EPIC AS A DYNAMIC LIVING LIBRARY: AN EXTRAPOLATIVE STUDY OF THE MAHĀBHĀRATA

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DECLARATION

I, Simjith V., hereby declare that this thesis entitled ''Epic as a Dynamic Living Library: an Extrapolative Study of the Mahābhārata'' is a bonafide record of research work done by me and that it has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title or recognition in the University of Calicut or any other Universities.

Simjith V.

University of Calicut
Date:

CERTIFICATE

This is to certify that the thesis entitled ''Epic as a Dynamic Living Library: an Extrapolative Study of the Mahābhārata'' submitted to the University of Calicut for the Degree of Doctor of Philosophy in Library and Information Science is a bonafide record of research carried out by Simjith V. under my supervision and guidance.

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She to whom this work is dedicated will know it when she sees it.

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PREFACE

The Mahābhārata constitutes an outstanding record of the collective conscious, unconscious and subconscious of man. There is perhaps hardly any human thought or sentiment which has not found expression in this epic, there is perhaps hardly any conceivable situation in human life which has not been portrayed in it indeed, one of the most striking features of the Mahābhārata is that every reader finds in it something, which is, as it were, specifically addressed to him.

-R. N. Dandekar

Old traditions and practices are not totally inapplicable to new situations as the field of knowledge is expanded by combining existing knowledge with new situations. India's epistemological legacy continues on many levels even in modern times. Based on the Mahābhārata, the great epic of India, which is regarded as the epitome of India's epistemological legacy, an unconventional project has been carried out here that has never been attempted before in the field of Information Science and Knowledge Management (KM).

The inner drive that prompted me to do the research on the Mahābhārata was not only because I was born in a village in India and grew up listening to the folklore, epics and mythology of this land but also because I could see myself in the Mahābhārata by relating it to the intense experiences of my life. In other words, as a narrative the Mahābhārata has an unparalleled plot structure that draws the readers into it and makes them see themselves in it in such a way that they can never come out. In that sense, any creative endeavor in the Mahābhārata is a catharsis.

I started reading Mahābhārata with an academic interest during my Post Graduation (PG). I did my PG dissertation based on the Malayalam novel 'Randamoozham' written by M. T. Vasudevan Nair with Bhīma from Mahābhārata as the central character. My personal encounter with Vasudevan Nair as part of my studies awakened the literary enthusiast in me and intensified my love and passion for the Mahābhārata. Kisari Mohan Ganguli's English prose translation is the first non-abridged version of the Mahābhārata that I have come across. Later, I came to know about the Critical Edition of the Mahābhārata published by Bhandarkar Oriental Research Institute (BORI) and read the 'Prolegomena' prepared by V. S. Sukhtankar for its first volume. It was the reading of 'Prolegomena' of the Critical Edition that helped me understand the cultural history of the Mahābhārata in great detail and inspired me to consider the Mahābhārata as a 'dynamic living tradition'. Furthermore, the book, 'The great epic of India,' written by E. W. Hopkins, unexpectedly caught my attention and made me realize that the Mahābhārata remains the epitome of the Indian epistemological tradition, embodying the dominant knowledge systems of ancient India. In this way, Sukhtankar and Hopkins, by revealing the historical transmission and epistemic paradigm of the Mahābhārata, gave me the courage to approach the Mahābhārata as a 'dynamic living library'.

In an extrapolative or exploratory research based on an ancient text, that too in modern perspective, the researcher is confronted with the problem of inadequacy or unsuitability of some of the research methodologies and designs. The main dilemma which I faced during this research is related to its theoretical design. It was Dr. Muhammadali, Associate Professor, Dept. of Journalism and Mass Communication, who asked me to apply Grounded Theory (GT) methodology to the research. With

the application of GT I felt that new light was shed throughout the research process. Michael Crotty's book 'The foundations of social research: Meaning and perspective in the research process' later became helpful. It is through this book that I got trained on how to design research, theoretically.

Myths are not merely stories. Carl Gustav Jung, Heinrich Zimmer, Joseph Campbell, and Jonathan Young are prominent contributors to the study of mythology. Jung suggests that universal patterns are conceived in myths because they express characters and stories that have been encoded into the human race throughout history. Although expressing the universal patterns, essentially transmitted to all-mankind, Jung believes the functions of myths are strictly personal. Joseph Campbell explains, myth is the ''homeland of the muses, the inspirers of art, the inspirers of poetry. To see life as a poem and yourself participating in a poem is what mythology does for you.''[1] According to Campbell myth basically has four functions: metaphysical or mystical, cosmological, sociological and pedagogical. Therefore, in that sense, what is revealed mainly through this research is the pedagogical function of myth. The Mahābhārata encompasses a wide range of knowledge ranging from spiritual to ritualistic and material knowledge, besides exploring the secrets of nature. It can be seen as an ancient art of KM, or a repository of information and knowledge spread over millennia throughout Southern Asia. Hence, by approaching the epic as the foundation of Information Science and KM, this research is trying to set an ideal paradigm for KM that brings essential structural changes in existing KM systems and processes. Apart from this, the sociological function is also performed here considering the possibilities of the theory proposed through

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1 Joseph Campbell and Bill Moyers, *The power of myth*, Ed. Betty Sue Flowers (New York: Anchor Books, Doubleday 1991). It was originally published in 1988.

this research. In addition to this, the constructivistic epistemological position of this research serves to nurture the Jungian argument that the messages conveyed through myths are strictly personal. Above all, in the case of the Mahābhārata, as Jung says, many universal patterns have been conceived, which have mirrored patterns in the collective unconscious of the human race for millennia.

Although the narrative architecture of the Mahābhārata is being applied in KM practices for the first time, when examining the major works of S. R. Ranganathan, the father of Library and Information Science (LIS) in India, it can be seen that he has explained Indian traditional systems and thoughts in relation to the modern context of LIS. ''Refer to the chapters of part E, 'Mystic picture of reference service', from his work 'Reference service' we can find that it has been divided into various sections, i.e. Light from Vedas, Light from Valmiki, Light from the 'Mother' of Aurobindo and Light from Sanskrit. Suktas or verses from Taittiriyopaniṣad, characters of Rāmāyaṇa and thoughts of Aurobindo etc. helped Ranganathan to explain how a reference library and librarian ought to exist. The fifth chapter, 'Light from Sanskrit', reveals his interest and pedantry in Sanskrit language. Similarly the influence of Indian philosophy is thus evident, both in visible and concealed forms, in many of his other works. The works like 'The five laws of library science', 'Colon classification', 'Prolegomena to library classification' and 'Library classification fundamentals procedure, with 1008 graded examples and exercises' are a few among the many examples.''[2] So, it

[2] Simjith V and Vasudevan T. M, ''Is Ranganathan a Pragmatic Philosopher? Reading the Five Laws of Library Science in the Light of Ancient Indian Philosophy'' (2019*). Library Philosophy and Practice (e-journal)*. https:// digitalcommons.unl.edu/libphilprac/3540

cannot be said that Indian traditional systems and thoughts are totally unfamiliar in the LIS discipline.

The theory developed through this research can be applied not only in the premises of LIS, but also in any other field. The epic poem Mahābhārata continues to serve humanity in this manner even in this modern age; as a perennial source of enlightenment, entertainment, inspiration and guidance. I would be very grateful if this study opens a discussion about the need for epistemological and ontological grounding in the field of Information Science and KM.

ABSTRACT

It is the explicit/tacit bifurcation of knowledge that serves as the basis of Knowledge Management (KM) practices today. Considering how such a bifurcation theory came to develop in KM, we come across the knowledge conversion theory developed by Ikujiro Nonaka and Hirotaka Takeuchi towards the end of 20th century. The knowledge conversion theory which was claimed to be based on Michael Polanyi's epistemological ideals gained wide acceptance and soon became the basis of KM practices. However, the theory had actually relied unduly on Polanyi's conception of knowing and restricts knowledge to the bifurcation of explicit and tacit; thereby ignoring the proper implications of his ideals envisaged in the notion of 'indwelled knowledge'. Consequently, all subsequent KM theories have come to rely on the explicit and tacit bifurcation of knowledge.

In the theory, since knowledge is approached only from the explicit/tacit bifurcation point of view, it has become a static entity in KM practices. Knowledge is thus processed in a linear fashion in existing KM models as a commodity and confined within the structure of corporate governance in an organization. As recent epistemological developments are mooving against the bifurcation of knowledge, we have to confront the question of how healthy are KM practices that approach knowledge as a static and authoritarian entity based on this bifurcated conception.

In fact, knowledge never culminates anywhere just as an artistic expression never comes to perfection. And it undergoes constant

spontaneous improvisation like an art form. Thus, like the arts, knowledge formation is an ongoing process. If so, in KM, we are not dealing with any static and authoritarian entities. Rather, we are dealing with open ended, dynamic and evolving entities. Though knowledge formation is a time bound process marked by the spatio-temporal peculiarities of its genesis and makeup, its refinement over time never stops, and in that respect its growth remains timeless. It is clear, therefore, that the current KM approach is not the right approach and we need to develop an alternative approach that takes into account the dynamic nature of knowledge. We can see such an approach in the Mahābhārata, the great epic of India, which remains an epitome of the Indian epistemological tradition, but at the same time, continues to evolve on many levels even today.

The earliest forms of the Mahābhārata are found in the oral narratives like nāraśaṃsis and gādhas. These narratives were preserved and disseminated and to some extent composed by the sūtas, commonly known as bards. The Mahābhārata is basically a verbatim form of art as the origin and growth of the Mahābhārata can be traced in these ballads of the bards. Despite its later transformation into textual form, the Mahābhārata has continued to evolve on many levels, in different languages because the basic artistic nature and dynamic character of the oral form were never disturbed. Therefore, even though Mahābhārata could be considered as a piece of literature available in textual form today, we ought to treat it as an ever evolving form of art. It is owing to this parallel between an art form and the epic thanks to its liberal development and dynamic growth akin to the growth of an art form, that it stands apart as a model to bring about essential structural changes in present day KM practices.

The epic could thus be seen to be a pre-eminent resource to edify the art of KM and an exemplar of the fundamental form of the KM systems.

Therefore, the researcher analyzes the narrative techniques of the epic from the point of view of an Information Scientist in the context of present day KM practices. Hence, the research approaches the Mahābhārata as a 'dynamic living library' and KM system conceived in the ancient times which has evolved ever since and is still evolving. In that sense, the researcher wishes to shed light on the foundational role that the epic has played right from the ancient times in setting an ideal paradigm for Information Science and KM, which fact has not yet been brought out.

As a result, the analyst has been able to develop a new approach to KM practices by developing a theory that emphasizes the tacit and personal components of cognition. Accordingly, as an alternative to the bifurcated KM system, the proposed theory derived from the narrative techniques of the Mahābhārata, an exemplar of the Stalagmite Architecture of KM, envisions a process-oriented KM system relying on 'indwelled knowledge' based on Polanyian ideals.

Indwelling refers to the act of integrating something into our embodied self. Therefore, for Polanyi, the ultimate instrument of any of our external knowledge is our body, whether intellectual or practical. Consequently, the problem of the subject-object dichotomy that has maintained the epistemic gap between the knower and the known is resolved and the explicit-tacit distinction of knowledge that has served as the basis of existing KM practices for so long becomes irrelevant. Nonaka and Takeuchi's theory is thereby called into question in the thesis as it lays a false foundation and direction for understanding and applying Polanyi's epistemology in KM. Furthermore, by creating an alternative to the corporatization of knowledge and the metric culture, the thesis creates a consistently liberal and dynamic free sphere in KM processes, thereby bringing KM practices outside the structure of corporate organization. A free

and open knowledge architecture and management theory is thus formed in a way that can be applied in any field, not only in the premises of Information Science.

Keywords: Indwelling, KM Philosophy, Knowledge Architecture, Knowledge Management, Mahābhārata, Michael Polanyi, Narrative Techniques, Oral Tradition, Stalagmite Architecture

സംഗ്രഹം

അറിവ് ഒരു ഘട്ടത്തിലും അതിന്റെ പാരമ്യത്തിൽ എത്തുന്നില്ല. ഒരു കലാരൂപത്തെപ്പോലെ ചടുലമായ വികാസങ്ങൾക്ക് അറിവ് നിരന്തരം വിധേയമാകുന്നു. എന്നാൽ സ്പഷ്ടം/അസ്പഷ്ടം (Explicit and Tacit) എന്നിങ്ങനെ അറിവിനെ രണ്ടായിപിളർക്കുന്ന സമീപനത്തിലൂടെ ജ്ഞാനനിർവ്വഹണപ്രയോഗങ്ങളിൽ (Knowledge Management practices) സുനിശ്ചിതമാക്കപ്പെട്ട ഒരു സത്തയായി (Static entity) അറിവ് രൂപാന്തരപ്പെട്ടു. എങ്കിൽ ജ്ഞാനനിർവ്വഹണത്തിൽ നവീകരിക്കപ്പെടാതെ സുനിശ്ചിതമാക്കപ്പെട്ട ഒരു ആധികാരികസത്തയായി (Authoritarian entity) അറിവിനെ പരിഗണിക്കുന്നതിലെ സമീപനം ചോദ്യം ചെയ്യപ്പെടുകയും അറിവിന്റെ ചലനാത്മക സ്വഭാവത്തെ ഉൾക്കൊള്ളുന്ന ഒരു സമാന്തര സമീപനം വികസിക്കപ്പെടേണ്ടത് അനിവാര്യമാകുകയും ചെയ്യുന്നു.

ഇന്ത്യൻ ജ്ഞാനശാസ്ത്ര പാരമ്പര്യത്തിന്റെ സംക്ഷിപ്തരൂപമായി നിലനിൽക്കുകയും അതേസമയം പല തലങ്ങളിൽ ഇന്നും പരിണമിക്കുകയും ചെയ്യുന്ന ഇന്ത്യൻ ഇതിഹാസമായ മഹാഭാരതത്തിൽ അറിവിന്റെ ചലനാത്മക സ്വഭാവത്തെ ഉൾക്കൊള്ളുന്ന ഒരു ബദൽ സമീപനം നമുക്ക് കാണാനാകും. പിൽക്കാലത്ത് വരമൊഴിയിലേക്ക് രൂപാന്തരം പ്രാപിച്ചിട്ടും വാമൊഴി ആഖ്യാനത്തിന്റെ കലാപരവും ചലനാത്മകവുമായ അടിസ്ഥാന സ്വഭാവത്തെ നിലനിർത്തികൊണ്ട് വിവിധ ഭാഷകളിൽ പലതലങ്ങളിൽ വികസിച്ചുകൊണ്ടിരുന്നു എന്നതിനാൽ നിരന്തരപരിണാമിയായ ഒരു കലാരൂപമായിതന്നെ മഹാഭാരതത്തെ സമീപിക്കേണ്ടതുണ്ട്. ഒരു സാഹിത്യകൃതിയായി നിലനിൽക്കുമ്പോൾതന്നെ കലാരൂപത്തോടുള്ള അതിന്റെ സമാന്തരതയും തത്ഫലമായുള്ള അതിന്റെ ഉദാരവും ചലനാത്മകവുമായ വികാസവും സമകാലിക ജ്ഞാനനിർവ്വഹണപ്രയോഗങ്ങളിൽ അനിവാര്യമായ ഘടനാമാറ്റങ്ങൾ കൊണ്ടുവരുന്നതിനുള്ള മാതൃക എന്ന നിലയിൽ മഹാഭാരതത്തെ പ്രസക്തമാക്കുന്നു. അവിടെ ജ്ഞാനനിർവ്വഹണത്തെ ഉദ്ബുദ്ധമാക്കുന്ന ഒരു സ്രോതസ്സായും ജ്ഞാനനിർവ്വഹണവ്യവസ്ഥയുടെ അടിസ്ഥാന രൂപത്തിന്റെ മാതൃകയായും ഇതിഹാസം മാറുന്നു. തത്ഫലമായി അറിവിനെ ഒരു ഉത്പന്നമാക്കുന്ന, നിലവിലുള്ള

ജ്ഞാനനിർവ്വഹണപ്രയോഗങ്ങളുടെ അടിസ്ഥാനമായി ദീർഘകാലം നിലനിന്നിരുന്ന, സ്പഷ്ട-അസ്പഷ്ട വിഭജനം അപ്രധാനമാകുന്നു. മാത്രമല്ല, അറിവിന്റെ മൂലധനവത്ക്കരണത്തിനും മെട്രിക് സംസ്കാരത്തിനും (Metric culture) ഒരു ബദൽ നിർമ്മിക്കുന്നതിലൂടെ ജ്ഞാനനിർവ്വഹണപ്രക്രിയയിൽ (KM processes) ഈ പ്രബന്ധം ഉദാരവും ചലനാത്മകവുമായ ഒരു സ്വതന്ത്ര മണ്ഡലം വിഭാവനം ചെയ്യുന്നു, അതുവഴി കോർപ്പറേറ്റ് ഭരണസംവിധാനത്തിന്റെ (Corporate governance) പരിസരങ്ങളിൽനിന്നും ജ്ഞാനനിർവ്വഹണപ്രക്രിയയെ പുറത്തുകൊണ്ടുവരുകയും ജ്ഞാനനിർവ്വഹണവ്യവസ്ഥയെ (KM system) പുനർനിർമ്മിക്കുകയും ചെയ്യുന്നു.

