Conceptualizing 'Cultural Frames of Reference' and 'Cross-Cultural Frames of Reference' for Various Cultures and Societies: Employing these Concepts to Bring about Social and Cultural Change in Different Societies

Sujay Rao Mandavilli
Institute for the Study of the Globalization of Science

Abstract:- This is an important part of our 'globalization of science movement' particularly for the social sciences because it allows a multi-cultural and a multi-dimensional interpretation of issues, and also allows solutions to various intractable and seemingly complex problems and issues birthed in various cultural contexts. The ideas and concepts of "Cultural frame of reference" and "Cross-cultural frame of reference" were already introduced by us in passing in our papers on the certainty uncertainty principle, cross-cultural research design, structured apperception tests, extended identity theory, ethnography of enculturation, and twenty-first century intellectualism, all of which were published in the year 2023. This issue is not a trifle or a bagatelle, and not certainly a laughing matter. It therefore deserves to be studied in all seriousness by social sciences researchers. It has several practical applications in fields such as social and cultural change and betterment, religious reform, the design of contemporary education systems, cross-cultural research design, behavioural studies, and even technological advancement and betterment. These concepts must be brought into fruition through the use of various social science research techniques such as ethnography, fieldwork, the participant observation method, interviews, questionnaires, emic studies, and the like. This paper is therefore a logical culmination of all our earlier efforts, and all the aforesaid papers besides our other papers have been linked together in a continuous chain.

I. INTRODUCTION

This paper forms an extremely important, essential and integral part of our much touted 'globalization of science movement' that we have been pursuing in some form or the other for close to two decades now particularly for different fields and disciplines in the social sciences. We have actively promoted this concept and have also laid the theoretical framework for many required and allied fields of study because it always necessitates and allows for a multi-cultural and a multi-dimensional interpretation of myriad complex issues, and also allows solutions to various intractable and seemingly complex problems and issues that

arise in different parts of the real-world to be birthed in their respective cultural contexts. The ideas and concepts of "Cultural frame of reference" and "Cross-cultural frame of reference" were also already introduced by us in passing in our papers on the certainty uncertainty principle, cross-cultural research design, structured apperception tests, extended identity theory, ethnography of enculturation, and twenty-first century intellectualism, all of which were published by us in different months of the same year i.e. 2023.

This issue which we further detail and elaborate upon in this paper, is not a trifle or a bagatelle, and not certainly a laughing matter, or otiose or nugatory by any means or any stretch of imagination. It therefore deserves to be studied in all seriousness by social sciences researchers from all over the world, and also with the seriousness and attention that it demands. It also has several important practical and real-world applications in diverse and vital fields such as social and cultural change and betterment, religious reform, the design of contemporary education systems, cross-cultural research design, cross cultural communication, behavioural studies, developing universal value systems, developing structured apperception tests, and even technological advancement and betterment for the collective betterment of humanity, all of which can make the world a truly much better place. They sky is literally the limit for this concept and idea; several other fields of study may readily suggest and present themselves as time progresses and goes by.

These concepts must be brought into fruition through the use of various social science research techniques such as ethnography, fieldwork, the participant observation method, interviews, questionnaires, surveys, focus group discussions, emic studies, and the like, besides the rigorous application of general scientific method. We have been discussing all these social science research techniques off and on in our previous papers, and at varying levels of detail and length. This paper is therefore a logical culmination of all our earlier efforts towards the 'Globalization of science', and all the aforesaid papers besides several of our other papers have

been linked together in a continuous chain for maximal impact and efficacy. [1] [2] [3] [4] [5] [6] [7]

II. FRAME OF REFERENCE

What is a frame of reference? We now attempt to provide a detailed definition of the term 'frame of reference.' A frame of reference in common parlance refers to a complete set of ideas and ideals that an individual possesses. It is also commonly taken to mean and encompass a habit or habits of mind, a certain and specific mindset, and a way of employing one's knowledge systems, experiences, habits, beliefs and ideas in order to understand and interpret the world. A cultural frame of reference is also very deep and is dependent on the entire process of human enculturation, acculturation or experience, and can be understood through techniques such as the 'ethnography of enculturation'. In short, a cultural frame of reference refers to "The process by which an individual perceives the world through the sum total of his own often deep-rooted enculturaton or acculturation experience, and also through the frame of reference of his own mind-orientation, cultural-orientation, thought worlds, worldviews and mindspace which are birth in his own unique cultural context and experience. It is also an aggregated superset of emic perspectives, and is related to a cultural taxonomy as well". The idea of the cultural frame of reference is also tied closely and deeply to the ideas of mind-orientation, cultural orientation, thought worlds, worldviews and mindspace. It must also be constructed taking into account a cultural taxonomy, a concept which we had deliberated in our earlier papers on socio-cultural change. Other concepts such as

Structured apperception tests for socio-cultural change, vignettes, eureka points, and mini-eureka points can come into play too. A cultural frame of reference can be positive or beneficial to society, or at times it can be negative and harmful. In other words, it can be a great cultural emancipator or a major cultural inhibitor or bottleneck. It also serves to process a variety of thoughts and information about the world and in relation to an individual's own unique experiences or cultural experiences, and would form an integral part of the design of 'Structured apperception tests for socio-cultural change', a concept that we had elaborated in a previous paper.

A cultural frame of reference also changes with the passage of time as culture evolves and individuals change along with it. A cultural frame of reference can therefore be meaningfully and positively changed by employing apposite social science research techniques. This is because Cultural frames of reference are commonly pre-scientific to varying degrees; this is because no society is completely perfect. A cultural frame of reference is also transmitted from generation to generation, or with some degree of modification. We had discussed the horizontal–vertical (and lateral) model to understand socio-cultural change, and this can impinge on cultural frame of reference as well. Cross-cultural understanding has now become much more easy given the fact that horizontal and lateral forces have been amplified and magnified considerably; however, this process is still by no means complete, and there are still cultural misconceptions galore in different parts of the world. Examples of these include common misunderstandings and differences of opinion between the West and the Islamic world, or between Hindus and Muslims. A cultural frame of reference must always be borne and kept in mind as a harbinger of meaningful social and cultural change, and any attempt at cultural change would be pointless and futile without it. This concept could also be beneficially used in many other areas of social science studies which could aptly align with it. It is often noted that an individual's enculturation processes can be so strong that it would take an intellectual bulldozer to dislodge. Alas, and unfortunately, many social sciences researchers have failed to take this concept into account and consideration, and may have consequently failed miserably in their endeavours.

