may not only include, but actually may need analytical techniques. Intuition plays an important role in a holistic or *saatvik* approach, but intuition unsupported by analytical corroboration may not carry conviction.

The 22nd verse in the same chapter describes what is ignorance, lack of knowledge or knowledge which is misleading and leads only to darkness or ignorance, and is called as *taamasik*. The verse is:

Yattu kritsnavad ekasmin kaarye saktam ahaitukam /

Atatvaarthavat alpam cha tat taamasamudaahritam //(18.22)

It means: 'That is said to be *taamasik* which is confined to a single unit but treats it as if it is the whole, in a way which is purposeless or without understanding the objectives (*ahaitukam*) and without grasping the essence, and thus sheds little or no light'.

The verse needs some further explanation. Taking a small sample and examining it as representing the whole is not *taamasik* by itself. What makes it *taamasik* is if it is done without proper awareness of the objectives of investigation (*ahaitukam*), and without any theoretical framework or backup (*atatvaarthatah*), and if the sample is too small (*alpam*) to be representative. Under such conditions, the investigation would be misleading and hence *taamasik*. This one verse, thus, captures the essence of sampling theory and cautions against pitfalls of sample survey.

Why is a holistic or totalizing approach considered by the Gita as on a higher plane than an analytical or disaggregating approach? And, why is this teaching of the Gita considered here as relevant to social science research? These are interrelated questions and can be taken together.

Holistic method is not just mystical monism and can be applied to the study or understanding of physical and social realities too. While monism tends to disregard

diversities and disjunctions as either unreal or secondary, a holistic method takes full note of them as important parts or aspects of the whole and probes in to the interconnectedness and the functioning of the system as a whole. Holism does not deny that reality can be multi-faceted. Apart from being multi-faceted, social reality – or for that matter, physical reality as well, is inter-related, uncertain to some extent, and subject to change in many respects. Social reality is better understood as communitarian, involving communities, rather than as a machine which can be dismantled piece by piece in different parts for separate study. Even for a machine, its functioning is better understood holistically than when analysed part by part. A holistic view allows us to understand interconnectedness, apart from overall functioning. In the case of social issues, a holistic approach is even more important than in the case of a machine like a car. Social reality is evolutionary rather than static, and a community is much more than a collection of individuals.

What is more, a holistic view examines its object of study not just from a single perspective but multiple perspectives, and see how they can be or are reconciled. Specifically, ethical, environmental and equity issues are vital in social, economic and political issues, and not just efficiency issue alone. A holistic understanding includes all these considerations. On the contrary, the analytical method tends to get narrowed down to single issues, often in isolation, which can be a serious handicap if studies are used as a guide for policy making. It is because of the need to take in to account all the factors that have a bearing on the object of knowledge (which the Gita calls as *jneyam* or *kshetram*), that Pani terms it as ‘Inclusive Method’ and attributes it to Mahatma Gandhi (Pani 2001, 2004). Pani is of course aware that in evolving this method, Gandhi was inspired by the Gita.

But this does not eschew the use of an analytical method of disaggregating and focusing on the particulars or units that constitute the whole. The analytical method is after all crucial for science, including social sciences, as it verifies or falsifies individual propositions and leads us to truth. Analytical tools can be useful even in a holistic approach. For example, Karl Marx used the concept of class and class conflicts as analytical tools to understand the capitalistic system as a whole. Without a holistic view, an approach can tend to be blind like the nine men studying parts of the elephant and missing the elephant as whole. But without analytical tools, a holistic approach may not have the limbs or instruments to work the approach.

Moreover, a holistic approach can be regarded as having gone astray if it is divorced from parts or particulars. A focus only on the whole ignoring its parts, or on the general without relating to particulars, may not be enlightening, and may be even misleading. An example will clarify this point. In India, almost till 1971, poverty was considered only at the aggregate level of the country as a whole in terms of the country's general economic backwardness. It was only when Dandekar and Rath came out with their famous study on *Poverty in India* in 1971, that poverty began to be seen in its particularities, which was more meaningful to evolve policies for poverty alleviation. It was not enough to project the economic backwardness of the country as a whole, it was equally or even more necessary to know who the poor were, how many they were, and to what extent they were poor. It is possible that a country as a whole may not be poor in terms of its per capita income, and yet it may have a significant number of the poor. Similarly, policies aiming at boosting the economic growth of the country as a whole may not significantly impact on poverty. Just as a

narrow analytical method has its limits, narrow holism too has them. That is why the seeker of knowledge has to be very clear about what she wants.