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INTRODUCTION

Art is not indifferent to truth; it is essentially the pursuit of truth
-R.G. Collingwood

What is art? How does art contribute to epistemology? The discourse on the relationship between art and epistemology dates back to the time of Plato. Plato, who considered all art as a representation of nature, had a very critical view of the existence of art in our lives. Explaining that art is basically emotional, he believed that emotions lead to errors and therefore the rational part of human nature should be emphasized.[1] Aristotle agrees with Plato that all art is mimetic (Mimesis) by nature, but disagrees with the claim that it makes people emotional and leads to errors. In his opinion, poetry is more philosophical and higher than history. Because when history relates to what has happened, poetry turns to what may happen. Here, he observes that history tends to express the particular, but poetry the universal.[2] Unlike the platonic view, the later critics argued that art is not indifferent to truth and that it is essentially a pursuit of truth.[3] If truth is regarded as knowledge

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1 Benjamin Jowett, *The Republic of Plato*, 3rd edition (Oxford: The Clarendon press, 1888), clix, https://archive.org/details/a604578400platuoft/page/n5/mode/2up.

2 S. H. Butcher, *The poetics of Aristotle*, 4th edition (London: Macmillan and Co. Ltd, 1922), 35, https://archive.org/details/poeticsofaristot00arisuoft/ page/34/ mode/2up.

3 R. G. Collingwood, *The principles of art* (London: Oxford University press, 1938), 288, https://archive.org/details/dli.ernet.5289/page/n13/mode/2up.

on the basis of this argument, then art is not different from knowledge, and the pursuit of truth is the pursuit of knowledge itself. Therefore, it becomes a response to the old yet innovative question of why art ought to have cognitive value. When art becomes cognitive, it is important to understand how art can change the world and whether a perpetual quest for more lasting values is taking place in art.

1.1 Exploring Epistemology of Art in Indian Approach

Human concern for art and beauty can be seen throughout the Indian epistemological tradition from the very beginning. The origin of Ṛg Veda[4] lies in the inspirational songs representing the intellectual pursuit of the Aryans, which they brought along to India from their earlier settlements.[5] The epistemological tradition of India begins here.[6] The ancient Indian thinkers

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4 The word 'Veda', from 'vid', means 'to know'.

5 S. Radhakrishnan, *Indian philosophy*, Vol. 1 (London: George Alien and Unwin Ltd, 1923), 64.

6 Prof. H. H. Wilson writes, ''when the texts of the Ṛg and Yajur Vedas are completed, we shall be in the possession of materials sufficient for the safe appreciation of the results to be derived from them, and of the actual condition of the Hindus, both political and religious, at a date co-eval with that of the yet earliest known records of social organization-long anterior to the dawn of Grecian civilization-prior to the oldest vestiges of the Assyrian Empire yet discovered-contemporary probably with the oldest Hebrew writings, and posterior only to the Egyptian dynasties, of which, however, we yet know little except barren names; the Vedas give us abundant information respecting all that is most interesting in the contemplation of antiquity.'' See, H. H. Wilson, ''Lecture on the present state of the cultivation of oriental literature'', *Journal of Royal Asiatic Society*. Vol. 13 (Cambridge: Cambridge University Press, 1852), 206.

Max Muller observes: ''The Veda has a two-fold interest: it belongs to the history of the world and to the history of India. In the history of the world, the Veda fills a gap which no literary work in any other language could fill. It carries us back to times of which we have no records anywhere, and gives us the very words of a generation of men, of whom otherwise we could form but the vaguest estimate by means of conjectures and inferences. As long as man continues to take an interest in the history of his race and as long as we collect

viewed the world quite imaginatively and metaphorically through poems, legends and epic tales. They compiled their cognitive experiences into couplets, and mantras in certain rhythms for easy recollection. It was not only the thoughts that later emerged as different systems of knowledge, but also the epics and the purāṇas that were compiled as oral narratives in their early stages. Therefore, every system of knowledge today needs to be understood as the modern forms of what have been preserved as memories and transmitted in various forms of oral narratives. Even though all of these knowledge systems later changed to literal forms, the origin and growth of Indian epistemology can be traced back to this oral tradition.

The dominance of introspective thoughts in Indian epistemology is unquestionable, but it is also important to note that the ancient minds of India were interested not only in introspective knowledge, but also in nurturing physical knowledge.[7] While Cārvāka (Lokāyata) system of philosophy argued that water, air, fire and earth are the core elements of the universe, Sāṁkhya system of thought believed that the nature, which is unknown and contain three qualities (Satva-Rajas-Tamas), is the cause of the universe. Yoga system which believed that truth could be realized through constant performance of physical practices; Vaiśeṣika system which argued that the search for truth is the analysis of the relation between the general and the particular, and that atom is the primary reason for the evolution of

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in libraries and museums the relics of former ages, the first place in that long row of books which contains the records of the Aryan branch of mankind will belong forever to the Ṛg Veda.'' See, Max Muller, *A history of ancient Sanskrit literature* (London: Williams and Norgate, 1860), 63.

7 India has a great tradition which indulged in both physical knowledge; in practice during the ancient times such as logic, grammar, rhetoric, philology, medicine, astronomy, mathematics, mechanical knowledge, sexology, zoology, agricultural knowledge etc. and several crafts and industries supporting the functioning of civil life such as painting, weaving, burnishing gold, pottery making, chisel stone technology and so on. See, Radhakrishnan, *Indian philosophy*, 29.

universe; Nyāya system which believed that the core element of the universe, atom could be understood by the observations made through the senses; Mīmāṁsa (Pūrvamīmāṁsa) system which searched for truth through hymns and sacrificial tradition; the system of Vedānta (Uttaramīmāṁsa) which professed that Brahma is the sole essence; Bauddha scheme which proclaimed that everything cosmic is mortal and that the survival of universe depends upon cause and cause-effect; and Jaina system of thought which believed that the universe, which exist from time immemorial, is not a creation by anyone and that soul too exist like any other physical component. All these knowledge systems remain, even today, in society as different schools of thoughts.

The historical evolution of Indian epistemology can be traced at different levels. S. Radhakrishnan divides Indian epistemology into four broad divisions: [8] 1) Vedic period (BCE 1500-BCE 600); this period is marked by numerous epistemological developments, including the arrival of the Aryans in the Gangetic plains, the creation of the Ṛg Veda, the classification of the Vedas, and the creation of the Upaniṣads 2) Epic period (BCE 600-CE 200); along with materialistic thoughts like Cārvāka philosophy, religious systems of Buddhism, Jainism, Śaivism and Vaiṣṇavism belong to this period. It was during this period that the six systems of philosophy (Ṣad-darśanas) developed; Sāṃkhya, Yoga, Vedānta, Mimāṃsa, Viśeśika and Nyāya and its authors being Kapila, Patañjali, Jaimini, Badarāyaṇa, Kanāda and Gautama respectively. These thoughts, which asserted the prominence of Vedas, were later codified as literary works. This period also dates the compilation of the Rāmāyaṇa and the Mahābhārata 3) Sūtra period (from CE 200); in order to make philosophy understandable, the mass of material grew so unwieldy that a shorthand scheme was needed. These precise versions occurred in the

8 Radhakrishnan, *Indian philosophy*, 57-59.

form of Sūtras. Philosophy became more critical here because commentaries were needed to understand the Sūtras 4) Scholastic period; the origin of scholastic period also dates from the second century CE. It is not possible to distinguish the Sūtra period from the Scholastic period. These two eras extend together to the present. It is notable being the period of modern commentators such as Kumārila, Śaṁkara, Śrīdhara, Rāmānuja, Madhva, Vācaspati, Udayana, Bhāskara, Jayanta, Vijñānabhikṣu, and Raghunātha; with their dialectics and restatement of old doctrines.

The epic period (600 BCE-200 CE) in the history of Indian epistemology is even more significant in this research as it explores the epistemology of art in the Indian approach. The intertwining of art and epistemology is most evident during this period, which was marked by the formation of the epics Rāmāyaṇa and the Mahābhārata, as well as other notable philosophical activities. Epics did not exist merely as creative art, but they incorporated different ideas of the time in which they were formed into their narratives on many levels without losing their literary beauty and elegance. Therefore, this research is focused on the Mahābhārata as this situation is manifested in the Mahābhārata in a more developed form than the Rāmāyaṇa. It could be understood, upon analyzing the background of the Mahābhārata, that it represents the thoughts of different periods; in one sense, the Mahābhārata enrich its epistemic background by imbibing the several ideas spanning between Vedic periods to the initial centuries of the Common Era. If so, then the Mahābhārata exists as a vehicle to carry the cultural heritage of the nation, formed over centuries and enriched by immense philosophical activities. Instead of marking the cultural heritage of the nation in a linear fashion, however, the Mahābhārata represents a chaotic tradition that incorporates the diversity of that culture as a whole along with its contradictions. It is by understanding the transmission history of the Mahābhārata that this situation is made clear. This research examines

not only the relationship between art and knowledge-the production, preservation, and dissemination of knowledge through art-but also what paradigm this context sets for the existing Knowledge Management (KM) practices in Information Science.

1.1.1 Aesthetics of Chaos in the Transmission of Mahābhārata

In essence, chaos implies 'disorder'; but the theory of chaos attempts to find the order underlying the disorder.[9] To realize the order underlying the disorder, in the domain of literary hermeneutics, cultural transmission of Mahābhārata is the best exemplar than any other literary tradition. Mahābhārata has a literary history of chaotic evolution, starting as a simple epic narrative to a complex literary work through its interaction with each era and several different historical contexts. The German Indologist Hermann Oldenberg summarizes the transmission history of Mahābhārata as, ''Began its existence as a simple epic narrative. It became, in course of centuries, the most monstrous chaos.''[10] Similarly some scholars have accused this proliferation, which has evolved into a state so that the center cannot be recovered after being dispersed from it in a non-linear fashion, as a 'loose-leaf file of palm leaves', 'the huge and motley pile', 'gargantuan hodgepodge' and 'literary pileup', etc. Its transmission method is beyond all structured human logic which forced them to experience Mahābhārata as chaotic.

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9 The first true experimenter in chaos was Edward Lorenz, a meteorologist. And this chaos theory was first proposed within the scope of literary hermeneutics by Michael Patrick Gillespie. See, Michael Patrick Gillespie, *The aesthetics of chaos: nonlinear thinking and contemporary literary criticism* (Florida: University press of Florida, 2003).

10 Cited in V. S. Sukhtankar, *On the meaning of the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 2016), 1.

Is Mahābhārata genuinely chaotic? Does any kind of order exist in its tradition? Any tradition is a blend; full of diversities. How rich can a culture be in an orderly system? Culture becomes more inclusive when it expands beyond all structural boundaries. When it becomes inclusive, there is a place for everything. Strangeness becomes strange here, it brings freedom and inclusiveness. It is in this universal inclusiveness that India's tradition has evolved. Mahābhārata is a piece of literature that incorporates all the discourses of that tradition with its chaotic dynamics. It is an endeavor to understand the dynamics of non-linear thinking, or to find the order underlying the disorder, by historically approaching the tradition of Mahābhārata. It should be by explaining these cultural dynamics that Mahābhārata must be historicized; the great tradition which turned into a dynamic living force must be traced.

1.1.1.1 Origin, Growth and Developments

On examining the ancient Indian literary history, two distinct traditions could be found existing from the beginning. The literary history of Mahābhārata also maintained these traditions. While one followed the trans-religious and popular tradition, the other parallel one identified itself with priesthood and religion. R.N. Dandekar named these traditions as the sūta-tradition and the mantra-tradition. Both these were oral traditions; but there were certain essential differences between them. He describes the sūta-tradition as related to what may be portrayed as secular matters and the doings of human heroes, or rulers. In their ballads and prevalent folk-songs, conventional legends and historical narratives, one finds representations of the several aspects of common life of the ancient Indians. The mantra-tradition, on the other hand, related to what is for the most part caught on by the terms, devout thought and practices. It comprised of the supplications, panegyrics, and enchanted chants of ancient Vedic Indians,

their ritual formulas and curses, and their spiritual yearnings and philosophical speculations. It is generally understood that the sūta-literature came after mantra-literature became popular in all its dimensions; however, many aspects of the contents of sūta-literature refer chronologically to a period prior to mantra literature.[11] Perhaps one of the reasons why this sūta-literature fell into the oblivion of history is that it remained in its fluid and floating condition even after mantra literature attained a scriptural form. It is in the grounds of these literary premises that the Mahābhārata is to be recognized.

The sūtas were the illegitimate descendants of the kṣatriyas. They were charioteers, friends, and counsellors in the court of the kings, who were placed somewhere between the last two classes in the Varṇa system. The kings were compelled to give due consideration to the sūtas who sang the valiant deeds of the war heroes wherever people were likely to assemble.[12] Their songs contained not only the adventure of the ancient ruling kings but also many other didactic matters and cosmogonies and cosmologies. This literature was preserved and disseminated and to some extent composed by the sūtas. Therefore, S. V. Ketkar gave Puranic literature, including the Mahābhārata and the Rāmāyana, a special name, the sūta-

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11 Dandekar says, ''the literature produced in the mantra-tradition, accordingly, came to be collected and consolidated at a very early date, and, as the result of this, the Veda, as we know it, came into being. The Sūta-tradition, on the other hand, continued to remain in a fluid and floating condition. This fact has given rise to the interesting paradox, namely, that, though many aspects of the contents of the Sūta-tradition chronologically refer to a period perhaps earlier than the one to which the contents of the mantra-tradition refer, the literary monuments, as such, of the Sūta-tradition, which have come down to us, are distinctly later than those of the mantra-tradition.'' See, R. N Dandekar, *Exercises in indology* (Delhi: Ajanta publications, 1981), 276-307.

12 Iravati Karve, *Yugānta: the end of an epoch* (Hyderabad: Orient BlackSwan, 2007), 5-6.

literature. Karve sees this as a secular and political tradition developed in Sanskrit literature against mantra literature of the Brahmins.[13]

The earliest forms of the Mahābhārata are found in the oral narratives like nāraśaṃsis (the descriptions praising the valiant deeds of man which are mostly associated with the Yajña tradition) and gādhas (songs of praise), which have been popular since at least 600 BCE. Jaya, the historical bardic song, which the epic itself records as its core text, is understood as a gādha that glorifies the deeds of warriors. It is generally assumed that Jaya, believed to have 8800 slokas, was composed for Yudhiṣtira by Vyāsa. Some scholars have argued that the Jaya begins with a return of the Pandavas from exile and glorifies the victory of King Yudhiṣtira. It can also be understood as a historical narrative that provides information regarding the common life of ancient Indians. It was preserved and sung by sūta-māgadhas and widely circulated in ancient India, especially in the northern parts of the country, with many variations. But in that prevalent literature of the bards, no flakes of the mantra literature can be found, as it enters the core text only after the epic (Jaya) was transformed into a scriptural form. The core text was incorporated with the religious and didactic contents by the Brāhmin community to evolve into the present form, after attaining the structured form formulated by the bards. One cannot find didactic contents in the Mahābhārata versions propagated in India during the bardic tradition. It is now acknowledged that, it was for the purpose of brahminizing the epic that all these efforts were taken.

Mahābhārata itself records that Vyāsa taught Mahābhārata to his five pupils; Vaiśaṁpāyana, Śuka (Vyāsa's son), Jaimini, Sumantu and Paila.[14]

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[13] Karve, *Yugānta*, 5-6.