Marxist historians who may have erroneously believed that culture was unimportant, may have failed too; their endeavours may have likewise have had catastrophic consequences. Marxists also don't seem to understand that religious, national, and linguistic identities are natural and important to individuals, and that humans are, and will always remain humans; therefore, virtually all their concepts in social sciences are probably flawed, however well-meaning they may at times be. It is also both amusing and entertaining to note how Marxists and Hindutva people blindly, vehemently, and vociferously oppose each other in a virtual slugfest; unfortunately, this is not the way, and is nether healthy nor desirable. It is also not tenable in a post-globalized world where information flows freely and beyond political boundaries; the only viable way is to tell the truth consistently and always. We are also unable to understand

[1] Elucidating the Certainty uncertainty principle for the Social Sciences: Guidelines for hypothesis formulation in the Social Sciences for enhanced objectivity and intellectual multi-polarity Sujay Rao Mandavilli IJISRT, March 2023

[2] Operationalizing cross-cultural research design: Practical, cost-effective, and a minimalistic application of cross-cultural research design to minimize cultural bias in research and reconcile diverse viewpoints IJISRT, April 2023 Sujay Rao Mandavilli

[3] Towards scientific apperception tests for twenty-first century social sciences research: Formulating 'Structured apperception techniques for socio-cultural change' in twenty-first century social sciences research Sujay Rao Mandavilli IJISRT June 2023

[4] Formulating 'Extended identity theory' for twenty-first century social sciences research: Modeling extended identity in relation to real-world observations and data Sujay Rao Mandavilli IJISRT, July 2023

[5] Redefining Intellectualism for a post-globalized world: Why present-day intellectualism is obsolete and why a comprehensive reassessment of intellectualism is required Sujay Rao Mandavilli IJISRT, August 2023

[6] Postulating 'Ethnography of Enculturation': A high-level overview of various social science research techniques that can be used to study human enculturation processes Sujay Rao Mandavilli IJISRT July 2023

[7] Wilson, E.O. (1999). "The natural sciences". Consilience: The Unity of Knowledge (Reprint ed.). New York: Vintage.

how the brain of a Marxist intellectual functions, but maybe a 'Chain of thought analysis' introduced by us in a previous paper might help. Richard Dawkins who was otherwise well-meaning, stands accused of not having taken this concept in any form seriously enough. Neither did the so-called four horsemen of the New Atheist movement. Their efforts may lead to a cultural backlash, and what we called "self-reinforcing cognitive dissonance". As such, these papers must also be linked to our two papers on socio-cultural change (where socio-cultural change is involved), our two papers on identity theory, and our papers on Anthropological pedagogy and the sociology of science (where educational reform is involved, or where new pedagogical concepts need to be developed). [8] [9]

Another allied and very important concept is that of 'Cross-cultural frame of reference' which refers to that component of a cultural frame of reference which can be productively and fruitfully applied across cultures and societies, i.e. that which is useful and beneficial for plotting and charting globalized tools and techniques of socio-cultural change, or cultural remediation, and would be a subset or superset of cultural frame of reference depending on which way one wishes to look at it. A frame of reference can also have other meanings in physics, mathematics, astronomy or the study of co-ordinate systems, (we also have concepts of rotating frame of reference, Galilean frame of reference (inertial frame of reference), and Cartesian frame of reference there; also macroscopic frames of reference and microscopic frames of reference) but that is not what we are presently interested in. In case of the latter, the concept of a frame of reference is mostly used in a physical sense. The two concepts are nonetheless somewhat closely related, and is some important ways, fundamentally and essentially the same.

A frame of reference is also related to a reference point which is a point of reference based on which an individual analyzes or processes information. The term 'reference point' is also used in physics, though in physics it has a slightly different meaning. The term 'reference point' can also be used in history; for example, we can have Alexander the Great's conquest of India between 327 BC and 325 BC, the Indian Battle of Panipat, the Indian Battle of Tallikota, The Battle of Plassey, and the Indian Sepoy mutiny of 1857 as useful historical reference points because they were associated with long-term political, social and cultural change in the Indian sub-continent. Similar historical reference points can also of course be found for other countries. Useful examples in case of the latter could be the

French revolution, the Meiji restoration, the Boer War, the Russian revolution, the First World War, the Great Depression, the Second World War, etc. [10] [11] [12] [13]

III. COMPONENTS OF CULTURAL FRAME OF REFERENCE

The following are the common concepts of 'Cultural frame of reference'

- Identifying and establishing how individuals who associate themselves with different cultures think in different circumstances using different kinds of qualitative research techniques.
- Identifying and establishing how individuals perceive different phenomena using qualitative research techniques e.g. The triple talaq divorce system in Islam, the Hindu caste system, the flat earth theory among some dogmatic Christians (also the Biblical literalism, Quranic literalism, and Vedas as source of all knowledge theory). (These are therefore, also known as pre-scientific frames of reference to some degree). There can also induce further downstream beliefs through the lead-lag effect. We had discussed these concepts in detail in some of our earlier papers.
- Making generalizations with respect to a particular culture, and identifying a 'Cultural frame of reference' with respect to a particular culture by taking all aspects of that culture into account and consideration.
- Identifying meaningful exceptions to such generalizations. Also refer to our paper on the 'Sociological Ninety-ten rule' (published in the year 2023) which dealt with the concept of exceptionism, and hypothesis formation under such circumstances.

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[8] Generic Identity Theory for the Twenty-first Century: Towards grand unified approaches in identity formation, identity transformation and identity dilution or neutralization Sujay Rao Mandavilli Elk Asia Pacific Journal of Social Sciences Volume 5, Issue 3, 2019

[9] Introducing Anthropological Pedagogy as a Core Component of Twenty-first Century Anthropology: The Role of Anthropological Pedagogy in the fulfilment of Anthropological and Sociological objectives, Sujay Rao Mandavilli, IJISRT 2018

[10] Kovalevsky, J.; Mueller, Ivan I. (1989). "Introduction". *Reference Frames*. Astrophysics and Space Science Library. Vol. 154. Dordrecht: Springer Netherlands.

[11] The relevance of Culture and Personality Studies, National Character Studies, Cultural Determinism and Cultural Diffusion in Twenty-first Century Anthropology: As assessment of their compatibility with Symbiotic models of Socio-cultural change ELK Asia Pacific Journal of Social Science Volume 4, Issue 2, 2018

[12] Articulating comprehensive frameworks on socio-cultural change: Perceptions of social and cultural change in contemporary Twenty-first century Anthropology from a 'Neo-centrist' perspective Published in ELK Asia Pacific Journal of Social Sciences Volume 3, Number 4 (July 2017 – September 2017)

[13] Unveiling the Sociological Ninety-ten rules for Social Sciences research: Towards better hypothesis formulation in the Social Sciences in the interests of higher quality research and intellectual multi-polarity Sujay Rao Mandavilli Published in IJISRT, February 2023

- Identifying and establishing such concepts and principles with regard to specific groups such as socio-cultural groups, socio-economic groups, creative classes, intellectual classes, occupational groups, and entrepreneurial classes, all lying within the context of a specific culture, if need be. We had also discussed all these concepts in depth in our earlier papers.