We may recall the Gita's observation about the coherence between knowledge (including methodology), the object of knowledge and the knower, noted above. The Gita is, thus, aware of the risk of subjectivity of knowledge, but this is not an insurmountable risk. Pani takes note of this problem (2001:47-50) and observes that the problem is overcome both through the insistence on the inclusiveness of the method (so that some factors bearing on the object of knowledge are not subjectively and selectively ignored), and also through insistence on non-selfishness and freedom from narrow considerations on the part of the knower. Though Pani is mainly concerned with the method as applied to action or policy, it is equally applicable to knowledge. The point is that a holistic method overcomes the risk of subjectivity in knowledge, which can be an important limitation of the analytical method when applied narrowly. This becomes obvious when we recall that a murder or even mass murders may be planned most analytically in a cold calculating way, working out all possible details of benefits and costs, and devising escape routes to avoid risks. Analytical rationality can be only an 'instrumental rationality' as Ashis Nandy calls it (2006:111). This narrow rationality questions neither the goals nor the various consequences, unlike the holistic method which goes in to all these questions and insists on the moral purity of both the knower and the actor.

In spite of such advantages of the holistic approach, it is not necessary that it leads to unanimity. Two persons both using a holistic approach to a particular field of knowledge may arrive at totally different conclusions, simply because either their

perceptions or situational contexts may differ. It may be misleading to adopt the criterion of unanimity for objectivity. As observed above, a more helpful criterion of objectivity is to see if the knower has her/his own axe to grind or is on the contrary unselfish and detached in the pursuit of knowledge. Even if holism need not lead to unanimity, it is expected to lead to greater understanding, and what is more, tolerance and respect for differences in views. It is possible that all views may not stand the scrutiny of inquiry, but the inquiry should be honest and detached. That is why the Gita emphasizes the moral purity of the knower and her purpose.

Knowledge may not always be pursued by a single person, but by a team. Team research has now become a prominent mode in most fields of knowledge. Different members of the team may be assigned different tasks, all of which form parts of the research of the team as a whole. While it is absolutely necessary that a team leader at least has a holistic grasp of the purpose and approach of the research project as whole, it is very desirable that all members of the team also share this holistic vision. Otherwise, the individual members doing segregated tasks may develop a sense of alienation, which may suppress their creativity. Their work may simply become joyless and mechanical. If on the other hand, they are involved in sharing the holistic vision of the project as a whole, they will be in a position to better contribute to the team effort. Holism need not be the exclusive prerogative of team leaders.

Most of the research methodology courses in social sciences hardly mention, let alone include, holistic method. These courses provide partial training for another reason too. While the research methods consists both of deductive and inductive

methods, courses normally teach only the inductive method covering data collection and analysis. This is in spite of the fact that even economics, a discipline known for using quantitative methods more than other social sciences, evolved mainly by using the deductive method. This is so with regard to both classical and neo-classical economics. Ignoring the deductive method probably follows from the fact that it is based on deducing from postulates, but postulates are derived in turn from holistic understanding. Without a holistic outlook, we may not be able to even formulate postulates needed for the deductive method! Students trained in such truncated research methodology would hardly be equipped well to handle social issues and cannot be competent to guide policy making. Interestingly, this preference for data collection and analysis, to the exclusion of theoretical and philosophizing approaches, gets rationalized. The quantitative methods are considered as painstaking, and theoretical, and philosophical writings as arm-chair research. That is how, though intuition is so important in research, particularly in arriving at a larger or holistic picture, there are hardly any attempts to train researchers in developing their intuitive capabilities. The point is that even pragmatic research, fieldwork and quantitative analysis require an overall perspective in terms of which we have to do our study, without which research may be hardly inspiring or productive of insights useful for policy. But, let alone developing any formal training for this, even the need for this emphasized in the courses and books on research methodology. The result is suppression of creativity in research.