Their five versions would have had existed during those ages. But the Mahābhārata version of Vaiśaṁpāyana, which he sang at the serpent sacrifice venue of Janamejaya, is the one which got wider acclaim. The only available Mahābhārata section of Jaimini, the Aśvamedhaparva, is found to exist entirely different from its modern day counterpart. It is believed that, it was the Vaiśaṁpāyana version that formed the basis for the one that Ugraśravas (Sauti) sang for the Śaunakas twelve years' sacrifice at Naimiṣāraṇya. Now in the version available for us, Vaiśaṁpāyana gives suitable answers to the questions asked by Janamejaya. C.V. Vaidya, an early Mahābhārata scholar, raises the question that how can these questions and answers become a part of the original work composed by Vyāsa.[15] He adds that we should understand either Vaiśaṁpāyana or someone else who heard the recitation and the dialogue amplified the original work on their own. Later, Sauti recites this amplified edition before Śaunaka in the twelve years' sacrifice, Śaunaka asks certain questions, and Sauti answers. Vaidya also asks how these questions and answers can be part of the original work or an amplified version of Vaiśaṁpāyana. Therefore, Vaidya is forced to admit that Sauti, or someone else who heard his recitation, amplified the original work

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[14] An observation acceptable for this situation is written by Sukhtankar in the prolegomena for the Ādiparva of the critical edition, ''In the beginning, therefore, it is clear that the poem, which was committed to memory, was recited freely, as faithfully as the particular reciter could contrive. This mode of transmission is not calculated to preserve rigid textual purity in any high degree, without stringent precautions, such as were adopted in the case of Vedic texts, but which never existed, as far as one knows, in the case of the epics. This fact also we find unexpectedly preserved by tradition. Vyāsa taught his Bhārata to his five pupils. And the five rhapsodists-the direct pupils of the author-it is reported, published five separate versions of the epic. As is well known, there is preserved a work which actually passes for the Aśvamedhaparva of the Bhārata of Jaimini (whether it is actually so or not) and which is totally different from Aśvamedhaparva.'' See, V. S. Sukhtankar, *Critical studies in the Mahābhārata*, Vol.1 (Bombay: Karnatak Publishing House, 1944), 96.

[15] C.V. Vaidya, *Mahābhārata: A criticism* (Bombay: A J combridge, 1905), 1.

a second time. This observation, which helps to understand the expansion of the Mahābhārata, justifies the fact that the version of Vyāsa is different from that of Vaiśaṁpāyana as it is the case between the versions of Vaiśaṁpāyana and Ugraśravas. Besides this observation, Vaidya records another shred of internal evidence of interpolation.[16] The arrival of Ugraśravas on to the sacrificial grounds in Naimiṣāraṇya and his subsequent recital of the Mahābhārata epic to the Śaunakas are recorded in the Anukramaṇikaparva, the first chapter of Ādiparva in the beginning of the Mahābhārata. Again, upon reaching the fourth chapter, Paulomaparva, Mahābhārata repeats the same in a different manner. Thus, the narrative progresses as if the first three chapters don't exist. These two beginnings of the first and second chapter lead him to the conclusion that Ugraśravas and Vaiśaṁpāyana are not contemporaries. In this study of Vaidya, each parvas are differentiated, separately, explaining those added at a later stage in the part of appendix titled 'Additions subsequently made to the Bhārata'. There he reveals the entry of mantra-literature into the epic, or its brahminization, along with the utterly boring repetitions of the stories.

It is an indisputable fact that at a certain point in history, the Mahābhārata came into the hands of Bhṛgu, born into the Brāhmin race. Subsequently, Bhārgavas or the descendants of Bhṛgu expanded Mahābhārata by adding their didactics and literatures into it. Prof. V. S. Sukhtankar termed this brahminized transformation of the epic as Bhṛguization. He differentiates[17] these later additions, the Bhārgava tales, one by one from Ādiparva to Aśvamedhaparva (14 parvas). Among these, it

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[16] C. V. Vaidya says, ''The Pauloma Ākhyāna is also irrelevant. This is introduced by the coming of Sūta to Śaunaka and begins as if nothing had been written before this. The story is an Arabian night story and is intended to glorify the obedience of Kshatriyas to Rishis (Ādiparva, Chap. 4-12).'' See, Vaidya, *Mahābhārata: A criticism*, 193.

[17] V. S. Sukhtankar, *Critical studies in the Mahābhārata*, 281-327.

is only in the Sauptikaparva, the 10th parva, that Bhārgava myths are added to a lesser extent. He states that less important parvas from 15-18, Āśramavāsika to Svargārohaṇa, are to an extent free from brahminization. He highlights several episodes (Upākhyānas) related to Bhārgavas, such as the Aurvopākhyāna (Ādi), Kārtavīryopākhyāna (Āraṇyaka), Ambopākhyāna (Udyoga), Vipulopākhyāna (Śānti), and Uttaṅkopākhyāna (Aśvamedha), and so on. It is further argued that the entire Pauloma and a large section of the Pauṣya, two independent sub-parvas of the epic, and the important discourses like the Bhṛgu-Bhāradvāja-saṁvāda, the Cyavana-Kuśika-saṁvāda and the Mārkaṇḍeya-samāsyā are also devoted to the legends of the Bhārgavas. Furthermore, these Bhārgava legends are frequently repeated in different contexts in the epic. He points out that the story of Uttaṅka, the legend of the altercation between Cyavana and Indra, the myth of Drona's obtaining weapons from the Bhārgava Rāma, and the account of Karṇa's discipleship under him are all told twice in different contexts. The story of the birth of Jamadagni and Rāma are related in all four instances; that the Bhārgava Rāma exterminated the Kṣatriyas thrice seven times is told ten times in an almost identical form; nevertheless, the humiliation of the pride of the kṣatriyas by the Rāma is mentioned a score of times.[18] Subsequently, by pointing out the relation between Bhārgava tales in Vedic literature and the Mahābhārata, he records how evidently the former reflects the numerous stories and genealogies in the latter.

It is also noteworthy here that Sukhtankar traced very clear and concise evidence of the conscious and deliberate effort put forth by the Bhārgavas in developing the epic. The covert addition of a few of Bhārgava legends, in the shape of the so called Paulomaparvan, to the epic has not even the remotest intrinsic connection with the story of the epic. The

[18] Sukhtankar, *Critical studies in the Mahābhārata*, 328-329.

bigoted Bhṛguization of older legends are not unnoticed and occur in the epic itself in two forms: one with and the other without some important Bhārgava element, to wit, the Stories of Sixteen Kings (Ṣoḍaśarājikiya) and the Nahuṣa-Agastya legend. The observation that Mahābhārata contains two variant openings, one of which is clearly inspired by a Bhārgava, both fortunately preserved by the conservative instincts, helped by a process of conflation peculiar to the Mahābhārata, which tolerates a close juxtaposition of discrepant versions is not a surprise too on that note. Certain indirect testimonies agree to the fact that efforts were made to connect some Bhārgava or other with the propagation of the epic. The role of Bhārgava Uttaṅka to instigate Janamejaya to undertake the serpent sacrifice is yet another aspect connecting to this. The tale, Āstīka, was narrated to the Bhārgava Ruru by his father Pramati. Another important fact is that Kulapati Śaunaka, before whom the Mahābhārata is said to have been recited by the sūta Ugraśravas, was also a Bhārgava himself! So the peculiar predilection of Śaunaka is very evident, when he says that he wants to hear the history of the Bhārgavas before anything else.[19]

Which all circumstances in history did prompt the Brāhmin race to divert their course into Mahābhārata? Which was that peculiar circumstance in history that forced the Brāhmins to make use of Mahābhārata, in order to protect and transmit their didactics and literature, upon acknowledging its influence even on the lower strata of the society? This question opens the door to cite the most enlightened and rationalistic age of ancient Indian history. The rationalistic and philosophical revolution which took place in India, between 600 BCE and 400 BCE, through Gautama Buddha progressed by making remarkable damage to Brahminical Hinduism. The pañcaśīla, the five precepts, and aṣṭāṅgamārga, the eightfold path, put forward by Buddha

[19] Sukhtankar, *Critical studies in the Mahābhārata*, 329-331.

were received by the society without any hesitation. His perspectives reached the common folk, in a simple and beautiful manner, through Jātaka tales and they started practising this tradition. Even after the death of Buddha his revolutionary ideas propagated with popularity. Thus Buddhism arose in the society, questioning the traditional Hinduism. Such acceptability for Buddhism deeply alarmed the Brahminists. It became a necessity for Brāhmins to propagate their didactics in society for their existence. They were in need of something as popular as the Buddhist scriptures, and the Mahābhārata may have been identified as an excellent medium for the same. Mahābhārata was reconstructed, imbibing the didactics, aiming for the revival of Hinduism. Even the Bhagavadgīta is understood today as one among the final steps taken for this reconstruction process.

We are, of course, making some assumptions here; the Mahābhārata was originally a non-Aryan story, but later, with the addition of several Brahminical literatures, it became the Hindus' fifth sacred book (Pañcamaveda) along with the four Vedas. Radhakrishnan opines that many incidents like blood thirst of Bhīma and the polyandry of Draupadi are indications of the non-Aryan bent of the epic. He argues that it soon turned into an Aryan story and became a national epic by incorporating different tales from different parts of the country worked into a single whole. In his opinion, it is intended to teach the rules of ethical conduct even to the weak and the lowly in society. The Buddhist scriptures were open to all, while the sacred books of the Brahmins were confined to three higher classes, so there was a need for a fifth Veda accessible to all.[20] In order to understand this situation, we can look at the Bhagavadgīta itself, since its inclusion in the epic is the main reason for the sacred status.

[20] Radhakrishnan, *Indian philosophy*, 478-482.

What is Bhagavadgīta? Is it a sole text written by a single author? According to B.R. Ambedkar, Bhagavadgīta is a philosophical defence of counter-revolution.[21] The two questions put forwarded by Ambedkar becomes relevant here:

1) For whose dogmas does the Bhagavadgīta provide philosophical justification?

2) Why did Gīta have to defend these dogmas?

Bhagavadgīta defends the dogmas of counter-revolution put forth in Jaimini's Pūrvamimāmsa, which Ambedkar regards as the Bible of counter-revolution. Gīta tries to renovate and strengthen those dogmas. By referring to Karma-yoga or action Gīta denote the dogmas embedded in Jaimini's Karma-kānda and Jñāna-yoga or knowledge would mean those dogmas contained in Brahmasūtra of Badarāyaṇa. While speaking about action Gīta refer to religious acts and observances and not activity or inactivity, quieticism or energism in general terms. Therefore, Ambedkar observes that as a matter of fact Gīta is concerned with the particular and not the general. He firmly believes that the Bhagavadgīta was written to save Brahminical Hinduism from the attack of Buddhism. His response to the question of why Gīta had to defend these dogmas is as follows. Buddha preached non-violence, and the people accepted it as a way of life, except for the Brāhmins. They had become averse to violence. Cāturvarṇya was attacked by him using some of the most offensive similes. The framework of cāturvarṇya had been demolished; Śūdras and women were able to become Sannyasis, a status which counter-revolution never granted them. Buddha condemned the karma-kānda and the yajñas in the context of himsa or violence. He also

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21 B. R. Ambedkar, ''Kṛṣṇa and his Gīta'', *The essential writings of B.R. Ambedkar*, ed. Valerian Rodrigues (New Delhi: Oxford UP, 2002).

condemned them for the selfish desire to get bonuses as the motive behind all their deeds. The response of the counter-revolutionaries to this attack was that the Vedic dogmas are infallible and therefore these things cannot be questioned. Such silly arguments could not have survived in the most enlightened and rational age known to India. Arguments that Kṣatriyas can kill without sinning merely because the Vedas say so were not acceptable to people who accepted non-violence as their way of life. The cāturvarṇya theory of gradation, the separation based on birth, would not have existed in that society that wanted social equality as their gospel and demanded social reconstruction on the basis of one's merit. The people who had accepted the doctrine of Buddha that acquisitive instinct (tanha) is the cause of all the misery in society could not accept the religion which deliberately invited people to get boons through sacrifices merely because the Vedas were behind it. No doubt that Jaimini's counter-revolutionary dogmas were on the brink of collapse under the furious attack of Buddhism if they had not been supported by the Bhagavadgīta.[22]

Ambedkar argues that Bhagavadgīta was composed only after Buddhism, Jamini's Pūrva-mimānsa and Badarāyaṇa's Brahmasūtra. How did Ambedkar infer that Bhagavadgīta is posterior to Jaimini and Badarāyaṇa? In his opinion, it is by modifying and attacking the pure and simple Karma-yoga in Jaimini's Pūrva-mimāmsa that the slokas in the Anāsakti-karma of Bhagavadgīta, slokas 9-13 in third chapter, was composed. Ambedkar believes that if Jaimini was alive, he would surely take note of this attack and reply to it. But nowhere we can find Jaimini's reference to Gīta. Also, Ambedkar points out the fourth sloka in the thirteenth chapter mention the Brahmasūtra of Badarāyaṇa by name. By putting together these reasons, Ambedkar concludes that the Gīta was composed only after Jaimini and

[22] Ambedkar, ''Kṛṣṇa and his Gīta'', 196-197.

Badarāyaṇa. It is clear that the Gīta was a new composition and not the expansion of some proportionately shorter religious instruction in the old version. There happens to be a separate evolutionary history for Gīta as it is for Mahābhārata. Several Vyāsa(s), over several years, have interfered with the composition of Gīta. Those interferences have become the reason for countless internal contradictions.

E. W. Hopkins says:[23]

> It is (Bhagavadgīta), however, too long a production to be introduced here in its entirety; but the…, than which nothing in Hindu literature is more characteristic, in its sublimity as in its puerilities, in its logic as in its want of it. It has shared the fate of most Hindu works in being interpolated injudiciously, so that many of the puzzling anomalies, which astound no less the reader than the hero to whom it was revealed, are probably later additions… Despite its occasional power and mystic exaltation, the Devine Song in its present state as a poetical production is unsatisfactory. The same thing is said over and over again, and the contradictions in phraseology and in meaning are as numerous as the repetitions, so that one is not surprised to find it described as the wonderful song, which causes the hair to stand on end.

Refer to what Telang (1882) wrote in the introduction to the work *Sacred books of the East*:[24]

> There are several passages in the Gīta which it is not very easy to reconcile with one another; and no attempt is made to harmonise

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23 See, E. W. Hopkins, *The religions of India*, (Boston: Ginn and company publishers, 1895), 390-400.

24 K. T. Telang, ''Bhagavadgīta'', *Sacred books of the east*, Vol. 8, ed. Max Muller (Delhi: Motilal Banarsidass, 1882), 11-13.

them. Thus, for example, in stanza 16 of chapter VII, Kṛṣṇa divides his devotees into four classes, one of which consists of 'men of knowledge', whom, Kṛṣṇa says, he considers 'as his own self'. It would probably be difficult to imagine any expression which could indicate higher esteem. Yet in stanza 46 of chapter VI, we have it laid down, that the devotee is superior not only to the mere performer of penances, but even to the men of knowledge. The commentators betray their gnostic bias by interpreting 'men of knowledge' in this latter passage to mean those who have acquired erudition in the Śāstra-s and their significations. This is not an interpretation to be necessarily rejected. But there is in it a certain twisting of words, which, under the circumstances here, I am not inclined to accept. And on the other hand, it must not be forgotten, that the implication fairly derivable from chapter IV, stanza 38 (pp. 62, 63), would seem to be rather that knowledge is superior to devotion-is the higher stage to be reached by means of devotion as the stepping-stone. In another passage again at Gīta, chapter XII, stanza 12, concentration is preferred to knowledge, which also seems to me to be irreconcilable with chapter VII, stanza 16. Take still another instance. At Gīta, chapter V, stanza 15, it is said, that 'the Lord receives the sin or merit of none'. Yet at chapter V, stanza 29, and again at chapter IX, stanza 24, Kṛṣṇa calls himself 'the Lord and enjoyer' of all sacrifices and penances. How, it may well be asked, can the Supreme Being 'enjoy' that which he does not even 'receive'? Once more, at chapter X, stanza 29, Kṛṣṇa declares that 'none is hateful to me, none dear'. And yet the remarkable verses at the close of chapter XII seem to stand in point-blank contradiction to that declaration. There through a most elaborate series of stanzas, the burden of Kṛṣṇa's eloquent sermon is 'such a one is dear to me'. And again in those

fine verses, where Kṛṣṇa winds up his Devine Lay, he similarly tells Arjuna, that he, Arjuna, is 'dear' to Kṛṣṇa. And Kṛṣṇa also speaks of that devotee as 'dear' to him, who may publish the mystery of the Gīta among those who reverence the Supreme Being (And see, too, chapter VII, stanza 17, where the man of knowledge is declared to be 'dear' to Kṛṣṇa). And yet again, how are we to reconcile the same passage about none being 'hateful or dear' to Kṛṣṇa, with his own words at chapter XVI, stanza 18 and following stanzas? The language used in describing the 'demoniac' people there mentioned is not remarkable for sweetness towards them, while Kṛṣṇa says positively, 'I hurl down such people into demoniac wombs, whereby they go down into misery and the vilest condition'. These persons are scarcely characterized with accuracy 'as neither hateful nor dear' to Kṛṣṇa. It seems to me, that all these are real inconsistencies in the Gīta, not such, perhaps, as might not be explained away, but such, I think, as indicate a mind making guesses at truth, as Professor Max Muller puts it, rather than a mind elaborating a complete and organised system of philosophy. There is not even a trace of consciousness on the part of the author that these inconsistencies exist. And the contexts of the various passages indicate, in my judgment, that a half-truth is struck out here, and another half-truth there, with special reference to the special subject then under discussion; but no attempt is made to organize the various half truths, which are apparently incompatible, into a symmetrical whole, where the apparent inconsistencies might possibly vanish together in the higher synthesis. And having regard to these various points, and to the further point, that the sequence of ideas throughout the verses of the Gīta is not always easily followed, we are, I think, safe in adhering to the opinion expressed above, that

> the Gīta is a non-systematic work, and in that respect belongs to the same class as the older Upaniṣads.