- Tracing an individual's or mass of individuals' cultural frames of reference to the enculturation or acculturation patterns using different social sciences research techniques such as the Ethnography of Enculturation.

- Tracing an individual's or mass of individuals' cultural frames of reference to other concepts such as thought worlds, worldviews, mind-orientation and cultural-orientation, and also to the concept of cultural taxonomy. We had already introduced these concepts in our earlier papers on socio-cultural change, and carried them forward to other papers as well where they were debated and discussed extensively. Readers may refer to these papers for more detailed information on these topics.

- This concept must also be studied in relation to identity theory and extended identity theory, and the various components of identity. We had published two different papers on the above in the years 2019 and 2023 respectively.

- This concept must also be understood in relation to our two papers on socio-cultural change where social and cultural change is involved. We have also provided references to these two earlier papers that we had published several years ago, in this paper. For example, teaching pre-Islamic history to Muslims, and scientific views of history to Hindus can work miracles and can change their respective cultures significantly, much as modern science had an impact on the Christian mind.

- This concept can also be understood in relation to the concepts in our papers on sociology of science and anthropological pedagogy where educational reform is involved. Readers may refer to the concepts espoused in these two papers as well, as these contain concepts and methods that will greatly influence the concepts and methods that are presented in this paper.

- This concept must also be understood in relation to any ideologies that are typically or atypically present in a culture; for example, Udhayanidhi Stalin, the son of MK Stalin, the chief minister of Tamil Nadu, made unwarranted derogatory remarks against Sanatana Dharma recently comparing it to a virus. To understand how ideologies impact a culture and affect people's perceptions in any given culture, it may also sometimes be necessary to execute a 'Chain of thought' analysis, a concept that we presented in a previous paper.

- This exercise may be carried out for both major and minor cultures, but researchers may focus on major cultures first because they have maximum impact. We had also dealt with the categorization of cultures in our earlier papers, and have taken others scholars' views about them into consideration.

- Culture-sensitive approaches and culture-specific techniques must be gainfully and productively employed to gradually edge out pre-scientific beliefs. Thus, a 'Cultural frame of reference' in various cultures, and a 'Cross-cultural frame of reference' across cultures can both be usefully employed. We have defined these in the past to mean carefully and systematically considered paradigms that systematically override all forms of traditional or pre-scientific beliefs and belief systems to gradually move cultures towards much more modern scientific and logical thought. Thus, these would be scientific frames of reference, people of a specific culture or groups of cultures could relate to (against the backdrop of their own culture), and not get overwhelmed by. The former would work appreciably and admirably in the context of a particular culture, while the latter would be more universal, making it a universal paradigm or set of paradigms.

- Thus, techniques for bringing about socio-cultural change must be fine tuned, and if necessary be modified in the contexts of different societies. This is essential to bring about socio-cultural change; otherwise, all efforts to bring about socio-cultural change in a society will fail and fall apart. As a part of this exercise, the initial pre-remediated state of different societies, the ideal state, and the possible terminal state may also be identified.

- Other downstream implications: This has many other downstream implications like designing 'Rationalist movements'. 'Cultural remediation movements', 'Designing universal morals' 'Universal human values' etc. These are all discussed and debated in a different section of this paper.

- As discussed, this approach must be combined with valid social science research techniques such as interview, questionnaires, survey, participant observation method, fieldwork. Ethnography of enculturation etc for maximum efficacy.

> *Some Downstream uses of the Twin Concepts of 'Cultural Frame of Reference' and 'Cross-Cultural Frame of Reference*

We now present below some possible downstream uses of the twin concepts of 'Cultural frame of reference' and 'Cross-cultural frame of reference'. These would of course probably only be the most common and widespread uses of these two concepts ever. More would readily suggest themselves as the time goes by, and it is up to other scholars and researchers to take the baton forward in the days and times to come, and expand both the scope and applicability of this concept. [14] [15]

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[14] Social Change and Modernity, Edited By Hans Haferkamp and Neil J. Smelser, University of California Press, 1992

[15] Creating Social change: Edited by Gerald Zaltman, Philip Kotler, Ira Kaufman

- *Redefining and Reimagining Rationalist Movements*

The Indian Rationalist Association was founded in the year 1949 by the stalwarts R.P. Paranjpye and S. Ramanathan. They eventually launched and published a magazine called "The Indian Rationalist". Many Indian rationalists were heavily influenced by Western intellectuals such as Robert Ingersoll and George Holyoake, and were also influenced by the epistemological view that regards reason as the chief source of knowledge. Indian rationalists also had close personal ties with Charles Bradlaugh and Annie Besant who greatly shaped and molded their views. They also established organizational links with the English Rationalist Press Association (RPA), and other similar international organizations.

Many Indian rationalists have worked tirelessly and ceaselessly for the eradication of superstition and blind faith which have regrettably been rampant in India. Not only have beliefs in myths prevailed, but less than ideal cultural and religious practices prevailed too. The famed Sri Lankan rationalist Abraham Kovvur made valiant and heroic attempts to debunk the claimed invincibility of Indian God men, and so did the Gandhian physicist rationalist former Vice Chancellor of the Bangalore University H Narasimhaiah, and both of them bemoaned their widespread popularity at that time and sought to address the issue. Many other Indian rationalists of eminent fame such as Joseph and Sanal Edamaruku have rightly lamented and bemoaned the fact that even Indian scientists cling on tenaciously to pre-scientific beliefs. This belief has also been reiterated by Dr. Innaiah Narisetti, Chairman of the centre of inquiry who also worked untiringly to promote a scientific temper and a scientific method in India. Some rationalists were also die-hard atheists, but this observation may not always have held true.

Our observation is that some rationalists at least have failed to understand the local culture, customs and traditions thoroughly enough, and even the human psyche, and may even have stood guilty and accused of having imposed pre-determined westernized models on Indian society. Of course, rationalists are free to refute these allegations. Luckily and thankfully, all this could change in a generation or two for the better if the cultural frame of reference is employed and adopted. This would also again facilitate better cross-cultural research design in the long run as people belonging to different nationalities become more scientifically aware, and collaborate with each other both vertically and horizontally. It would also require the emergence of the appropriate social science research tools, techniques and methods, and a better collaboration between social scientists and other scientists. Only this approach can possibly lay the permanent foundations for a more rational and freethinking society, and relegate all forms of religious dogma to the background. But perhaps religion and belief in God will not die down entirely until theological issues remain unresolved, and religion will remain important social and cultural symbols in most societies. Rationalists also need to bear this in mind and the over-simplified "science is atheism" paradigm needs to be quashed first. We also have an inkling that their well-meaning endeavours have failed

from the observation of the unfortunate emergence of New Age movements, New Godmen and religious strife as well in different parts of the world. Only the right kind of comprehensive, well-conceptualized and well-rounded approach can probably put an end to all this.