The need for holistic research and the limits of exclusive reliance on narrow analytical work, become clear in the light of concrete examples given below. A classic example of the failure to take a holistic view is the narrow outlook of public

policy during the Great Depression that started in the World economy in 1929. When employment levels and prices started crashing, wage cuts were ordered, which would have been rational in a micro-economic setting, but not in a macro-economic and holistic setting. This was an example of treating an individual unit or a part as the whole itself, termed by the Gita as a *taamasik* approach. As a result of wage cuts, Depression only deepened and widened. As John Maynard Keynes, who took a holistic view, showed later that wage cuts only made aggregate demand decline and increased unemployment. He recommended deficit budgets and increased public spending to boost aggregate demand and fight the Depression. We have learnt a great deal by now and the recent recession is not likely to reach the same magnitude as the Great Depression.

Another classic example of the superiority of the holistic method is Marxian theory. Karl Marx took a grand view of economic systems as a whole and could derive great insights about how the capitalist system worked and why poverty emerged. Economics has never been the same after Marx and Keynes.

Taking economic development purely or mainly in terms of growth rates of Gross National Product (GNP), could also be considered as an example of *taamasik* approach. Development has to be considered much more broadly in terms extent of poverty, health, literacy and education status, gender equality, overall distribution of wealth and income, public hygiene, civic sense and responsibility among citizens, freedoms enjoyed and environmental status. Such a holistic view of development could be considered as *saatvik*.³

The holistic method works at smaller or lower levels too, and need not be confined to understanding grand systems alone. Take the case of vehicular pollution in cities. The problem is tried to be tackled mainly by legally putting a mandatory ceiling on the extent of pollution generated by *each* vehicle. For the moment, let us ignore the problem of implementing this law and assume that all the vehicles obey the norm. But this may not bring down the *total* level of pollution generated by all vehicles. Even a policy of reducing road congestion by widening the roads and constructing flyovers for faster traffic may solve the problem only marginally. A holistic policy on the other hand would recognize that neither of these above policies would meet the problem fully if there is no control or restriction on the total number of vehicles. Such a holistic policy would like to discourage private cars and encourage public transport and bicycles.

Take another common problem in India. Say, some farmers in an irrigation command area have complained about inadequate and irregular availability of irrigation water. If the focus is exclusively on the farmers suffering from shortage of water as the whole problem, then it would be an example of a *taamasik* approach. If instead the whole command area is studied, including the farmers in the upper reach, it may then be found that these more fortunately placed farmers abuse their easy physical access to water, and illegally cultivate water-intensive crops or use other wasteful methods of over-irrigation, thus depriving the farmers in the lower reaches.

Coming to Personnel Management or Human Resources Management in a factory or corporate enterprise, it would be a *taamasik* management if the human resources are treated as only employees, focusing attention only on what they do in

their work place. A *saatvik* way would be to treat them as human beings, taking note that they may have other aspects to their life apart from working in a factory, such as family, and caring for all their concerns. Here, workers would then get a feeling that they belong to an extended family which cares for them, and their loyalty and commitment would improve enormously.

The Gita's three-fold criterion can be applied to the study of Comparative Religion too. A *saatvik* approach here would be to seek common ground between religions and identify the scope for reconciliation, improving mutual understanding and tolerance. A *raajasik* approach would focus on the differences between religions. A *taamasik* way would be to use the study of comparative religion mainly to project one's own religion in a much better light, asserting one's own religion as the only true religion and one's own concept of god as the only true God.

A great advantage of the holistic approach is that it enables the emergence of new paradigms, which may be needed to solve a fresh set of problems. It gives rise to fresh thinking and more effective policies, leading to greater happiness and welfare as the Gita says (*'sukha-sangena badhnati'*, quoted above). More than a training in a fixed set of techniques, one awakens to such an approach by an open mind and wide reading, very necessary for researchers.

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Notes

- 1, The quotation is taken from Tagore (1989: p.x).
2. For a fuller presentation of the concept of *tigunas* along with application in various fields as taught by the Gita, see (Nadkarni 2008:179-83).
3. For such a holistic approach to development, see chapter 7 in (Nadkarni 2008:379-414).

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