The Bhagavadgīta studies of D.D. Kosambi (1962), is rich with similar arguments. In the essay titled 'Social and economic aspects of Bhagavadgīta,' Kosambi explains the brahminized expansion of the Mahābhārata through Gīta. These observations of Kosambi are in accord with the arguments of Ambedkar, Hopkins and Telang. Kosambi writes:[25]

> The lower classes were necessary as an audience, and the heroic lays of ancient war drew, them to the recitation. This made the epic a most convenient vehicle for any doctrine which the Brāhmins wanted to insert; even better than rewriting the purāṇas, or faking new purāṇas for age old cults. . . No one could object to the interpolation of a story or episode. After all, the Mahābhārata purports to be the recitation in the Naimiṣa forest to the assembled sages and ascetics by a bard Ugraśravas, who repeated what Vyāsa had sung to Janamejaya as having been reported by Sañjaya to Dhṛtarāṣṭra! The Brāhmins were dissatisfied with the profit derived from the Gīta, not with its authenticity. So, we have the Anu-Gīta as a prominent sequel in the 14th Canto (Aśvamedhaparva). Arjuna confesses that he has forgotten all the fine things told before the battle, and prays for another lesson. Kṛṣṇa replies that it would be impossible even for him to dredge it out of his memory once again; the great effort was not to be duplicated. However, an incredibly shoddy second Gīta is offered instead which simply extols Brahminism and the Brāhmin. Clearly, that was felt necessary at the

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[25] D. D. Kosambi, *Myth and reality: Studies in the formation of Indian culture* (Bombay: Popular prakashan, 1962), 15-18.

time by the inflators though no one reads it now, and it cannot be compared to the first Gīta even for a moment.

Then, when was the Bhagavadgīta composed? Ambedkar says that the effort to figure out the date of composition of Bhagavadgīta is barely anything but a journey behind a mirage. It is fated to be a failure. Because, Bhagavadgīta is not a sole text written by a single author. It contains different sections written by different authors over different periods of time. What conclusions could be reached through the arguments of Ambedkar? Gīta could have had a core text, and other sections were added to it according to the needs of the later ages. The four stages of evolution of Gīta, put forward by Ambedkar, are important here. He believed that if the date of composition of Gīta is to be assessed, if that effort has to be fruitful, the date of composition of each and every section needs to be assessed separately. These four stages are differentiated as given below:[26]

1) The core text was only a heroic tale or an epic. The bards went around telling or singing them. Its contents were Arjuna disagreeing to fight the war, Kṛṣṇa persuading him to fight and Arjuna yielding to it. It would have been an imaginary tale. But it didn't have any religious or philosophical dimensions (Here, Ambedkar acknowledges the possibility of this non-philosophical core text to be the part of the first edition of the Mahābhārata named Jaya).

2) The first section added to the core text is the part which proclaims Kṛṣṇa as almighty and the God of Bhāgavata. This part in Gita is contained in the slokas describing the Bhakti-yoga in modern day Bhagavadgīta (Ambedkar believes that the date of composition of

[26]B. R. Ambedkar, *Collected works of Dr. Br. Ambedkar* (Malayalam), Vol. 7, trans. Ignatious Kakkanatan (New Delhi: Dr. Ambedkar Foundation, 1999), 256-283.

this initially added section is somewhere posterior to the period of Megasthenes).

3) The second section pasted on to the core text is the part representing the Sāṃkhya and Vedānta philosophy used for the defence of Pūrvamimāmsa dogmas (Ambedkar opined that the date of composition of this secondly added section is between 200 CE-450 CE. Here, he points out what Prof. Jacobi recorded in the essay ''The dates of the philosophical sūtras of the Brāhmaṇas'', Vol. XXXI, 1911).

4) Third section pasted on to the core text contains the sloka-s which elevates Kṛṣṇa from the status of a God to the Parameśvara, God of Gods. This section could be easily found from the 10^{th} and 15^{th} chapters (Ambedkar says that the date of composition of this final edition could be during the ruling period of the Gupta dynasty. In his opinion, the Gupta rulers accepted Kṛṣṇa-Vasudeva as the deity of their clan. Their enemies, the Śāka kings had already acknowledged Mahādeva as the deity of their clan. As religion was a mere trade for the Brāhmins they were never the devotees of a single God but came forward to worship the God of the ruling class. Brāhmins thought of pleasing their lords by elevating the clan-deity of the rulers to the stature of the great and mighty Parameśvara. Thus, Ambedkar observes that this section was added to the core text between 400 CE-464 CE).

The discussions so far are sufficient to understand how the two distinct literary traditions of ancient India, which were observed by Dandekar, were reflected in the development of the Mahābhārata. Hence, it is essential to recognize that certain socio-political contexts shaped the way that the epic was constructed and transmitted. It has an evolution that has

developed in parallel with history. The connection of a literary creation with the history of the time in which it was formed is important here, and therefore, it is necessary to understand the socio-political background of India during the period in which the Mahābhārata was formed.

1.1.1.2 Socio-Political Background

There is no evidence that the Mahābhārata was composed before the 6th century BCE, and archaeological studies indicate that by the 5th century CE, the epic had evolved into a collection of one lakh ślokas (Śatasahasrīsaṁhita). Therefore, the political background of India in those periods, especially after Buddha and Mahāvīra, from the 4th century BCE to the 5th century CE, is considered here. Dissenting religions such as Cārvāka, Ājīvika, Jaina and Bauddha were formed during this period when the Rāmāyaṇa was composed. It was also during this period that the Śaiva and Vaiṣṇava religions took shape. Sāṃkhya, Yoga, Mīmāṁsa, Vedānta, Viśeśika and Nyāya systems were also composed during this time. Thus it was a period in which the origin, growth and developments of different thoughts and their mutual conflicts were made possible. The reciprocal conflicts of thoughts, both Vedic and non-Vedic, are important here.

Jain thought gained more popularity in the society through Chandragupta Maurya, the founder of the Maurya dynasty in the 4th century BCE. In the 3rd century BCE, Chandragupta Maurya's grandson, Asoka, popularized Buddhist thoughts to an unprecedented extent. There is no other historical context in ancient India where the religious orthodoxy of Hinduism has been questioned as much as in the Maurya period after Buddha and Mahāvīra. These dissenting ideas, which were accepted in the society by constantly questioning the ideas of Vedic Hinduism, lost their significance with the rise of the Ṣunga dynasty in the 2nd century BCE. The last Emperor of the Maurya dynasty, Brihadratha Maurya, was assassinated

by the Puṣyamitra Ṣunga, the commander of Emperor Brihadratha, approximately in 185 BCE, and the Ṣunga dynasty was established. Through Puṣyamitra, who was of Brāhmin descent, Vedic Hinduism was thus restored, and he took a strong stand against the dissenting religions which rejected the authority of Veda. The Vedic religion, or Brahminical Hinduism, strengthened the cāturvarṇya by suppressing and sometimes assimilating dissenting thoughts. The Gupta period that followed was, from approximately mid-to-late 3rd century CE to 550 CE, in this sense, a continuation of the Ṣunga period. Since the Mahābhārata was formed in these historical contexts, all these elements were reflected in the epic as a response to those events. The dynamics in the Mahābhārata caused by these socio-political contexts can be summarized as follows.

Bardic literature, which developed in secular form, with all its diversity, can be seen in the early stages of the epic. Not only the valiant deeds of the war warriors but also the folk tales, animal fables and tribal myths in northern India which are not directly related to the epic thus found a place in it. Cāturvarṇya, the theory of gradation, with the argument that it is natural, was presented in the epic according to Veda. The gradation theory may have had such an impact on the epic as a result of the use of the epic, which was merely a bardic song, by the propagandists of Vedic Hinduism to overcome the social acceptance of dissenting thoughts. Later, different knowledge systems, shad-darśanas, which recognized the relevance of the Vedas, became dominant in society and gradually took their place in the epic. Thus Upa-Vedas (Dhanurveda, Sthāpatyaveda, Gāndarvaveda and Āyurveda) and Dharmaśāstras found a place in epic along with Upanishadic discourses: the Upanishadic teachings of Śvetāśvatara, Katha, Māitri, and Atharvaśiras can be seen as such. Brahminical myths and other Vedic legends as part of Bhṛguization and Kṛṣṇa tales were also added. However, especially the epic passages after the war are rich with the influence of dissenting

thoughts such as Jaina, Bauddha, and Cārvāka, which rejected the theory of cāturvarṇya and varṇāśramadharma.[27] It can be assumed here that the dominance of such dissenting ideas in the Maurya period was also a decisive influence in shaping the ideas of the epic. But, in the final stages of this epic formation process, when the Vedic religion was revived and strengthened through Puṣyamitra Ṣunga, as if in response to that particular social context, the main focus of the epic was to defeat all such dissenting thoughts with cāturvarṇya ideas in order to preserve the orthodoxy of Hinduism. We have to come to the conclusion here that the epic was constantly making additions to its textual content, using different narrative forms of the time in accordance with the ideas that guided society at different periods. Thus the epic has become an epitome of the Indian epistemological tradition as it travels with time and incorporates the different knowledge of different eras.

1.1.1.3 Epic Period

The discourse on the Mahābhārata period is more complex. Since the Mahābhārata was created from the imagination of many poets from different eras, it is impossible to limit the epic period to a definite time frame. However, if the events mentioned in the epic are considered as historical facts, a probable date can be found and the events can be traced back to a definite time frame. Therefore, many scholars have worked on this;

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[27] According to Doniger, Yudhistira, who is deeply saddened by the end of the Kurukṣetra war, is the epitome of Emperor Asoka, who is tempted to reject violence after the battle of Kalinga. ''Commentators have sometimes regarded Yudhiṣtira as a Brahmin king (like Puṣyamitra) or a Buddhist king (like Asoka), or both, a Brahminical Asoka, who is tempted to reject violence much as Asoka, by the testimony of his edicts, hoped to do. Yudhiṣtira's refusal to rule after the war may have been a response to Asoka's thirteenth Major Rock Edict or to legends about Asoka that circulated after his death (Aspects of the life and character of Arjuna too may have been created in response to Asoka).'' See, Wendy Doniger, *The Hindus: An alternative history* (New Delhi: Speaking tiger publishing, 2015), 256.

all those efforts have remained partial or incomplete. Historians, archeologists, astrologers,[28] philologists, and genealogists[29] have put forth conflicting arguments regarding its chronology; the time period from BCE 5000 to BCE 600 is, thus, considered as the period of war, the central theme in Mahābhārata.

1.1.1.3.1 Geographical References

The ancient sites such as Āryavartha, Brahmadeśa, and Brahmarṣideśa are related to the modern Indian places like Kashmir, Haryana, Punjab, Sindh, Gujarat, Saurashtra, Kuch, Uttar-Pradesh, Bihar and Assam.[30] Hastinapura, the capital of Kauravas, is the Meerut district in Uttar-Pradesh; it is at the Barnava village in Meerut, the ancient Vāraṇavata, that the Kauravas built the lac-house to kill Pāṇḍavas. Madura and Ahichatra, the birth place of lord Kṛṣṇa, is in Uttar-Pradesh. Bāghpat, the ancient Vṛkaprastha, is also situated in the Meerut district. Panipat, the ancient Pāniprastha, and the battlefield of Kurukṣetra war is in Haryana. The Virāda Nagar, where the Pāṇḍavas spend their exile, is the Jaipur city in Rajasthan. Indraprastha is the current

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28 Each of the arguments based on astrology is contradictory. Based on some sources in the Ṛgveda, some scholars believe that the war took place around BCE 5000. Some other astrologers date the war to BCE 3093 and BCE 2300, following astrological indications from various contexts in the epic. However, Vedic and Sanskrit scholars generally consider BCE 3100. But the fact is that no historical research, especially astrological approaches, has been able to satisfy these observations; historians argue that the cultural background of the epic does not allow the date to be placed back so long.

29 One can also think of how reliable the genealogical approach to determining the date of the epic is. The chronology of generations is calculated by taking the mean average of the lifespan of each generation according to the events described in the text in relation to specific generations. The main drawback here is that there are no specific reasons or exact criteria for estimating the average of generation.

30 Rajan Gurukkal, *Myth charithram samooham* (Kottayam: Sahithya Pravarthaka Co-operative Society, 2013), 36-48.

capital city of India, New Delhi.[31] Moreover, the description of the Janapadas, which were deployed on both sides during the Kurukshetra war, helps us to better understand this background. The Janapadas, namely, Magadha, Kāśi, Valsam, Chedi, Karuṣa, Daśārṇa, and Pānchāla from central region and Vriṣṇis, Yādavas and Abhisārars from south-western Kashmir had come to fight for the Pāṇḍava side. Mahābhārata describes that the Janapadas Videha, Anga, Vanga, Kalinga from the east; Mahiṣmati, Avanti, Vidarbha, Viṣāda, Sauvīrya from the south, Gāndhāra, Trigartha, Kekeya, Mādra, and Kamboja from north-west, Kosala, and Śurasena from central region had assembled for the Kauravas. From these descriptions, it is clear that Magadha was not a prominent political state during that period. Therefore, it should be assumed that the geographical background of Mahābhārata is the period between BCE 1000; when there was a shift from Janapadas to Maha-Janapadas, and BCE 600; when Magadha rose as a prominent political state.

1.1.1.3.2 Archaeological References

Excavations were carried out in Hastinapura, the capital city of the Kaurava, between 1950 and 1952 under the direction of renowned archaeologist Prof. B.B. Lal. Many such excavations took place near Dwarka in 1963 (Deccan College, Pune, Department of Archaeology) and 1979-1980 (S.R. Rao from Archaeological Survey of India). Similarly, many attempts have been made to understand the historicity of the Mahābhārata in different places over time; it still continues. But even now, we do not have strong archaeological references to corroborate the historicity of the epic. However, Lal's excavation proves one literary evidence, which was mentioned in Matsya

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[31] See, B.B. Lal, ''Mahābhārata and archaeology'', *Mahābhārata: myth and reality, differing* views, ed. S. P. Gupta and K. S. Ramachandran (New Delhi: Agam Prakashan, 1976), 53.

and Vāyu purāṇa, that Hastinapura was flooded away during the reign of the Pāṇḍava ruler Nichakṣu (He was the fifth king to come to power after Parīkṣit who ruled Hastinapura after the war) and that the then king had shifted his kingdom from Hastinapura to Kauśambi. During the floods, heavy layers of silt brought by the Ganges River were found in Kauśambi on top of the strata where the grey wares were found; pottery sediments similar to the last stage of the grey ware culture at Hastinapura were also found at Kauśambi. It proves that the floods and the subsequent emigration of people to Kauśambi are real. But this archaeological evidence is not enough to prove the historicity of the epic. If the Mahābhārata is a historical fact, it is important to think about which period in ancient India can be linked to those events. In this case, another observation by Lal,[32] which calculates the reigns of the rulers from Nichakṣu to Udayana, is noteworthy. Udayana is the nineteenth from Nichakṣu amongst the rulers at Kauśambi. Udayana, accordingly, was the 24th ruler after the war. Since Udayana is a contemporary of the Buddha, the death of the Buddha is assumed to be BCE 487, and the reign of Udayana is estimated to be around BCE 500. Assuming that the average reign of a ruler is 15 years,[33] the total reign of the 24 rulers who came to power after the war would be 360 (15X24=360), then he thinks that the year of war would be BCE 860 (500+360=860).[34] Along with this evidence a time that guarantees the availability of iron must be connected with the epic period. It was impossible for a civilization without iron to wage great wars, and iron

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32 B. B. Lal, Mahābhārata historicity-slide presentation at the international seminar on Mahābhārata organized by Draupadi Trust in April 12, 2012 at New Delhi.

33 The average years per ruler are calculated based on the total number of rulers in each of the major dynasties (Maurya, Sunga, Kanva, Satavahana, Gupta, and Muslim rulers of Delhi) of ancient India.

34 He is not asserting that the war exactly took place in BCE 860, but rather completely denying the possibility of war in a period before BCE 900.

was essential for agricultural development and deforestation to extend their territory. Radiocarbon dating of excavated relics, such as cooking pots, terracotta toys, glass bungles, iron nails, and copper utensils, revealed that they were strongly related to the Painted Gray Ware Culture (PGW). The PGW is an Iron Age found in Western Gangetic plain and Ghaggar-Hakra valley which lasted from 1200 BCE-600 BCE. The people of the region lived their lives through agro-oriented works and that they had iron spears, knives, and arrowheads as weapons. Therefore, it is impossible to date Iron Age related history back to the Ochre Colored Pottery (OCP) period, BCE 2000-BCE 1500, of the Bronze Age. The period cannot be considered here as the epic characters evolved into supernatural beings during the Northern Black Polished Ware (NBPW) culture (BCE 700-BCE 200), which marked the increase in the availability of iron and the knowledge of the people in metallurgy. Hence, if the epic events are real, the archeological approaches that connect them to the PGW period make more sense. Thus, the post Rg-vedic period becomes prominent.