- *Cultural Remediation Movements*

This approach must also naturally be adopted and employed for ushering in meaningful and long-term or permanent social or cultural change. Otherwise, any attempts to change will fail. Types of changes from our perspective can be classified into long-term or permanent changes and short-term changes, irreversible and reversible changes, directed and undirected changes, major changes and minor changes, positive changes and undesirable or harmful changes, gradual changes and non-gradual changes, endogenous changes and exogenous changes, contact-driven and non contact-driven changes, though this would perhaps require a combination of several social science research techniques to achieve and fructify, which may be both short term, and long term. Cultural change would also manifest itself when social hierarchies are abolished and all kinds of helotages are relegated to the background. People tend to dilly-dally and vacillate, and also grope meaninglessly in the dark. They must be given a direction.

People also cannot adopt lies and falsehoods. They cannot also accept half-truths and statements that are not well-rounded and comprehensively thought through. This is an innate and an intrinsic part of human nature. Thus, cultural change can only be brought about through what we called "Eureka points" and "Mini Eureka points". This is a home-truth that needs to be dinned into people's heads. We have authored two papers on socio-cultural change a couple of years ago, and had introduced the concept of symbiotic approach to socio-cultural change. These concepts can also be suitably enhanced by means of a diachronic element such that snapshots of a society are formulated. We had also proposed "Structured apperception tests for socio-cultural change". A readership of all these papers would not just be ideal, they would also be necessary before a meaningful readership of this paper can be accomplished. Thus, all these concepts need to meshed together into a holistic unit if any degree of success is to be achieved. This approach will also hold good for identifying cultural bottlenecks, research on diachronic extensions to socio-cultural change.

- *Better Cross-Cultural Communication*

A Cultural frame of reference may be required for understanding many facets of modern-day life. Understanding how Japanese and Korean brands took over America is also very interesting from a cross-cultural perspective. In the early years, Americans were reluctant to buy Japanese goods as Asian goods were perceived to be inferior. Americans also had vivid and negative images of the Japanese during the Second World War era, and this naturally dissuaded many Americans from buying goods. Therefore, the Toyopet Crown of 1957 was a complete failure in the American market. It was also sluggish, and not powerful enough. However, the Japanese persisted, and soon Japanese cars got a reputation for reliability and

economy. The biggest change however came during the 1974 Oil Crisis as gas prices skyrocketed in the USA. By 1990, the Japanese had also entered the luxury car market with their Lexus, Infinity and Acura brands. The success of the Japanese car makers also encouraged Korean car companies to follow suit, and Hyundai introduced its Pony and Excel cars in the US market subsequently. It would be interesting to understand this success story from both a Japanese, Korean and an American perspective, and to understand all issues from a comprehensive cultural perspective; i.e. all cultural factors need to be understood. What drove Japanese car companies to succeed? Would the Japanese have tasted more success if cultural factors were not involved?

In the recent years and particularly since Immigrant and Nationality Act of 1965 was enacted, Asians have become very successful in the USA, particularly the Chinese and the Indians. Both groups in the USA now have a higher median income than the average American. The Indians form the second largest Asian ethnic group in the USA after the Chinese, and make up over one percent of the American population at just over four million. There are several CEO's of Indian origin heading multinationals such as Satya Nadella, Arvind Krishna, and Sundar Pichai. Indians, particularly Gujaratis dominate the motel business, ever since Kanjibhai Desai entered the field in 1942. What drives Asians to strive hard and become successful? Will this change in a generation or two? What kind of a ripple and cascading effect will this have on African Americas? Why don't Americans and Asians often do not understand each other? What are the root causes of distrust, if any? What are the differences in the process of identity formation between both groups? What are the differences between the Chinese, Indians and other Asians in this regard? What can be done to bridge differences? How much wrong is there on each side? How does the generation gap manifest itself in different cultures? All these questions can be answered much more easily if the twin ideas of Cultural frame of reference and Cross-cultural frame of reference are properly and thoroughly grasped and understood. As a part of this exercise, various types of typical and atypical emic and etic perspectives also need to be taken into consideration. Readers may also refer to our two papers on Generic identity theory and Extended Identity theory in this regard.

Thus, this approach can also be fruitfully employed for reducing cross-cultural barriers, which have barely diminished over the years. It can also be gainfully employed to achieve better acculturation and cultural integration. Xenophobia is still present in many cultures and societies around the world particularly in closed ones, and even Japan and India are xenophobic to varying degrees. Geographical racism also persists, and is combined with national identity and religious identity to result in a multiplier effect. We still have anti-Muslim sentiment or Islamophobia which is the fear of, hatred of, or any form of prejudice against Islam as a religion or individual Muslims, especially when it is viewed as a geopolitical force or a potential source of terrorism. This is similar to the idea of anti-Semitism which manifested itself most vulgarly during the Third Reich when

Jews were gassed in Auschwitz and other places during the widely condemned Holocaust. Some Hindu nationalists also claim the existence of Hinduphobia in the West; this may be partly true and partly exaggerated, but Marxist scholarship is generally seen to be highly biased and prejudiced, and communal in some sense. Differences of opinion have also persisted among the Sinhalas and Tamils, and these culminated in the anti-Tamil pogrom also known as the Black July in July 1983. This approach can also be used to design emancipatory movement such as the anti-apartheid movement and the Black lives matter movement, Women's emancipation movements, and more and more downstream uses may present themselves in the years to come. It can also be used to study human behavior, behavioural patterns, changes in behavior etc as these aspects form a part of a complex social science that can be made even better by taking our proposals into consideration.

This approach can also be utilized to accomplish and achieve better cross-cultural comparisons which can be done through the formal study and analysis of various kinds of emic and etic perspectives in different cultures. It can also be readily used to accomplished better cross-cultural research design in scientific research; for more on this, refer to our papers on cross-cultural research design where different types of emic and etic perspectives were discussed threadbare. It can also be fruitfully and beneficially be used to achieve better horizontal and vertical collaboration between cultures, whether in scientific endeavours or otherwise. Proper and apposite cross-cultural communication has perhaps never been attempted in the first place; Sir Mortimer Wheeler, the famous British Indus archeologist never appears to have communicated cross-culturally and multi-dimensionally with the Indian archeologist BB Lal, and cross-cultural difference persisted with cardinal errors of perception and analysis on both sides. Gregory Possehl also does not appear to have culturally engaged with Indian archeologists and historians properly. Asko Parpola collaborated with Iravatham Mahadevan, but the latter was a Dravidian nationalist. But Indian historians were then comprised of a motley group of Marxists, and the newly arrived Hindutva brigade. A meaningful cultural debate was also never pursued by Nineteenth century Indologists beginning from Max Muller, despite Witzel's claims to the contrary. Therefore, a cultural frame of reference must be the starting point of cross-cultural debate and dialogue, and an essential concomitant for success. [16] [17]

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[16] Last, Kathryn (2007). "Cultural Pluralism and the Return of Cultural Heritage". In Tierney, Stephen (ed.). *Accommodating cultural diversity*. Applied legal philosophy. Aldershot: Ashgate.

[17] Saouma, Galia; Isar, Yudhishthir Raj (2015). ""Cultural Diversity" at UNESCO: A Trajectory". In Beukelaer, Christiaan; Pyykkönen, Miikka; Singh, J. P. (eds.). *Globalization, culture and development: the UNESCO Convention on Cultural Diversity*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

- *Understanding Ideologies Better*

The word "Ideology" is said to be derived from the French word "ideologie" and was probably coined by a philosopher, A.L.C. Destutt de Tracy, as a moniker for what he called his own "science of ideas". In a crude sense, it may be referred to a collection of beliefs that are usually not fully and rigorously tested and often lack universal applicability. According to the political scientist David W. Minar, there are six different ways in which the word "ideology" has been used in different periods in time, and these are as follows: [18] [19]

✓ As a collection of dearly cherished and closely held ideas and beliefs with a rigid content, which are usually normative, prescriptive and non-changing;
✓ A set of ideas or ideals with a loose internal logical structure but which are not compatible with other external principles;
✓ A set of ideas either fallacious or partly true which play a role in determining human-social interaction;
✓ A set of mostly crude and undocumented ideas which play a key role in the structure or a mission of an organization (usually a political or a quasi-political one) but without any currency outside that organization;
✓ A set of ideas and ideals which rely on persuasion;
✓ A set of ideas and ideals which form the basis of social interaction, usually with a small or closed group.

According to Willard A. Mullins an ideology is composed of the following four basic and key characteristics:

✓ It must have a power over cognition and must seek to control or influence individuals in some way, and to a reasonable degree;
✓ It must be capable of guiding and altering or modifying one's evaluations and patterns of thinking to a reasonable degree;
✓ It must provide a certain kind of guidance towards action or goad people towards committing a certain set of actions; and
✓ It must be comprised of logically coherent beliefs that hold good within an entity, but many not be externally consistent with other ideas, principles, and ideologies.

Other definitions of the term "ideology" have also been provided by the famed professor of cultural theory Terry Eagleton. According to him, an ideology is a set of ideas characteristic of a particular social group or class, and a set of ideas that may not have universal applicability. These ideas may often be false, and may help an identity achieve dominance either politically or otherwise. These set of ideas and ideals also lead to distorted communication, provide the premise for false illusions, and achieve mostly negative results. We do have different many different ideologies such as the Hindutva ideology which was mostly formulated on religious, but also to a lesser extent on nationalistic and cultural grounds, the Dravidian ideology that was formulated on linguistic and other mostly outdated historical premises, the Nazi ideology of the 1930's that was founded on German nationalism, and Anti-Semitism, which is also derived partly from non-universal principles. We also have other ageing scholars such as Michael Witzel of Harvard University, whose ideas and ideas are based on antiquated mid-nineteenth century premises and shibboleths. In order to understand all these ideologies, and how individuals function and behave within them, a cultural frame of reference is required, and also to a lesser extent, a cross-cultural frame of reference. This must be accompanied by a 'chain of thought' analysis, a concept that we introduced in a previous paper. For further information, readers may refer to our paper on the 'Ethnography of enculturation' where this concept was discussed in great detail. According to this approach, an individual's internal thought patterns, the ideologies he cherishes and subscribes to, and his external behavior, must be cross-assessed in a triumvirate and most importantly, in a logical and in a step by step fashion.

- *Better Policy Formulation*

This approach can also lead to better policy formulation particularly in multi-cultural contexts and societies. For example, many policy planners scarcely appear to have understood India's cultural, religious and linguistic diversity. In the early years of India's independence, various Hindi nationalists such as Purushottam Das Tandon, Seth Govind Das, Babunath Gupta, R V Dhulekar, and Ram Manohar Lohia argued vehemently in favour of Hindi, often adopting dogmatic positions over consensus-building with other Indian linguistic groups, and as American scholar and expert of the Indian constitution late Granville Austin observed, at times creating deep schisms in the parliament and even going to the extent of imperiling and undermining India's national unity. Also, various Hindutva groups barely appear to have understood the Muslim mindset or psyche, and barely appear to have taken into account their concerns and considerations for cross-religious dialogue or debate. Even if and when they did, they barely appear to have skimmed the surface, and scratched on the surface. Some Hindutva groups also conveniently appear to have ignored the diversity within the Hindu faith itself, preferring a Brahminical interpretation of Hinduism which is a multicultural and syncretic entity and function with many interacting and overlapping parts. Many Hindutva groups also failed to understand or appreciate the Kashmir problem from a multidimensional perspective, and take all ramifications of the issue into consideration. They may also not appreciate or understand that some Ladakhi people do not want to be overwhelmed by outsiders after the abrogation of article 370 of the Indian constitution. In Sri Lanka, Sinhala nationalists sought to muzzle and steamroll all opposition in order to declare Sri Lanka as a Sinhala Buddhist nation. Both right-wing and left-wing ideologues anywhere in the world do not appear to have had pertinent tools at their disposal to address such complex issues. All such problems can only be solved using structured, systematic and comprehensive cross-cultural approaches such as the ones described in this paper.