The efforts to structure and compile Vedic hymns started during the immigration period of Aryans to the Gangetic plains. Kurus, Pānchālas, Kosalas, and Kaśis started settlements at places like Delhi, Kanuj, Avadh (Oudh), and Benares respectively.[35] On the basis of the archeological studies it is not possible to date the Rg-Veda period beyond BCE 1500. If so, the later Vedic age would have started from BCE 1000.[36] It is in the later Vedic literatures that the Kuru dynasty, Kurukshetra and Mahābhārata characters are first referred. In this manner, the Mahābhārata characters appear in Kāṭhakasaṁhita of Yajur Veda (Dhritarāṣtra), Chāndogyopaniṣad (Kṛṣṇa, the

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35 See, Radhakrishnan, *Indian philosophy*, 271.

36 Rajan Gurukkal's study of the Mahābhārata, which describes the connection of later Vedic literatures with the epic characters, is discussed here. See, Rajan Gurukkal, *Myth charithram samooham*, 36-48.

son of Devaki) and Atharva Veda (Parīkṣit). The status of Ācāryas of Mahābhārata is amongst the sages who should be revered by Jalārpaṇa according to Asvalāyanagrihyasūtra. It is notable that Kuru-dynasty and Kurukṣetra war finds reference in Brahmaṇas. These clues are evidence of the Mahābhārata characters being anointed as great warriors in the later Vedic literatures; if so, it becomes impossible to place their lifetime much before the Vedic literatures.[37] By the time of Pāṇini, i.e. around BCE 600, the characters of Mahābhārata such as Vasudeva Kṛṣṇa and Arjuna had evolved into idols of worship. By BCE 200, the era of Patañjali, Vasudeva Kṛṣṇa had reached the epitome of worship, after being evolving as the incarnation of Viṣnu-Nārāyaṇa. The great warriors of war turn into supernatural powers, after being worshipped for around three, or four centuries; if so, the 400 years before BCE 600 is more close to the time period of Mahābhārata. The observation of Radhakrishnan that the story of Mahābhārata unveils during an era where; caste prominence gained momentum, ceremonial religion appealed to the people, and Vedic hymns had lost their original force and meaning, gives strength to the thoughts that relate the period of Mahābhārata post the Ṛgveda period.[38] These arguments get along with the archeological readings of the epic period; if so, then the astrological and genealogical readings become nullified.

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37 Arthur. A. Macdonell says, ''There can be little doubt that the original kernel of the epic has as a historical background an ancient conflict between the two neighboring tribes of the Kurus and Pānchālas, who finally coalesced into a single people. In the Yajurvedas these two tribes already appear united, and in the Kāṭhaka King Dhritarāṣtra Vichitravīrya, one of the chief figures of the Mahābhārata is mentioned as a well-known person. Hence the historical germ of the great epic is to be traced to a very early period, which cannot well be later than the 10_{th} century B.C.'' See, A. A. Macdonell, *A history of Sanskrit literature* (New York: D. Appleton and company, 1900), 284-285.

38 Radhakrishnan, *Indian philosophy*, 272.

1.1.1.4 Textual Dynamics: A Brief Note

The XIth conference of the international congress of orientalists was organised in Paris in 1897. There, Prof. M. Winternitz demanded that a critical edition should be prepared for Mahābhārata. That was the first voice recorded, in a clear and emphatic manner, in history for the critical edition of Mahābhārata. The propriety in transferring such a diverse and contradictory epic in its essence to the next generation was discussed there. Prof. Winternitz reiterated his requisition in the XIIth and XIIIth conferences held at Rome (1899) and Humberg (1902) respectively. His efforts could thereby convince the assembled savants that a critical edition was relevant for the historical and critical study of the great epic of India. Later, it was decided to consider the proposal of Prof. Winternitz and the Sanskrit Epic Text Society was formed as a stage for the study of epics in Sanskrit language and a committee was entrusted by the Indian section of the international congress of orientalists in Rome (1899) for this. The committee thus formed was out of favour for the aforesaid proposal and instead recommended that the preparation of the critical edition should be undertaken by the International Association of Academics. Subsequently, in 1904, the London session of this association was ready to compose the critical edition of Mahābhārata and the fund for the preliminary work of this edition was permitted by the academics of Berlin in Vienna. This was the first step taken for the preparation of the critical edition of Mahābhārata in history. As a furtherance of this project, Prof. H. Luders analyzed the first 64 stanzas of the Ādiparva, on the basis of the 29 manuscripts of Mahābhārata available in the European libraries in those days, and published a specimen of critical edition in 18 pages in 1908. But this effort didn't inspire many. Winternitz pointed out, twenty years later in the XVIIth conference of the international congress of orientalists held at Oxford in 1928, that nothing else other than this effort by Luders took place as a part of the textual study of

Mahābhārata. It is understood that the western efforts for the critical edition ceased thereby. The First World War also became a reason for it.[39]

In 1917, the Bhandarkar Oriental Research Institute (BORI) was founded in Pune. After the war, on July 6, 1918 the institute called for a general body and started working on the preparation for the critical edition of Mahābhārata. Prof. V.S. Sukhtankar was designated as the director of the institute and later as the general editor of the Critical Edition (1925-1943). The BORI prepared the critical constitution of the text by examining 1259 manuscripts (Number of manuscripts actually used: 734; others were unusable as they were partial) from eight languages in India (Sarada (Kashmiri old and new), Newari, Maithili, Bengali (Assamese and Oriya), Devanagari, Telugu (Nandinagari), Grantha (Tamil), and Malayalam); 4920000 collation units, approximately, have been set up at various centers in India for this project. The Critical Edition had three General Editors; V.S. Sukhtankar (1925-1943), S.K. Belvalkar (1943-1961), and P.L. Vaidya (Since 1961). Ten persons worked as the editors of the 18 parvas. It was published in 19 volumes (Extent: 12985 Demiqurto pages), and has an index too.[40] Thus the Critical Edition of the Mahābhārata that we have today is the result of a great effort, beginning in 1897 and lasting until 1966.

The Mahābhārata, even in its scriptural form, reflected all the diversity of Indian culture so that the single authentic archetype could not be so easily separated from its various texts. It considered the Nīlakaṇṭha manuscript (17th century CE) as the vulgate-text for the constitution of the

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39 All this information recorded in the 'Prolegomena' that V. S. Sukhtankar wrote for the Ādiparva of the Critical Edition.

40 See, R.N. Dandekar, *Souvenir of the completion of the critical edition of the Mahābhārata* (Poona: Bhandarkar oriental research institute, 1966).

critical text. It is known by the name Bhāratabhāvadīpa.[41] The manuscripts accepted for the constitution of the critical text doesn't exist in the form based on the reference given by the parvasaṁgraha (As a text, Mahābhārata is divided into parvas, upa-parvas and adhyāyas. This order of division is stated in parvasaṁgraha, the third chapter of Ādiparva). Huge differences were observed in upa-parvas, adhyāyas and slokas. The number of adhyāyas in Ādiparva of the Critical Edition is 225, but this figure does not tally with the number given in the parvasaṁgraha (218). The situation is no different in other editions of the epic. ''The Calcutta edition of the Ādi has 234 adhyāyas, the Bombay editions vary between 234 and 236, while the Kumbhakonam

41 Other creditable performances, apart from the Nīlakaṇṭha manuscript, which were of immense help during the preparation of the critical edition, needs to be mentioned here. The editio princeps (Calcutta, 1836), The well known pothī-form Bombay editions (Published by Ganpat Krishnaji in Śaka 1799, and Gopal Narayan in 1913, and others) were all composed based on the Nīlakaṇṭha manuscript. The Kumbhakonam edition, the new edition of the southern recension of the Mahābhārata by Prof. Subramaṇya Sāstri of Madras, considered as the better representative of the southern tradition also deserves special mention. The Grantha edition (Sarfojirajapuram, 1896) and the old Telugu edition (Madras 1855) were the important ones among the texts that Sukhtankar didn't examine. In his opinion, they didn't likely contain any information of high importance which was not found in the other editions or manuscripts taken up for the preparation of critical edition. Apart from the various manuscripts, certain aids or testimonials of a particular or subsidiary character have been used for the composition of the critical edition. R. N. Dandekar writes: ''These testimonia normally consist of 1) the adaptations of the epic like the Javanese adaptation Bhāratam (about AD 1000) and the Telugu adaptation by Nannaya (about AD 1025) called Āndhra Bhāratamu, 2) the epitomes in Sanskrit like the Bhāratamanjari of Kṣemendra (About AD 1050), the Bālabhārata Amaracandra Suri (13th century AD), and the Pāṇḍavacarita of Maladhāri Devaprabha (16th century AD), an 3) the various commentaries on the epic, like the Jñānadīpika of Devabodha (early 11th century AD?), which is, incidentally, the oldest available commentary, the Viṣamaśloki of Vimalabodha (between AD 1150 and AD 1300), the Bhāratārthaprakāśa of Sarvajña Nārāyaṇa, the Bhāratārthapradīpika of Arjunamiśra (15th century AD), the Laksālaṁkāra of Vādirāja (16th century AD), and the Bhāratabhāvadīpa of Nīlakaṇṭha (17th century AD).'' See, Dandekar, *Exercises in Indology*, 306-307.

edition reaches the astonishing figure 260, though the parvasaṁgraha figure in the case of each of these latter additions is the same, 227.''[42] These facts reveal that the adhyāya divisions of the extant manuscripts are arbitrary. Contradictions could be found even in the names given to the parvas. Upa-parvas of the same name repeat inside the parvas such as Sabha, Sautika, Mausala, and Mahāprastānika. The division into the 18 parvas, that we have today, could have happened at the final stage of compilation of Mahābhārata. In the first stage, it was all parvas alone without the upa-parvas. It is understood that, those which were parvas in the Vaiśaṁpāyana version later changed into the status of upa-parvas. What does this mean? Even after attaining a scriptural form, the Mahābhārata was subjected to several re-writings and the changes to the arrangement schemes continued.

These fluctuations of the manuscripts and complex character of Mahābhārata made it a necessity to devise a different approach to the constitution of its critical text different from the method used for the western classics. The editors adopted the general criterion for the critical constitution, which considered only the most common stanza, or group of stanzas among all acceptable manuscripts; the rest were deemed later additions. Two aspects of this constitution as observed by M. A. Mehendale are important here:[43]

1) Constitution of the text of a stanza and constitution of the whole adhyāyas. If the text of a given stanza was not handed down uniformly in all the versions, then the editor had to examine all the variant readings and decide on the basis of manuscript criteria which one was to be accepted for the critical edition

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42 See, Sukhtankar, *Critical studies in the Mahābhārata*, 125.

43 M. A. Mehendale, ''The critical edition of the Mahābhārata: Its achievement and limitations'', *Annals of the Bhandarkar Oriental Research Institute,* Vol. 88, (2007), 1-16. Accessed July 4, 2021, http://www.jstor.org/stable/41692082.

2) If certain parts of the text consisting of a single stanza, a group of stanzas, or longer passages sometimes making up a whole adhyāya or even adhyāyas were not found in all versions, they were looked upon as later additions. Such additions, if short, are printed in footnotes, the longer ones are given place in its appendices

These footnotes and appendices reveal an unparalleled textual transmission in epic's literary tradition. It is important to note how Sukhtankar presents this situation where he also reveals the real objective of the critical constitution of the Mahābhārata:[44]

> I have given in the text whatever in each case appeared to be supported by the balance of probabilities, but all important deviations in the manuscripts are noted in the critical apparatus, so that every reader has, at his disposal, the entire material for controlling and correcting the constituted text, where necessary. All important elements of the text-lines, phrases, significant words and even word-parts-that are less than certain, are indicated by a wavy line printed below them…This wavy line, running through the entire length of the text is, to my mind, the symbol and constant remembrancer of this essential fact in Mahābhārata textual criticism that the Mahābhārata is not and never was a fixed rigid text, but is fluctuating epic tradition, a theme avec variations, not unlike a popular Indian melody. Our objective should consequently not to be to arrive at an archetype (which practically never existed), but to represent, view and explain the epic tradition in all its variety, in all its fullness, in all its ramifications. Ours is a problem in textual dynamics, rather than in textual statics.

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[44] Sukhtankar, *Critical studies in the Mahābhārata*, 128.

Thus, critical text became the most authentic text prepared with the available manuscripts of Mahābhārata. It cut across a path into the dynamic and fluctuating tradition of Mahābhārata. According to Sukhtankar, the entire Mahabharata is now compiled from at least ten manuscripts; a number of parvas have been completely collated from twenty manuscripts; some from thirty; a few from as many as forty manuscripts; the first two adhyāyas of the Ādi, which have special significance for the critical composition of the text of the entire epic, have been collated from no less than sixty manuscripts.[45] However, the critical version of the epic does not exist as a pure text that is completely free from errors. Many contradictions are evident there as well.[46] While the early interpolations in the available manuscripts were similar, critical text was not able to nullify it. The differences in interpolations were found in the later ones. If so, what is the significance of this constituted text? It is the only text claimed to be the most ancient form of the Mahābhārata, according to the direct line of transmission, being purer than the others, and free of obvious errors in copying and spurious additions.[47] Sukhtankar writes:[48]

> Two facts emerge rather clearly out of the chaos: firstly, the text was originally committed to memory and recited freely; secondly, different rhapsodists recited differently. This has indeed been assumed by many writers on the subject. All that is quite natural and intelligible. As a matter of fact, from generation to generation, from place to place, from bard to bard, the wording, even the contents, would vary a little, until the text is committed to writing, which is the

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45 See, Sukhtankar, *Critical studies in the Mahābhārata*, 14.

46 Refer to the article which presents these contradictions of the critical text one by one and reveals its merits and demerits. See, Mehendale, ''The critical edition of the Mahābhārata: Its achievement and limitations'', 1-16.

47 See, Sukhtankar, *Critical studies in the Mahābhārata*, 129.

48 Sukhtankar, *Critical studies in the Mahābhārata*, 96-97.

beginning of a different phase in its history. The view that the epic has reached its present form by a gradual process of addition and alteration receives strong support from the fact that this process is not stopped even by scriptal fixation.

This chaotic dynamics can be seen not only in the texts but also in its creator; the creator evolves along with the creation. Bruce M. Sullivan[49] says that Vyāsa, who was initially considered as the transposition of Brahma (the demiurge), later changes into the portion (aṃśa) of Viṣṇu-Nārayaṇa. According to Sullivan this is due to the response of evolution that the concept of God undergoes in Indian society. The Gods like Brahma, who were once seated at highly revered positions during the formation of epic, lost their designations by later centuries of BCE and were overpowered by the Vaiṣṇava-Śaiva God concepts. Sullivan believes that this is reflected in the concept of Vyāsa too. If so, what was the real purpose of making a very simple bardic song into the most monstrous chaos that even its creator can evolve in this way? The aim of the Mahābhārata, according to Radhakrishnan,[50] was to satisfy the popular mind, and it could only be done by accepting popular stories, it preserves all the ancient beliefs and traditions of the race, which were very comprehensive in its scope, and the epic sought to inculcate in the minds of the people the basic unity of the country by bringing together the social and religious ideas of the different peoples who had gathered on the soil of India.[51]

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[49] Bruce M. Sullivan, *Seer of the fifth Veda: Kṛṣṇa Dvaipāyana Vyāsa in the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 1999).

[50] Radhakrishnan, *Indian philosophy*, 479.

[51] Sister Nivedita writes: ''In Hindu literature there is no second work which can be called "national" in the same sense as the Mahābhārata. The foreign reader, taking it up as sympathetic reader merely and not as scholar, is at once struck by two features; in the first place, its unity in complexity; and in the second, its constant effort to impress on its hearers the idea of a single centralized India

1.1.1.5 Living Tradition Beyond Textual Trimmings

It is noteworthy how the epic still interacts in the society as a dynamic living force, transcending all its barriers. This thought leads us to see how this epic influences many different modern contexts.

The Mahābhārata has never existed in a definite state at any stage of its evolution. As in oral literature in the early days, the epic was subject to constant addition and alteration even in its scriptal fixation.[52] When dealing with modernity, it was translated into many European languages besides Indian vernaculars. Now even Persian readers can have access to the Mahābhārata (Razmnama). It is constantly being considered on many levels in academic interventions and influences literary works in many languages. It has always been the subject of poems, novels and stories. Transcending even all such textual trimmings, it has today become a dynamic living tradition,[53]

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with a heroic tradition of her own as formative and uniting impulse.'' See, Sister Nivedita, *The complete works of Sister Nivedita*, Vol. 4 (Calcutta: Sister Nivedita girls' school, 1955), 126.