[18] On the Concept of Ideology in Political Science Willard A. Mullins American Political Science review June 1972
[19] Ideology An Introduction Terry Eagleton Verso 1991

- *Developing Universal Morals and Universal Principles*

There is an urgent need to replace religion-driven and religion-inspired values and value systems with more universal and religion-neutral ones. This must happen slowly and step-by-step, and may last several generations. A value is defined as a universal value if it has the same value or worth for all, or almost all, people regardless of their cultural identity which most often encompasses religious identity cherish their value and value their worth equally and to the same degree. According to the Russian-British philosopher Isaiah Berlin, "Universal values....are values that a great many human beings in the vast majority of places and situations, at almost all times, do in fact hold in common, whether consciously and explicitly or as expressed in their behaviour..." This idea and concept is in diametric opposition to the idea of moral relativism which states that universal moral values cannot exist. Some values such as democracy and pluralism are touted to be universal human values, but this may not be the case given the fact that some cultures may not value and cherish them at all. [20]

The Israeli Social psychologist Shalom H. Schwartz, along with a number of other psychology colleagues, carried out empirical research on 25,000 people in forty-four different countries investigating whether there were any universal values at all, and what those values were. He also developed the theory of basic human values which is a theory of cross-cultural psychology and universal values. The theory extends and expands upon earlier cross-cultural communication frameworks such as Geert Hofstede's cultural dimensions theory which is a framework for cross-cultural communication. According to Schwartz, there are ten types of basic human values, each distinguished by their underlying motivation or goal. Schwartz also explains how people in all cultures recognize them. There are two major methods for measuring these ten basic values which are the Schwartz Value Survey and the Portrait Couple Values Questionnaire or PCVQ. Schwartz's ten types of values are conformity, tradition, achievement, hedonism, security, self-Direction, stimulation, universalism, power, and benevolence. In addition, there are fifty-six specific human values. The latter measures four couple value dimensions which are conservation, openness to change, self-enhancement, and self-transcendence. The fourteenth Dalai Lama of Tibet has also proposed a set of universal human values such as tolerance, forgiveness, contentment, a desire to help others, and self-discipline. Much of his work was done with the help of Dr Richard Davidson, who is an eminent neuro-scientist.

Religious inspired and religious derived values must be replaced by universal values and ethics. There is still a long way to go before this can possibly happen. Ideology has no place here; it is difficult to conceive and imagine Hindutva groups formulating universal human values, but Marxists intellectuals apparently cannot contribute meaningfully to this field either as they cannot even understand and comprehend basic cultural differences to begin with. Most other atheists also speak about a post-religious society, but do not prescribe universal human values. However, Sam Harris is an exception, and has proposed universal human values from time to time. Most schools teach moral studies, but most do not teach universal human values; all this shows that we still have a very long way to go. A cultural frame of reference helps us understand how people from different religious and cultural groups perceive different cultural and ethical issues be it capital punishment, individual rights and liberties or vegetarianism. For example, Muslims may value adherence to rules more, and spirituality less. Hindus and Christians may likewise have other preferences, and function and operate differently. This approach also helps us understand the kind of values different groups (religious on non-religious) cherish or practice widely, exaggerate or blow out of proportion, and the kind of values they tend to ignore or brush under the carpet. Thus, this approach will help us tweak and design systems of moral values and universal human values more appropriately.

- *Better Education and Pedagogy*

The concept of Cultural frame of reference must be borne in mind during the design of education systems, and the development of pedagogical techniques. We have written extensively on education and pedagogy and the introduction of social and cultural change through the medium of education. Readers may refer to, and understand all the relevant concepts from our paper on Anthropological pedagogy and the sociology of science where many useful concepts were discussed in great detail. Thus, one of the essential, core and important functions of education is to bring about meaningful and positive social and cultural change, and not just to prepare students for a better professional life. Education must also make students more scientifically aware and inclined, but we have a long way to go before this can happen. For example, in 1913, J. McKeen Cattell, the then Vice President of the American Association for the Advancement of Science was highly skeptical about the ability of non-white cultures and peoples to produce great scientists or scientific work of any substantial merit; even the otherwise brilliant American Biologist and Geologist Louis Agassiz considered non-whites to be extremely unfit for scientific work. This may still partly hold good if the scientific output from Asia and Africa alone is taken into consideration. The issue is of course cultural and not genetic. The presence of geniuses in India such as Srinivasa Ramanujan bears ample testimony to this. However, the fact that such geniuses are few and far in between in India and in many other developing countries implies that a cultural reboot and educational reform are badly needed. Improving educational systems and tweaking them to perfection can have a ripple and cascading effect on the scientific output of various cultures, and help to a significant degree. But for this, the concept of a cultural frame of reference and the understanding of the cultural psyche in different contexts and situations need to be properly understood and systematically applied. This is even necessary before other techniques such as "Public communication of Science and Technology" or PCST can

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[20] Schwartz, S. H. and Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross cultural replications. Journal of Personality and Social Psychology,

be applied, to increase the popularity of science, or to instill in wider populations a love of science. [21] [22]

Thus, the cultural orientation of a society also needs to be defined and studied. Societies can be classified as past-oriented societies versus future-oriented societies, inward-looking cultures versus outward cultures, rigid versus flexible cultures, Individualistic versus collective cultures, material or non-material cultures, Contentment versus innovation driven cultures, Rational-oriented versus Non Rational-oriented cultures etc. Individual mind-orientations also need to be studied in relation to society, and widely held superstitions and myths need to be identified. We had also interviewed, between 2017 and 2019 several people (seventh graders and above) in several parts of India who did not even know that the Earth went around the sun or the approximate size of the universe. They did not know the basics of science either. Thus, education (which has now become more or less universal in all parts of India and elsewhere) had failed them all very badly. Hindutva groups are not interested in scientific awareness or a scientific design of education systems, and Marxists don't care either. If anything, Marxists have damaged education systems in India and elsewhere through a warped and a flawed interpretation of historiography. The author was attacked or mocked in his earlier days (not of course at present since his scientific output has increased tremendously) by both Hindutva groups and Marxist groups. The former is naturally always driven almost entirely by religious considerations; On the other hand, it is amusing to note that Marxists are totally out of touch with reality, and live in a make believe world, refusing to acknowledge that so many decades of their scholarship have been in vain. As a matter of fact, the very term Marxism has come to be associated with senility and dotage not just in economics, but also in the social and cultural spheres and domains and they often have even got the wrong end of the stick in many intellectual debates. [23]

Social scientists must swing into action and play a pivotal role in the transformation of societies; non-social scientists cannot play any significant role here. Social scientisits must design social and scientific institutions appropriately; for all this, understanding the 'cultural frame of reference' is a must. Thus, we had also proposed that teaching scientific views on the origin of religion, scientific theories on the origin of languages or life, a recapitulation of defunct theories, a formal study of the origin of myths, superstitions and legends, etc (by shedding light on different scientific views on these subjects) so that different pre-scientific views such as the Divine origin theory of languages or the Tower of Babel theory can gradually and eventually be edged out. Students must also be encouraged

to think for themselves, and no form of dogma whether religious or scientific must be encouraged at any cost. [24] [25]

- *Better Ethnography*

To put it in plain and simple terms, ethnography which is an important branch of Anthropology, is the systematic description of a given culture through the use of extensive and intensive fieldwork. In a loose and in a very broad sense, the core objective of ethnography is to provide a very detailed, and an in-depth account of the day-to-day living patterns, and the habits and customs of different groups of people in a natural setting. It is a primarily qualitative study, (with a minimal use of quantitative techniques) and combines both descriptive and analytical methods. We have discussed the idea of ethnography with all its myriad implications in three different papers on the subject. We had also provided detailed definitions of ethnography in those papers, and had discussed some case studies as well. These three papers were the structured and annotated approach to ethnography to eliminate cultural bias, long-term ethnography, and the ethnography of enculturation. Readers may read the aforesaid three papers for greater clarity on the subject. We believe that ethnography can indeed be made better if the concepts of cultural frame of reference are taken into account and consideration, and formally and consciously applied. This will lead to a wider set of emic perspective obtained, and a qualitatively better research output obtained.