52 Wendy Doniger says, ''The Mahābhārata was retold very differently by all of its many authors in the long line of literary descent. It is so extremely fluid that there is no single Mahābhārata; there are hundreds of Mahābhāratas, hundreds of different manuscripts and innumerable oral versions (one reason why it is impossible to make an accurate calculation of the number of its verses). The Mahābhārata is not contained in a text; the story is there to be picked up and found, salvaged as anonymous treasure from the ocean of story. It is constantly retold and rewritten both in Sanskrit and in vernacular dialects; it has been called a work in progress, a literature that does not belong in a book . . . It grows out of the oral tradition and then grows back into the oral tradition; it flickers back and forth between Sanskrit manuscripts and village storytellers, each adding new gemstones to the old mosaic, constantly reinterpreting it. The loose construction of the text gives it a quasinovelistic quality, open to new forms as well as new ideas, inviting different ideas to contest one another, to come to blows, in the pages of the text.'' See, Doniger, *The Hindus*, 263-264.

53 James L. Fitzgerald says, ''It is conceivable that this tradition is best imagined as a generative matrix of themes, fixed in part, but very fluid and dynamic.'' See, James L. Fitzgerald, ''India's fifth Veda: The Mahābhārata's presentation of

and participates in man's creative and artistic surroundings at many levels. It was forever subjected to the strong markings of freedom of expression. It's an inspiration to anyone, both for enlightenment and entertainment.[54] Epic fuels many regional folk interpretations and classical art forms. It has spread to many parts of India in various forms of performing arts such as Nautanki (UP), Pāṇḍavāni (Chhattisgarh), Pāṇḍavālīla (Central Himalayan region of Garhwal in Uttarakhand), Dandanata (Western Odisha), Hari-Katha-Kālakṣepa (Southern parts of India), Yakṣagāna (Karnataka), Therukūthu, Gāndhāri-Draupadi Amman worships (Tamil Nadu) and Nizhalkūthu, Thullal, Kūdiyattam and Kathakali (Kerala).[55] The epic has even been subjected to remarkable symbolic interpretations in some historical contexts.[56] It is part

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itself,'' in *Journal of south Asian literature*, Vol. 20, No. 1, Part I (Michigan state University: Asian studies center, 1985), 126.

54 It is noteworthy that Dandekar mentions how the Mahābhārata influence its readers; ''the Mahābhārata constitutes an outstanding record of the collective conscious, unconscious and subconscious of man. There is perhaps hardly any human thought or sentiment which has not found expression in this epic, there is perhaps hardly any conceivable situation in human life which has not been portrayed in it indeed, one of the most striking features of the Mahābhārata is that every reader finds in it something, which is, as it were, specifically addressed to him. In this sense, the Mahābhārata belongs not only to the Indians but to every citizen of the world.'' See, Dandekar, *Exercises in Indology*, 263-266.

55 Mahendra K. Mishra explains in detail how the character Bhīma works in the folk tradition of central India. Many Mahabharata characters like this are spreading in different parts of India on different levels. See the article ''A Hero of the Mahabharata in Folklore of Central India'', https://www. researchgate.net/publication/215971173_A_Hero_of_the_ Mahabharata_ in_Folklore_of_Central_India.

56 One instance in history that reveals the symbolic functionality of this epic to cause for the social reconstruction is nationalism. Mahābhārata became the allegory of Indian nationalism during the days of freedom struggle in India. Several works, such as Anāsaktiyoga; Mahatma Gandhi's translation of Gīta, Gītārahasyam; the Gīta translation of Balagangadara Tilak, Bhāratasaṁgraham of Rajagopalachari, Pānchāli's Vow of Subramaṇya Bhārati etc, had played unique role in this situation. Pamela Lothspiech observes, in the work 'Epic nation', how the Mahābhārata was entwined with the Indian nationalist

of the cultural identity of Muslim sects[57] in some places, and also tribal beliefs in others. Tribal Bheels, Indo-Aryan ethnic groups in West India, have their own version of the Mahābhārata.[58] Besides these, it is manifested in

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movement to provide ideological support in the late colonial period. Draupadi and Abhimanyu are the two characters who were the center of the Mahābhārata interpretations formed in the Indian languages from the later part of the 19th century to the middle decades of the 20th century. Lothspiech says that when Draupadi became the symbol of defamed Indianness, Abhimanyu became the symbol of an amazing strength; to fight against injustice, to overcome an opposing situation. In the work, 'Screening culture, viewing politics: An ethnography of television, womanhood, and nation in post-colonial India', Purnima Mankekar points out how the Tamil writer Subramaṇya Bhārati connects Draupadi with Indian nationalism. Mankekar notes how Bharati compared the disrobing of Draupadi to colonial domination in his poem Pānchāli's Vow. She adds: ''Gandhi and his contemporaries focused on Draupadi's agency to encourage Hindu women to participate in the freedom struggle.'' See, Pamela Lothspiech, *Epic nation: Reimagining the Mahābhārata in the age of the empire* (New Delhi: Oxford UP, 2009). Purnima Mankekar, *Screening culture, viewing politics: An ethnography of television, womanhood, and nation in post-colonial India* (Durham and London: Duke UP, 1999), 251.

57 The folk epic 'Pandun Ka Kara' (Meo version of the Mahābhārata performed by Mirasi singers) shows the importance of the Mahābhārata tradition in the cultural identity of the Meo Muslims in Rajasthan, even when they disagree with the values promoted by the Vedic tradition. See, Shail Mayaram, ''Meos of Mewat: Synthesizing Hindu-Muslim Identities'', http://manushi-india.org/pdfs_issues/PDF%20files%20103/2.%20Meos%20of%20Mewat.pdf.

58 Draupadi interferes in modernity not only as an allegory of nationalism but also as a complete symbolic power which can participate in the daily life of common folk. An observation recorded by Kevin McGrath, by pointing out an article in Times of India newspaper (Ahmedabad, August, 7th, 2005, page. 6) in his work 'Stri: Feminine power in the Mahābhārata' is a strong evidence for the continuing existence of Draupadi in the surroundings of Indian life. He writes: ''Firstly, the question of polyandry continues to fascinate audiences and Draupadi still receives attention in the contemporary South Asian press. In the Times of India recently an article appeared which claimed: ''Incidentally, the Toda believe that they are descendants of the Pandavas and, hence, practice polyandry. But the threat of extinction has made them monogamous.'' The whole of page six of this issue of the paper was devoted to the question of polyandry, the headline being "Modern Draupadis''.''It is sheer economics that is behind these 'Modern Draupadis'", writes Kuldeep Singh Deep, citing the example of "Gandukula village (in the Punjab) where seven brothers share two wives between them''. The caption for this article stated: And you thought

many other artistic ways, including sculpturing, paintings, plays, music, and films. It has branched itself into all walks of human life like god-concepts, worship, customs, beliefs, proper nouns, i.e. name of persons and places, and proverbs. Today, beyond all geographical boundaries, this epic has become a flexible dynamic force that can intervene anywhere in society and change into any form.[59] Thus, we recognize that ''Mahābhārata is not a text but a tradition.''[60]

If so, how do we mark the concept of 'Vyāsa' based on the facts discussed so far? What does history tell us? Mahābhārata is freedom, expression, catharsis, art and culture. A perfect blended literature; it is never finished, but merely abandoned. It manifests the very fluid and dynamic nature, to a large extent. There is no proper point of origin, a structured growth or a logical development, and doesn't end on a good note. It was equally approachable for violence and non-violence. It became functional on both ends. It tasted the same for the illiterate and the experienced statesman. With spanning over several ages, thoughts, and ideas, Mahābhārata is full of diversities; contradictions too. But it embraced all those diversities along with its contradictions. When we approach this tradition with an instinctive understanding, one can comprehend the order

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polyandry died with the Mahābhārata…As landholdings shrink and an adverse sex ratio makes women scarce, wife buying and sharing are no longer frowned upon in Punjab's Malwa region…Small landholdings-only 3.5 acres on average-have resulted in the revival of polyandry…In this scenario, they (the brothers) can either forcibly marry a distant relative or buy a wife. In both cases, the brothers can manage only one woman among themselves, resulting in wife-sharing.'' See, Kevin McGrath, *Stri: Feminine power in the Mahābhārata* (New Delhi: Orient BlackSwan, 2009), 212.

59 Peter Brook's nine hour Mahābhārata play is the best proof that the epic does not belong to one country or race alone.

60 A. K. Ramanujan, ''Repetition in the Mahābhārata'', in *The collected essays of A.K. Ramanujan*, ed. Vinay Dharwadker (New Delhi: Oxford UP, 1999), 162.

underlying the disorder.[61] Therefore, there is no hesitation in concluding that it represents the collective consciousness of the nation and the chaos within its borders. Then, who would be Vyāsa? The dynamic living tradition of Mahābhārata reveals that Vyāsa is an invisible narrator/expander; one who unconditionally conditioned all chaos.

1.2 Epic as a Dynamic Living Library

What is Mahābhārata? What is its history? How expansive is it? Hopefully we have been able to respond to all these questions to an extent. We have now, in front of us, a very fluid and dynamic past of an epic tradition. Mahābhārata, during the course of its evolution, by transforming into a dynamic force, attained immensity by imbibing several knowledge systems. The social repercussions in each era have nurtured Mahābhārata at different levels. As a result of the facts mentioned above, the long duration between 600 BCE to 500 CE could be taken as the chronological background of this poem.[62] More importantly, this poem was, amazingly, able to imbibe the various kinds of conceptual ideas produced in India during this period. As it reflects Vedic literature and Upaniṣadic teachings, this poem might have an associated time span far more ancient. Epic poets blended all the mysteries

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61 A.K. Ramanujan called this understanding, which resulted in that aesthetical experience of non-linear thinking, as 'native intuition', not in any occult sense, but as linguists use. This native intuition, which is beyond structured human logic, entwines all diversities and contradictions. See, "Repetition in the Mahābhārata", 163.

62 Radhakrishnan argues that the beginning of the epic period is somewhere in the 6th century BCE and that changes in the epic may have been introduced to suit conditions up to the 2nd century CE. E.W. Hopkins, on the other hand, considers the epic to be a compilation period dating from 400 BCE to 400 CE +. These two observations lead us to understand the epic as a result of a long period of effort beginning at 600 BCE and lasting until about, approximately, 500 CE. See, Radhakrishnan, *Indian philosophy*, 272. E. W. Hopkins, *The great epic of India: Character and origin of the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 1993), 397-398. Originally published in 1901.

and innate natures of the human mind, with all the material and cultural necessities for human life, in this epic. The epic has been the grand epistemological heart of India, animating it intellectually over the past millennia and destined to lead the entire humanity for millennia to come. Therefore, it is to be understood here as an epitome of the Indian epistemological tradition. The question of which parts came into being at what time is relevant. Philologists opine that a more thorough linguistic approach is necessary to ascertain, precisely, the oldness of the verses which entered into this epic in each era. However, the brilliant arrangement of different systems of knowledge in the epic poem that can be seen in these chaotic dynamics is reminiscent of a KM system. A historical approach towards the epic also inducted the same. Thus the current research approaches the Mahābhārata as a dynamic living library and a KM system conceived in the ancient times which has evolved ever since and is still evolving. Hence, this research mainly explores what the ancient art of KM, the Mahābhārata, offers to enrich the present day KM practices. The epistemic aspect of Mahābhārata is familiar, but a research work pertaining to the relevance of ancient wisdom of the east to present day KM practices is very rare.

1.2.1 Present Day KM Practices: A Brief Note

It is explicit and tacit bifurcation of knowledge that serves as the basis of Knowledge Management (KM) practices today. Considering how such a bifurcation theory developed in KM, we come across the knowledge conversion theory developed by Ikujiro Nonaka and Hirotaka Takeuchi. In 1995, when formulating Organizational Knowledge Creation (OKC) theory, Nonaka and Takeuchi relied on the explicit and tacit bifurcation of knowledge to define four modes of knowledge conversion. According to their theory two forms of interactions bring about four major processes in

knowledge conversion: 1) from tacit to explicit (externalization); 2) from explicit to explicit (combination); 3) from explicit to tacit (internalization); and 4) from tacit to tacit (socialization). The knowledge conversion theory, which relies on the explicit and tacit bifurcation of knowledge, gained wide acceptance and soon became the basis of KM practices. Consequently, all subsequent KM theories have come to rely on the explicit and tacit bifurcation of knowledge. But since knowledge is approached only from the bifurcation of explicit and tacit, knowledge has become a static entity in KM practices.

Knowledge is thus processed in a linear fashion in existing KM models as a commodity and confined within the structure of corporate governance in an organization. As recent epistemological developments move against the bifurcation of knowledge, we have to confront the question of how healthy are KM practices that approach knowledge as a static and authoritarian entity through this bifurcated conception.

Does knowledge in any domain ever come to a halt? In fact knowledge never culminates anywhere just as an artistic expression never comes to perfection. And it undergoes constant spontaneous improvisation like an art form. Thus, like the arts, knowledge formation is an ongoing process. If so, in KM, we are not dealing with any static and authoritarian entities. Rather, we are dealing with open ended, dynamic and evolving entities. Though knowledge formation is a time bound process marked by the spatio-temporal peculiarities of its genesis and makeup, its refinement over time never stops, and in that respect its growth remains timeless. It is clear, therefore, that the current KM approach is not the right approach and we need to develop an alternative approach that takes into account the dynamic nature of knowledge. We can see such an approach in the Mahābhārata, which remains an epitome of the Indian epistemological

tradition, but at the same time, continues to evolve on many levels even today.

The earliest forms of the Mahābhārata are found in the oral narratives like nāraśaṃsis and gādhas. These narratives were preserved and disseminated and to some extent composed by the sūtas, commonly known as bards. The Mahābhārata is basically a verbatim form of art as the origin and growth of the Mahābhārata can be traced in these ballads of the bards. Despite its later transformation into textual form, the Mahābhārata has continued to evolve on many levels, in different languages because the basic artistic nature and dynamic character of the oral form were never disturbed. Therefore, even though Mahābhārata could be considered as a piece of literature available in textual form today, we ought to treat it as an ever evolving form of art. It is owing to this parallel between an art form and the epic thanks to its liberal development and dynamic growth akin to the growth of an art form, that it stands apart as a model to bring about essential structural changes in present day KM practices.

1.2.2 Statement of the Problem

For the reasons cited above, drawing parallels and revealing the inextricable connection between the growth of art and the development of epistemology, the Mahābhārata can be taken as an artwork that epitomizes the Indian epistemological tradition. The epic could thus be seen to be a pre-eminent resource to edify the art of KM and an exemplar of the fundamental form of the KM systems. Therefore, the researcher analyzes the narrative techniques of the epic from the point of view of an Information Scientist in the context of existing KM practices. Hence the problem lies in:

- Approaching the epic as a dynamic living library as well as a knowledge architecture and management system conceived during

the ancient times which has evolved ever since and is still evolving, and

- In establishing it, through an extrapolative study, as a primordial form or foundation of Information Science and the art of knowledge management thereby setting it as an ideal paradigm for KM practices in the present day Information Science

1.2.3 Operational Definition of Key Concepts

The study is titled as ''Epic as a Dynamic Living Library: An Extrapolative Study of the Mahābhārata''. The key concepts are described below:

Epic: ''Narrative poem or cycle of poems dealing with some great deed-often the founding of a nation or the forging of national unity-and often using religious or cosmological themes.''[63]

Dynamic Living Library: A system of knowledge architecture and management originally conceived as a primordial form of database, which has evolved ever since its conception and is still evolving.

1.2.4 Objectives of the Study

The Mahābhārata serves as an epitome of the epistemological tradition of ancient India, incorporating different systems of knowledge from different eras. It still evolves on many levels. Therefore, by approaching the epic as a dynamic living library, the objectives of the study are stated as follows:

- To examine how the epic poets used narrative techniques in the Mahābhārata to cover the technicalities of KM with literary beauty and elegance

[63] *The Hutchinson encyclopedia*, 1998 edition (UK: Helicon publishing, 1997), 365.

- To examine the narrative techniques in Mahābhārata in the context of the present day KM Systems and processes
- To examine whether a paradigm can be set for Information Science and KM by approaching the narrative of the Mahābhārata, revealing the role played by the epic right from the ancient times, as a knowledge architecture and management system

1.2.5 Scope and Limitations of the Study

Epic texts are not merely texts, but significant symbols of a particular nation's legacy. Mahābhārata is one among the best investments of India's tradition. Therefore, it would be the revival of national legacy when the study is centered on Mahābhārata. The Mahābhārata represents an extensive view of knowledge ranging from spiritual to ritualistic and material knowledge, besides exploring the secrets of nature. It can be seen as an ancient art of KM, or a repository of information and knowledge which were virtually scattered all over Southern Asia spanning over a period of millennia. Therefore, by approaching the epic as the foundation of Information Science and KM, this study is trying to set an ideal paradigm for KM that overcomes the limitations of existing KM systems and processes. The epistemic paradigm of the Mahābhārata has been the subject of many academic interventions, but the epic has not yet been examined in terms of KM in Information Science. Furthermore, the study touches on various disciplines such as art, epistemology and narratology, focusing on the possibilities of KM in particular and Information Science in general.

Epistemic perspectives on Mahābhārata are rich enough to be discussed on many levels. The list goes on and on with history, religion and custom, philosophy, spirituality, politics, anthropology, numismatics, philology, hermeneutics, archeology, natural science, military science, and

cultural studies. Mahābhārata characters were constantly used to depict the complexities of the human condition; even transgender issues (Gender identity) were dealt with. However, this research limits itself by approaching the epistemic paradigm of the epic only from the perspective of the Indian epistemological tradition. In other words, restricting the epic as an archive of knowledge systems in Indian epistemology is recognized as one of the limitations of this research. The influence of various systems of knowledge in Indian epistemology on the epic has already been established, so it is through the literature review that the epic is presented as an epitome of the Indian epistemological tradition. The research then focuses completely on the narrative of the epic as well as its knowledge architecturing and management in the analysis part. Besides this epistemological limitation, some other methodological challenges have been identified. There has not been a more thorough linguistic approach to ascertain, precisely, the oldness of the verses that entered into the epic during each era, so it is hindered in distinguishing and understanding how the KM architecturing in the epic was developed in each era. Therefore, the researcher is compelled to study the development of the epic and its knowledge architecturing and management in general, which started at least from 600 BCE and is still evolving. Moreover, this kind of text-centered study of the epic, interpreting the source will be problematic and highly time consuming in terms of the availability of the relevant historical resources and documents.

1.2.6 Organization of the Report

The research report is divided into five chapters, and is organized as below:

1.2.6.1 Introduction

The epistemological background of ancient India is described with a brief note on the relationship between art and epistemology. The historical

evolution of the Mahābhārata, which incorporates various knowledge systems, is discussed in great detail and is revealed here as a tradition that is still evolving. Other technical aspects of the research are then incorporated into the discussion, which presents the Mahābhārata as a dynamic living library, including the statement of the problem, operational definition of key concepts, objectives, scope and limitations, organization of the report, and conclusion.

1.2.6.2 Review of Literature

The review of literature helps to create an idea on the epistemological background of the problem at hand, as well as in methodology. Based on the objectives of the study, the review of literature is arranged thematically, which can be considered as a secondary source of data. Therefore, with the help of related literature that reveals the epistemic background of the epic, the researcher establishes that the Mahābhārata is an epitome of the epistemological tradition of ancient India. The narrative perspectives and the KM perspectives of the epic are then reviewed.

1.2.6.3 Methodology

Tentative theoretical samplings, which can replace the hypotheses, have been formulated based on the objectives of the study and the research has been designed accordingly. The theoretical framework is developed by explaining the hermeneutics as a theoretical perspective from the epistemological stance of constructionism, using Constructivist Grounded Theory (CGT) as the methodology, and qualitative and thematic content analysis is used to generate data interpretation.

1.2.6.4 Analysis and Discussions

Data analysis progresses in three stages based on the objectives developed for the study. The analyst formulates two tentative theoretical samplings

according to the first two objectives and develops two core categories based on them. Two core categories, Narrative techniques and Knowledge architecture and Management, are analyzed in two stages, along with their subcategories, respectively, and each sub-theory is developed from each core category. The third and final stage considers the third objective and thus constructs a general theory comparing the findings from the analysis of the first two stages.

1.2.6.5 Summary of Findings, Suggestions and Conclusions

The summary of findings, suggestions and conclusions of the study has been imbibed evidently.

The preliminary part and bibliographical references are also given at appropriate places.

1.2.6.6 Style Manual Used

This study relies on 'The Chicago Manual of Style', 17th edition, for source citations. It is common to use Chicago's two systems of source citation, which uses footnotes or endnotes or both, usually together with a bibliography, and author-date system. This study follows the system that uses footnotes or endnotes or both, along with bibliography. Footnotes and bibliography are arranged accordingly. Notes are flexible enough to allow for unusual types of sources and to include comments on the sources cited, ensuring that this system is highly flexible.[64]

1.3 Conclusion

To some extent it is clear from the discussion so far why Mahābhārata has become one of the best ways to explore the intertwinement between art

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64 *The Chicago manual of style*, 17th edition (Chicago: The university of Chicago press, 2017), 743.

and epistemology. It is also recognized that the Mahābhārata is the most reliable source for the answer to the question of whether art has cognitive value. Therefore, the cultural history of the Mahābhārata offers us the possibilities to approach it as a 'dynamic living library' that assimilates the various forms of knowledge of the time in which it was formed. It can also be considered as an ancient form of the KM system. In that sense, the researcher wishes to shed light on the foundational role that the epic has played right from the ancient times in setting an ideal paradigm for Information Science and KM, which, by matter of fact, has not yet been brought out.

2

REVIEW OF LITERATURE

A classic is a work which constantly generates a pulviscular cloud of critical discourse around it, but which always shakes the particles off
-Italo Calvino

Considering the view of classical grounded theorists, an extensive review of literature before the emergence of a core category violates the basic premise of GT; the theory does not come from the existing theory, but from the data. Once the core category and its properties and related categories have emerged and the basic conceptual development is well underway to some extent, GT methodology considers literature to be another source of data that must be integrated into the constant comparative analysis process.[1] The researcher has adapted this classical approach in the process of dealing with the related literature, but also treats them specifically for documentation. However, a classical text like the Mahābhārata cannot be explored here without preconceived notions. It does not merely exist as a literary text; it is constantly interfering with the culture of the people in India on many levels. If so, while focusing on the epistemic paradigm of the

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[1] The classical grounded theorists Glaser and Holton firmly believe and emphasize that the pre-study literature review in qualitative data analysis is a waste of time by derailing the relevance of GT Study. See, Barney G. Glaser and Judith Holton, ''Remodeling grounded theory,'' in *The grounded theory review: An international journal*, Vol. 4, No. 1 (Mill Valley, CA: Sociology Press, 2004), 12-13.

epic, which is the essential core of this thesis, we can only approach it from within the ideological sphere of influence that the epic has created so far. Not only the Mahābhārata, but any classical text is constantly creating such a sphere of influence over its people.[2] Therefore, this research is progressing within its scope and limitations, taking into account this particular situation.

Literary analysis, based on the categorized themes in the course of the research, emphasizes mainly on epistemic (Embedded knowledge), narrative (Literary techniques) and KM (Knowledge Management) perspectives of the Mahābhārata. The research is significantly influenced by these three dimensions, with each being discussed here respectively. However, it is not possible here to present the literature, chronologically, within the respective themes because the sub-themes have to be discussed within the considered themes and the ideas in the literature have to be connected by using the freedom of an author allowed to a researcher in Constructivist Grounded Theory (CGT) to some extent. Since CGT has already been adopted as the methodology of this research, the researcher enters into the extensive review of the literature only after deriving the core categories and their related categories from the textual data. Therefore, through literature analysis, the researcher intends to illustrate, more clearly, the background and context that led to the formulation of the research problem and objectives of the study, rather than the methodological aspects of the related studies.

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[2] Italo Calvino says, ''Classics are books which, the more we think we know them through hearsay, the more original, unexpected, and innovative we find them when we actually read them.'' *Why read the classics?*, trans. Martin McLaughlin (New York: Vintage books, 1999), 6.

2.1 Epistemic traces in the Mahābhārata: Notable approaches

From the later part of the eighteenth century, Mahābhārata became a subject matter for many studies and analysis. The modern engagements on Mahābhārata started, in 1785, with the translation of Bhagavadgīta by the British scholar Charles Wilkins (1750-1833).[3] His translation of the Bhagavadgīta was translated into French (1787) and German (1802), causing the European attention to gradually turn to Indian philosophy. In 1816 and 1819, the Sanskrit texts of two episodes from the Mahābhārata, ''The Slaying of Hiḍimba'' and ''The story of Nala'', were first edited by the German linguist Franz Bopp (1791-1867). Bopp was perhaps the first western scholar to read the Mahābhārata in its entirety as part of academic interest (1825). A few years later, the first edition of Mahābhārata appeared in Calcutta between 1834 and 1839, in four volumes with a table of contents. In 1837, the article ''Zeitschrift für die Kunde des Morgenlandes'' by Christian Lassen, the first volume in the series published under the title ''Contributions to the knowledge of Indian antiquity,'' which scholars consider to be the first systematic study on the Mahābhārata, appeared. Later, epic contexts and characters began to be used at various levels in academic studies and analysis. It has been the focus of several academic disciplines such as history, religion and custom, philosophy, spirituality, politics, anthropology, numismatics, philology, hermeneutics, archeology, natural science, military science, cultural studies, etc. Moreover, epic characters were constantly used to depict the complexities of the human condition, including transgender issues (Gender identity). The empirical approaches to knowledge production centered around the Mahābhārata, which began in 1785 in these ways, continue today. However, despite such a wide range of epistemic aspects, this study considers the Mahābhārata as an

[3] Charles Wilkins. *The Bhagavat-Geeta or dialogues of Kreeshna and Arjoon: in eighteen lectures with notes*. (London: C. Nourse, 1785)

epitome of the epistemological tradition of ancient India. The review of literature, therefore, is completely confined to that perspective.

The ancient epistemic premises of India were rich in both spiritual and material knowledge. This epistemic tradition, which can be traced back to at least 1500 BCE, began with the compilation of Ṛg Vedic hymns. However, the epic period (600 BCE-200 CE) draws more attention in this context, at different stages in the history of Indian epistemology, because the Mahābhārata is a work that has evolved along with history, and the knowledge formed during that period has taken its place in the Mahābhārata at various levels. In other words, the dominant knowledge systems in Indian epistemology were developed during a long period from 600 BCE to 200 CE when the epic Mahābhārata was formed. It was during this period that the six systems of philosophy (Ṣad-darśanas); Sāṃkhya, Yoga, Vedānta, Mimāṃsa, Viśeśika and Nyāya developed. Knowledge systems such as Cārvāka, Buddhism and Jainism, which questioned the relevance of the Vedas, were also formed during this period. It is the influence of these ancient thoughts that enrich the range of ideas in Mahābhārata on a better philosophical note. The reason why this research approaches the Mahābhārata as an epitome of Indian epistemological tradition is none other than this.

2.1.1 Epic Philosophy: 'Philosophy in the Epic' and 'Philosophy of the Epic'

In the academic discourse related to the epic Mahābhārata, the expression 'epic philosophy' is generally used. Although the term 'epic philosophy' refers to the epistemic paradigm of the epic, it can be understood in two different ways. E. W. Hopkins and Joseph Dahlmann, prominent Mahābhārata scholars, define 'epic philosophy' as 'philosophy in the epic' and 'philosophy of the epic,' respectively. According to Hopkins the

philosophical sections of the epic reflect the different schools and contradictory systems in ancient India, some of which date back to our era.[4] In his monograph on the Mahābhārata, ''The great epic of India: Character and origin of the Mahābhārata,'' first published in 1901,[5] the chapter 'Epic philosophy' discusses, in great detail, how approved systems like Vedism (orthodox Brahmanism), Ātmanism (''an idealistic interpretation of life''), Sāṃkhya, Yoga (''the deistic interpretation of Sāṃkhya''), Bhagavata or Pāśupata (''sectarian interpretation of Yoga'') and Vedānta are expounded in the epic.[6] But for Dahlmann, Sāṃkhya is the 'philosophy of the epic.' Indeed, he was right; the entire Mahābhārata can be seen as interplay of the three elements in Sāṁkhya (Satva-Rajas-Tamas), which asserts that the universe is caused by an unknown nature consisting of three qualities. Apart from Samkhya, according to Dahlmann, the other philosophical discourses represented in the epic are not Mimāṃsa, Vedānta, Yoga, or Nyāya but the Hetuvāda (skepticism) and Lokāyata (materialism).[7]

In order to understand the relationship between the epic and older literature, it is necessary to know the entire literature referred to as well as those cited in the epic. For that, Hopkins has reserved the first chapter of his work to find out which literature was familiar to the epic poets. As allusions to Vedic literature, he observes that Veda, Chandas, mantra and śruti are naturally common in all parts of the Mahābhārata. Ṛk, Yajus, Sāman and Atharvan, commonly known as the fourfold Veda, are referred to by name in the epic. Saṁhitās, Brāhmaṇas (Tāṇḍya, Kāṭha, Kaṇva, and Tāittiri) and

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4 E.W. Hopkins, *The great epic of India: Character and origin of the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 1993), 363.

5 Page references are to the first Indian edition of *The great epic of India* published by Motilal Banarsidass in 1993.

6 Hopkins, *The great epic of India*, 85-86.

7 J. Dahlmann, *Die Sāṃkhya Philosophie als Naturlehre und Erlösungslehre nach dem Mahābhārata* (Berlin: F. L. Dames, 1902), ix-xiv.

Āraṇyakas are rarely mentioned. The verses of Śvetāśvatara, Kāṭhaka, Māitri and Atharvaśiras Upaniṣads are cited in several places. Hopkins devotes more than thirteen pages to describing how the Māitri Upaniṣad is cited in the epic. Subsidiary Vedas such as Āyurveda (medicine), Dhanurveda (archery), Gāndarvaveda (music) and Sthāpatyaveda (architecture) are mentioned in many places. Allusions to heretical thoughts such as Jaina, Bauddha and Cārvāka occur in several contexts by denying and affirming them simultaneously. Along with Purāṇas and Ithihāsas, Dharmaśāstras, Dharmasūtras, Arthaśāstra, Kamaśāstra and Āśvalāyana Gṛhya Sūtra are also referred. In this way, Hopkins sketches the revealed and profane literature that set the background for the imagination of epic poets. Moreover, the next two chapters are reserved for explaining the interrelation of the Rāmāyana and the Mahābhārata and tracing the philosophical systems expounded in the epic.

In the chapter 'Epic philosophy,' Hopkins highlights the different schools and contradictory philosophical systems expounded in the Mahābhārata and presents them separately according to the schools they belong to. Philosophical schemes like Vedānta, Nyāya, Viśeśika, Sāṁkhya (Sāṁkhya as atheistic), Yoga (Yoga as deistic and Brahmaistic), all of which that belong to different schools, are elaborated in detail according to the situational demands. But it is impossible to treat them as identical. ''To see in them a philosophical chaos, out of which are to arise future systems, is equally impossible.''[8] However, for him, the only unity that could be connected to the different philosophical positions in the epic is ''deism''. If so, what was considered as authentic? According to Hopkins,[9] in the epic, the conflicting views are characterized by the fact that the authority that is insisted upon as the only valid authority in one place is insisted upon in

[8] Hopkins, *The great epic of India,* 85.

[9] Hopkins, *The great epic of India,* 85.

another as altogether delusive, and it wasn't done by heretics, but by the authors of the respective essays whose combined publications constitute the pot-pourri of the whole epic. For him, the epic advocates several systems of knowledge, each with its own test. The oldest and most widely represented is undoubtedly the biblical test. Again and again the epic affirms that the Vedas are authoritative and that those who do not accept Vedas as the test-stone of philosophy are damned. But alongside these extreme expressions of orthodoxy, Hopkins observes, new faith coexists in the epic that rejects the older scriptures as an authority. Vedas are authoritative for sacrifices and deeds. If one wants to practice rites one must naturally go to ritual. Such Vedic ritual rules (Śāstraprāmāṇya and Vedaprāmāṇya) which accept the necessity of rituals remain valid because they have no alternatives. But to one who sees no benefit in rituals, the scriptures are just a set of contradictions. In this way, Hopkins considers that epic does not recognize any system as authoritative.

According to Hopkins, Vedānta seems to refer to both Upaniṣads and Āraṇyakas throughout the epic. In xii, 196, 7 (In the 12th parva, the 7th śloka of the 196th chapter),[10] Vedānta may refer to Sāṁkhya, but the word is more naturally used to refer to the teachings of the Upaniṣads. It is evident from the passages cited in the chapter on literature titled ''Literature known to the epic poets'' exhibit the characteristic usage. On the contrary, he points out, in Gita 18, 13, the word Sāṁkhya means Vedānta, because in there, it is a set of five karmahetavaḥ which are not recognized in Sāṁkhya. It is also observed here that the commentator is often irrelevant in philosophical sections as he wants to turn Sāṁkhya into Vedānta on every

[10] Hopkins has made most of the references in this volume based on the Bombay edition of the Mahābhārata (Prefix 'C' is used when relying on the Calcutta edition for reference).

occasion.[11] The Upaniṣads are referred to singularly, collectively, or distributively in the plural. In general, in the epic, he observes that they are grouped with the Angas and called Upaniṣads, rahasyas, mysteries, Brahma Veda, and Vedānta; whereas, like the Āraṇyakas, they are logically excluded from the Vedas. To Hopkins, Upaniṣad has two distinct meanings in the epic.[12] On the one hand, it may mean mysteries, secret wisdom, essential truth, or essence, as in xiii, 78, 4, iii, 207, 67 and in xii, 252, 11. In other cases, he observes, Upaniṣad appears clearly to be a literary work, even opposing the mysteries it sometimes resembles, as in the form of Upaniṣad in the Pāli scriptures.