- *Can be used in Technology Development*

This approach can also be used to accomplish better technologies, and improve technologies to a great degree. For example, deep learning techniques, language translators, Large language models or LLM's , reinforcement learning from human feedback (or RLHF) to train artificial intelligence agents, database of events fed into AI systems, providing inputs to Generative AI by exposing cultural preferences, cultural biases, linguistic preferences and linguistic limitations. Cultural Anthropologists can be of great use in technology development, but the potential is barely realized. This is because social science research techniques have barely come of age, and furthermore because they are highly Eurocentric in orientation, and still highly steeped in the nineteenth century exploratory mindset and study of "highly primitive peoples" mindset. All aspects of culture must also thus be effectively gauged in their entirety in assessing a Cultural frame of reference, and then be used as crucial and critical inputs into technology development. These include a study of typical mind-orientation and cultural orientation as well, and linguistic abilities and linguistic limitations too.

To provide another example, LLM's and AI can be used in multi-lingual communication to a great degree, and enhance the capabilities of the linguistic have nots who are not proficient in English or any other dominant or widely

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[21] Teaching science in the 21st century, Jack Rhoton, Patricia Shane, 2006

[22] Yearley, Steve (2005), Making Sense of Science: Understanding the Social Study of Science (London: Sage)

[23] *Furay, Conal; Salevouris, Michael J. (1988). The Methods and Skills of History: A Practical Guide. Harlan Davidson*

[24] Religion and Science: Historical and contemporary issues, Ian G. Barbour, Harper Collins, 1943

[25] Ferro, Marc (2003). *The Use and Abuse of History: Or How the Past Is Taught to Children*

spoken language. Thus, a large quantum of data can be made available in Non-English languages too. The sky is the limit here, and this approach can have a great positive and beneficial impact on economics as well, and can lead to greater economic output. Refer the concepts of Anthropological Economics for this. Rather unfortunately, many technologies such as Microsoft office have stagnated for a quarter of a century now both under the leadership of Steve Ballmer and Satya Nadella, but this is another topic of discussion. Even voice recognition technologies, handwriting recognition technologies and language translation technologies are yet to be properly integrated into Microsoft Office. So much is possible even using already available and existing technologies, but their potential has barely been realized. However, we do have some use of cultural inputs into technology, but we have barely scratched the surface. For example, Anthropometry is sometimes used in scientific measurements and design of equipment, and the science of ergonomics sometimes takes into account human body measurements from different cultural contexts.[26]

- *Religious Reform and Religious Harmony*

The concept of cultural frame of reference must be taken into account and consideration, and any attempts at meaningful reform would fail without it. As a matter of fact, the idea of cultural frame of reference would be central to any successful attempt at religious reform. As a matter of fact, this approach can be beneficially used in accomplishing religious reform as much as it can be beneficially used in accomplishing religious harmony between diverse religious groups e.g. Hindus and Muslims. Christians and Jews, or Sunnis and Shias. It can also be used to design a school or a college syllabus or curriculum, and ensure that cultural changes are satisfactorily achieved. For example, we have stated that a scientific view of history can make Hindus more scientifically aware, just as a study of pre-Islamic history can be used to make Muslims more scientifically aware; history textbooks must also be designed and presented suitably. Scientists do not have many meaningful or innovative solutions to offer to quash religious fundamentalism, extremism and terrorism, or take people away from religion.

The only solution many scientists have to offer in the cultural domain or sphere is atheism. We had discussed the oversimplified and highly simplistic religion versus atheism debate or God versus atheism debate paper (mostly drawn from Christian experience or tradition). This is highly and fundamentally flawed because we haven't attained a satisfactory definition of the term God yet, which can vary from culture to culture. Humans will also almost be humans, (they can never transform or metamorphosize themselves into robots or non-feeling machines) and polarization leads to self-reinforcing cognitive dissonance. No one wants to believe in a half-truth or a half-baked idea either. Besides, there are so many things about the working of the universe that we do not know about. Bearing all these factors in mind

Carl Sagan and Neil DeGrasse Tyson had called for agnosticism and not atheism. Agnosticism and freethought are two ideas were strongly endorse. Rabid and dogmatic atheism is also restrictive and self-defeating, because it may even pre-empt a quest for the truth. Belief in God is perhaps intrinsically not harmful in itself, provided it is not accompanied by dogma or other concomitant ideologies. We will be looking forward to the emergence of new moral, spiritual, and (unharmful) religious movements in the years and decades to come.

All religions are also not equal. It would indeed be fallacious to state so, because all religions do not teach exactly the same thing. Christianity is indeed fundamentally different from Islam, and Hinduism is different from both Christianity and Islam. The idea of equality of all religions and faiths was perhaps promoted to by Mahatma Gandhi, and in Nehruvian India to achieve and accomplish a fair modicum of clinical unity among practitioners. This is of course partially necessary and useful in its own way, but it also has its own set of limitations. Thus, thought worlds, worldviews, mental makeup of individuals (and of course the cultural frame of reference) would vary widely from region to region, and from religion to religion. All these factors need to be considered and borne in mind during any meaningful remediation exercise. There is also an exodus of people from Islam both in the Middle East, and in the more recent past, in India as well. Famous apostates have included Wafa Sultan, Ayaan Hirsi Ali, Harris Sultan, Amina Sardar, Ali Sina, Askar Ali, and several others. This exodus has continued even though it is often difficult for Muslims to express doubts about Islam as noted by Simon Cottee in 2015, and by several others as well. In 2007, a study by Khalil Bilici also tried to identify the reasons for people leaving Islam, and cultural backwardness, oppression of women, oppression of non-Muslims, rigidity of texts, doubtful and dubious morality, and over-emphasis on Sharia and other Islamic rules were cited as the main reason for people leaving Islam.

There have been many reforminst movements within Hinduism. In the realms and fields of social work and social upliftment, famous figures such Swami Vivekananda, Dayananda Saraswati, Ishwar Chandra Vidyasagar, Babasaheb Ambedkar, Mahatma Gandhi, Vinoba Bhave, and Baba Amte have been most important. Periyar EVR was another social reformer from the south. Many such reforms fought for the eradication of social evils such as the caste system, superstition, blind faith and untouchability. Movements such as the Bramho Samaj, Arya Samaj and the Ramakrishna movement were launched to eradicate social evils or to carry out social work. In Christianity, the Protestant Reformation was a religious reform movement of the sixteenth century. Martin Luther was a prominent figure in this movement. This movement led to the creation of a new branch of Christianity called Protestantism which separated itself from the Roman Catholic Church in due course.

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[26] Schmidhuber, Jürgen (2022). "Annotated History of Modern AI and Deep Learning"

Reformist movements are relatively new to Islam and began in full force only at the dawn of the twenty-first century. Even though we must always take into consideration a cultural frame of reference, we must always emphasize that all humans are intrinsically the same. This is known as the psychic unity of mankind. We have discussed, elaborated and laid bare this concept and idea in our two papers on identity theory. Thus, Muslims are also as human as Muslims and Christians. The ex-Muslim Wafa Sultan therefore rightfully says she is against Islam and not against Muslims as individuals. We also have obviously nothing against Muslims as individuals too. According to Ayaan Hirsi Ali, only a small percentage of Muslims are "Medina Muslims" or terrorists. This refers to Mohammed's (The founder of Islam) flight from Mecca to Medina in 622 AD (also known as the Hegira or the start of the Islamic calendar). This was done to avoid persecution and non-recognition at Mecca. It was only after this point that his career as a prophet flourished. Islam did not really widely spread until after the death of Muhammed, the founder of Islam.

- *Identifying what can be Universalized, and what cannot be Universalized*

This approach can also be used to Identify what aspects of a culture can be universalized or globalized, and what cannot be universalized or globalized. Thus, this aspect will constitute an extension of the cultural frame of reference that we have referred to as 'Cross-cultural frame of reference'. For example, Jains may be vegetarians, (in their religion ahimsa or non-violence is considered to be extremely important), but it is impractical to conceive the whole world as becoming vegetarian even after centuries of co-ordinated effort. Thus, different strategies need to be employed for different groups irrespective of whether they are from the west or from the east. Similarly, all Muslims or not even all Christians can become atheists, even though atheism may be relatively more natural to the Japanese, Korean and the Chinese, even though the latter would also be as truth-seeking as anyone else. Converting the whole world to vegetarianism or atheism would be impossible as any meaningful research social science research exercise would show.

- *Can be used in the Development of Scientific Theories*

This approach can also be used in the development of scientific theories .For example, studies must be carried out as to how people react to, and accept theories in say diverse fields such as physics, or astrophysics, and theories must be molded and presented accordingly for the layman. The term layman here refers to just to people in one culture, but in many different cultures. At present, many aspects of theorization are driven by careerism, peer rivalry and the desire of scientists to show off their superiority. Scientists show off the superiority, assume airs and talk down to people belonging to both western cultures and non-western cultures. Some kind of elitsm and nerdism is discernible even in the presentation of theories such as the theory of relativity, the quantum theory, the certainty uncertainty principle, and Godel's incompleteness theorem. Non-western cultures were barely a blip on the radar of several western scientists some decades ago, and they barely adapt their theories to non-western audiences, or present them appropriately. This is in spite of well-meaning researchers such as Sir Arthur Eddington who tried to popularize the theory of relativity; even his approach had its flaws and limitations. For example, theories about the existence God (the acceptance or negation of God) are also highly western-centric in orientation. Racism is also a western construct which emerged before the Victorian age, and we also had scientific racism; many eminent scientists of the time were unabashed racists. We had also called into question the reliability of IQ tests in an earlier paper and had proposed the "Comprehensive socio-cultural persecution complex" as a part of the certainty uncertainty principle to address the issue, Along with the globalization of science, we also look forward to the democratization and the widespread popularization of science, not just in the west, but also elsewhere. Obtaining people's perspectives on various scientific issues is extremely important and is at the core and heart of this approach.

- *Use in other Areas of Study*

This approach can also be used in many other areas of study; For example, it can be used for "population management" to find out why people have large families in some cases, or why people have low families in some cases. Take the example of South Korea, Japan, Bihar. In the first two cases, birth rates have fallen to abysmally low levels, while in the case of the latter they are still stubbornly high. Most research studies in Japan and South Korea have shown that younger women want to pursue their careers aggressively, do not want the burden of raising kids, prefer live in relationships etc. They also want simple and clutter-free lives. On the other hand, people in Bihar prefer larger families because they do not want to depend on the government ration system, and still consider children to be source of security in their old age. Birth rates in Bihar can probably fall only as more and more women get educated. This approach can also be used for the development of more modern and more scientifically-designed historiography bereft and devoid of ideologies, and the development of a suitably designed culture-specific syllabi, which are of great importance in overriding pre-scientific beliefs. This may also be the crying need of the hour and day.

All these can be reliably pursued only if people's perspectives are taken into account, and implemented or carried forward for the design of such systems. The Author worked in a Software company twenty years ago; there, advanced English was being taught to people who did not even know the basics of the English language, and all the well-meaning efforts of the management naturally went in vain. Such miscommunications can be eminently nipped in the bud if these techniques are adopted. This approach can also have various uses in other diverse fields such as political science. For example, it can be used to understand how people perceive politicians etc, and their preferences for various political parties based on their cultural and social identity. This is of course a basic minimum list. We look forward to other social science research scholars derive

more downstream applications in the days and years to come.

IV. CONCLUSION

This paper is an extremely important and an integral part of our much-touted 'globalization of science movement' particularly for various sub-branches in the social sciences because it allows for multi-cultural and multi-dimensional perspectives of issues, and also naturally allows for innovative, tailor made and customized solutions to various intractable and complex problems and issues found in different cultural contexts. The ideas and concepts of "Cultural frame of reference" and "Cross-cultural frame of reference" were already introduced by us albeit in passing in our papers on the certainty uncertainty principle, cross-cultural research design, structured apperception tests, extended identity theory, ethnography of enculturation, and twenty-first century intellectualism, all of which were published earlier this year i.e. 2023, and has been further extended and elaborated upon by us in this paper. This issue is certainly not unimportant and deserves to be studied with a great deal of attention. It also has several practical applications in fields such as social and cultural change and advancement, religious reform, the design of better education systems, better cross-cultural research design, more in-depth behavioural studies, and even technological advancement and refinement. These concepts must be realized through the judicious use of various social science research techniques such as ethnography, fieldwork, the participant observation method, interviews, questionnaires, emic studies, and several others which we have discussed all along in varying levels of detail. Thus, this paper is a logical culmination of all our earlier efforts, and is naturally bound to result in better social sciences research in multiple spheres and domains, and a better quality of life for people around the world.