Further, Hopkins notes sporadic parallels between the epic, the Bhagavadgīta, Anu-gīta, and Śānti, and the various Upaniṣads. According to him, Bṛhadāraṇyaka is the only earliest work cited in the epic, whereas Chāndogya, Aitareya, and Kāuṣītaki have many parallels, as do the Kena, Muṇḍaka, Praśna, and a few others which are among the later works of this class. It is oddly enough that the Māitrāyaṇa has been hardly compared, yet he shows that the later epic poets certainly copied it and the earlier Kāṭhaka. He explains how the Kāṭhaka or Kaṭha Upaniṣad is expounded in the epic, with reference to the Bhagavadgīta. ''From the Kaṭha Upaniṣad, iii, 10, indriyebhyaḥ parā hy arthā, arthebhyas ca param manaḥ, manasas tu parā buddhir, buddher ātmā mahān paraḥ, and ii, 19, nā 'yaṁ hanti na hanyate, the Gita, 3, 42, has indriyāṇi parāṇy āhur indriyebhyaḥ param manaḥ, manasas tu parā buddhir, yo buddheḥ paratas tu saḥ (the Sa is higher than intellect); and in 2, 19-20, it inverts and modifies the na jāyate and hantā cen manyate hantum stanzas (Kaṭha, 2, 18-19).''[13] The slokas of the Śvetāśvatara Upaniṣad are similarly repeated in the epic (though the

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11 Hopkins, *The great epic of India,* 93.

12 Hopkins, *The great epic of India,* 9-10.

13 Hopkins, *The great epic of India,* 29.

Upaniṣad itself comes from the older Kāṭhaka): ślokas v, 44, 29 and 24 are exact copy of śloka iii, 8.[14] ''Maitri Upanishad is found reflected in the epic at iii, 213, and in a later imitation in the twelfth book. The former epic section is based entirely on the Upaniṣad, and the preceding sections appear to be due to an expansion of the same material. The order followed is generally that of the Upaniṣad.''[15] In xii, 339, 113, the Atharvaśiras Upaniṣad is applied, and the commentator himself explains it as referring to the Upaniṣad (on this and on i, 70, 39-40 in the Śakuntala episode). Nevertheless, he observes, we should rest content with recognizing that the epic references (a) the Bṛhadāraṇyaka, (b) the Kāṭhaka, and (c) the Māitrāyaṇa, or, in other words, copying at least one each of the three types of Upaniṣads i.e., old prose, metrical, and later prose.[16]

It is noteworthy that the epic also refers to the Brahmasūtra, known as the Vedānta sūtra, along with the Vedānta. Hopkins suggests that this may be one of the late marks of the Bhagavadgīta, pointing out that the Gīta mentioned Badarāyaṇa's Brahmasūtra by name in the 4th śloka of the 13th chapter. Otherwise, he opines that the Brahmasūtra would have been unknown before the Harivamśa.[17] Apart from Brahmasūtra, Bhagavadgīta also refers to Jaimini's Pūrvamīmāṁsa (Mīmāmsa), Kapila's Sāṁkhya and Patañjali's Yoga. Moreover, the influence of Buddhism is reflected indirectly in the Gita. However, in the epic, Mīmāṁsa is not referred to as a philosophical system. But ''the word is obviously too general to make much of, though it is used as if it applied to the Pūrvamīmāṁsa, for the

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14 Hopkins, *The great epic of India,* 28.

15 Hopkins, *The great epic of India,* 33.

16 Hopkins, *The great epic of India,* 46-47. Only a few examples cited by Hopkins are mentioned here. He has explained in detail how each of the Upaniṣads mentioned here secured their place in the epic, see pp. 28-47 for further reference.

17 Hopkins, *The great epic of India,* 16.

Pūrvaśāstravidaḥ are here, xii, 19, 22, kriyāsu niratā nityaṁ dāne yajñe ca karmaṇi.''[18]

The section xii, 321, 80 ff. in the epic is reminiscent of the Nyāya philosophy. Hopkins argues[19] that the argumentative group of five, explained in terms of padārtha, consists of sāukṣmya, sāṁkhyakramān, nirṇaya, and prayojana, which recall, particularly the definition of the last, the corresponding section in the formal Nyāya. In the epic, Prayojana (motive) is defined as follows: ''where inclination is produced by ills arising from desire or dislike and a certain conduct is followed, that is motive.'' Based on Kisari Mohan Ganguli's translation, Hopkins establishes that this definition of prayojana is almost identical to that given by the proponent of Nyāya; Gautama, in i, 24, yam artham adhikṛtya pravartate tat prayojanam: ''if one sets an object before one's self and acts accordingly, that is motive''. Thus, as cited above, the epic contains: prakarṣo yatra jāyate, tatra yā vṛttis tat prayojanam. Similarly, the epic's definition of nirṇaya resembles that of Gautama's in i, 40. In this way, Hopkins claims that Nyāya is also mentioned in sections i, 70, 42; i, 1, 67; xii, 19, 18 and in xii, 210, 22. Thus, in the epic, Nyāya refers to logic, but in the pseudo-epic, Nyāya refers to a special logic system.

Both Hopkins and Dahlmann agree that the Viśeśika system is mentioned in the epic, though not in great detail. Hopkins claims that, in the epic, the word Viśeśika is used as an adjective in reference to gunas, or in the sense of excellent. Although the system is unknown in the main epic, it is mentioned in i, 70, 43-44, and in ii, 5, 5 (vākya) pañcāvayavayukta, whether the five avayavas mentioned here be terms referring Nyāya or Viśeśika.[20]

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18 Hopkins, *The great epic of India,* 94.

19 Hopkins, *The great epic of India,* 95-96.

20 Hopkins, *The great epic of India,* 96.

However, Hopkins observes that Dahlmann, who is the author of ''Das Mahābhārata als Epos und Rechtsbuch,'' (1897) admits that the five ''avayas,'' as he call them twice, refer to the Viśeśika system.[21]

It is clear from the Yogin tales in the epic that there were important differences between the ancient and modern views of Yoga. In the section on ''Yoga as Deistic and Brahmaistic''[22] in ''The great epic of India,'' Hopkins discusses in detail these apparent differences in views on Yoga as reflected in the epic. As he explains, Yoga in the epic tales consists of two broad categories: the ''Deistic'' and the ''Brahmaistic''. It was the ''discipline'' of the deistic Yogin as portrayed in these tales to stand on one leg for years and keep quiet long enough for birds to nest in one's matted hairs. One-leg Yogin sought only one thing, supernatural powers. It is recounted in tale after tale what powers he gained as a result of these exercises, and these powers were his goal. Although he was deistic, he did not think about ''entering Brahman,'' but only in controlling terrestrial, celestial, and elemental powers. Upon death, he hopes to be a powerful and free spirit, enjoying the good things. On the other hand, he observes, the Yogin of the pseudo-epic discipline, the Brahmaistic Yogin, learns all these powers, but ''he who practices them goes to hell,'' because his goal was not to be a thaumaturge but to be released (mokṣa).

Hopkins's article titled ''Yoga technique in the great epic'' (1901) gives a more detailed account of the practical aspects of Yoga expounded in the Mahābhārata than that is found in ''The great epic of India'' (1901). There too we find Hopkins categorizing Yoga in the epic into two broad

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21 Joseph Dahlmann, ''Das Mahābhārata als Epos und Rechtsbuch,'' *Journal des Savants* (1897), 226.

22 Hopkins, *The great epic of India,* 106-111.

categories:[23] one that consists of ascetic practices (tapas) for magical powers, and the other that involves breath control and meditation for liberation (mokṣa) from the cycle of death and rebirth. He called the former ''the popular Yoga'' and the latter ''the philosophical Yoga''. ''The philosophical Yoga'' is characterized by its relationship with Sāṃkhya. ''The epic itself teaches that the great difference between the two systems is that the Sāṁkhya does not believe in a personal God, while God is the supreme belief of the Yogin.''[24] In the Mokṣadharmaparva of Śāntiparva, a theistic system of yoga had superseded ''deistic'' and ''Brahmaistic'' aspects of Yoga in the earlier narratives. Hopkins elaborates his position here by arguing that this process was actually carried out in the epic by recreating the atheistic Sāṁkhya. The Brahmaistic Yogin, who seeks solace in the Brahman, is an advance on the deistic Yogin, who recognizes only isolation (kevalatva). Subsequently, when the Brahman isolation appears revamped as pantheistic Brahmaism under the influence of Vishnuism, the theistic aspects appear. The triumph of theism opened the way for bhakti to prevail.

The two-tiered argumentation of Yoga developed by Hopkins, that we have discussed here, seems to privilege the ''philosophical'' strand that appears in the didactic episodes and was expounded, apparently late in the epic. This ''philosophical'' strand, which he believed to be closer to the heart of the epic, was opposed to the religious practices of ''popular'' Yoga that appeared in the narrative episodes of the epic. However, C. D. Gibbons challenges Hopkins's two-tiered argumentation of Yoga in his study ''Beyond the solar door: Yoga in the Mahābhārata and its Vedic antecedents''

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23 E. W. Hopkins, ''Yoga-Technique in the Great Epic,'' *Journal of the American Oriental Society*, 22 (1901), 336-337.

24 Hopkins, *The great epic of India,* 111-112.

(2020).[25] According to Gibbons, the epic does not categorize Yoga in this way although there is no doubt that the Mahābhārata was influenced by the ''philosophical'' model of yoga. He ''argues that treatments of yoga in the epic's narrative and didactic corpora, far from being fundamentally incompatible manifestations of popular and elite classes of ancient Indian culture respectively, are largely complementary.''[26] A central claim of his thesis is that the Mahābhārata deals with the form of Yoga predicated on its relation to the Vedic texts, particularly the Upaniṣads. There, he also argues that Yoga, as a soteriological path, is first named and emphasized in the Upaniṣads associated with the Kṛiṣṇa 'Black' Yajurveda.

In the monograph ''What comes first (in the Mahābhārata): Sāṃkhya or Yoga?'', published in 1998, P. Schreiner reveals the importance of Yoga in the Mahābhārata on 'quantitative', 'episodic', 'redactional', and 'logical' grounds.[27] Basically, the 'quantitative priority' of Yoga comes from the fact that the form 'yog-' appears far more frequently in the epic than the form 'sāṁkhy-', which appears nearly exclusively in didactic passages. Thus, yog-'s higher frequency (approximately eight hundred and eighty-four 'hits') is what lends it its 'quantitative priority'. However, there is criticism that this quantitative approach through word count analysis does not adequately take into account the broad semantic meaning of the word Yoga in the Mahābhārata. By considering the fact that Sāṁkhya is only mentioned in books 12 and 13 (including the Mokṣadharmaparva) of the epic, and to a lesser extent in book 6 (including the Bhagavadgīta), Schreiner attempts to

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25 C. D. Gibbons, ''Beyond the solar door: Yoga in the Mahābhārata and its Vedic antecedents'' (Australia: The University of Queensland, 2020), https://doi.org/10.14264/9aded23

26 Gibbons, ''Beyond the solar door: Yoga in the Mahābhārata and its Vedic antecedents,'' ii.

27 P. Schreiner, ''What comes first (in the Mahābhārata): Sāṃkhya or Yoga?,'' *Asiatische Studien Études Asiatiques*, 53 (1998), 755-777.

explain its 'episodic priority'. Accordingly, the epic offers no place for Sāṁkhya outside the books mentioned here, but at the same time the word Yoga appears throughout the epic and bringing Yoga ''closer to the core of the Mahābhārata''.[28] Similarly, in the 'redactional' approach, he lays out the arguments for the priority of Yoga. The redactional history of the Mokṣadharmaparva chapters does not provide any clarity regarding the chronology of Sāṃkhya and Yoga. ''Sāṁkhya passages enclose or precede, but also succeed Yoga passages.''[29] However, according to him, Yoga is prioritized in this category as well because the 'quantitative' and 'episodic' evidence makes it ''closer to the raw material out of which the epic has been formed''.[30] Moreover, the frequent pairing of Sāṁkhya with Yoga in the Mokṣadharmaparva leads Schreiner to conclude that it reflects a desire to convey authority and orthodoxy to Sāṁkhya as equivalent to Yoga, the generally accepted stream of Mokṣadharma. In addition, for Schreiner, the practical spirit of Yoga gives it a ''rational'' priority, because the theoretical speculations of Sāṁkhya are logically posterior to the practical efforts of the Yogin. Therefore, Schreiner sees Sāṁkhya as a ''top down'' system that theorizes liberation in contrast to practical ''bottom up'' approach of Yoga, to overcome pain and suffering.

James L. Fitzgerald's study ''The Sāṁkhya-Yoga 'Manifesto' at Mahābhārata 12.289-290'' (2007) shows how the Sāṁkhya-Yoga systems are expounded in the Mokṣadharmaparva by juxtaposing each other. For Fitzgerald, the two chapters in the Mokṣadharmaparva (xii, 289-290) provide clear and coherent presentations of doctrines clearly labeled as ''Yoga'' and ''Sāṁkhya'', which are both remarkable in both form and content. In his

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28 Schreiner, ''What comes first (in the Mahābhārata): Sāṁkhya or Yoga?,'' 756-757.

29 Schreiner, ''What comes first (in the Mahābhārata): Sāṁkhya or Yoga?,'' 775.

30 Schreiner, ''What comes first (in the Mahābhārata): Sāṁkhya or Yoga?,'' 775-776.

observation two deliberately constructed elements link the chapters together into an apparent text-pair (As shown in the Pune edition's apparatus, the manuscript tradition of the Śāntiparva never considered them together): First, the Bhīṣma Yudhiṣtira frame gives an introduction to both texts, a relatively detailed and doxographically interesting introduction. At the end of the anuṣtubh Yoga exposition, xii, 289, 57, and the beginning of the second chapter, xii, 290, this frame of reference resumes. Then it concludes, logically, with eight ślokas (xii, 290, 94-101) followed by anuṣtubh exposition on Sāṁkhya. In addition to framing dialogues of these chapters, four clearly constructed questions are put into Yudhisthira's mouth between the two chapters, a device that gives the long textual pair a relatively high degree of cohesion and tension. Secondly, the end of each chapter is embellished with a carefully composed section in the classical Upajāti triṣṭubhs, each section assimilating the previous teaching to the anthropomorphically represented ''Nārāyaṇa''. Fitzgerald writes:

> There are five major instances of Sāṁkhya-Yoga text-pairs in the Mokṣadharmaparva of the Mahābhārata. Each of these five pairs juxtaposes a teaching self-consciously labeled as ''Yoga'' to a similarly self-conscious ''Sāṁkhya'' teaching (or, in the case of 12.187, an ''adhyātma'' teaching closely resembling some of the later '' Sāṁkhya'' teachings). The five instances are 12.187 and 188 (the 10th and 11th texts of the Mokṣadharmaparva), 12.231-232 (in the 28th text of the Mokṣadharmaparva, ''Śuka's Questioning of Vyāsa''), 12.289-290 (the 52nd and 53rd), 12.294.6-25 and 26-49 (within the 54th text of the Mokṣadharmaparva, ''The Dialogue of King Karāla Janaka and the Seer Vasiṣtha''), and finally 12.303-304 (in the 56th text of the Mokṣadharmaparva, ''The Dialogue of King Janaka and the Seer Yajñavalkya''). The thematic juxtaposition of Yoga and Sāṁkhya is also brought up occasionally a few other times,

> e.g., in Vyāsa's instruction of Śuka at 12.228.27-38. The two concepts are mentioned as a pair, or virtually so, 50 times in the Mokṣadharmaparva, though all but six such occurrences are found in 12.289-90 (5 times), the Vasiṣṭha-Janaka dialog (8 times), the Yajñavalkya-Janaka dialog (13 times), and the Nārāyaṇīya (18 times). (The other six occurrences are at 12.47.34-35, 50.32, 189.4, 228.28, 231.3 [both in ''Śuka's Questioning of Vyāsa''], and 308.25 [in Sulabhā-Janaka]. The pairing of the terms occurs fourteen other times in the Pune text of the Mahābhārata, 6 of them in the Gītā (2.39, 3.3, 5.4, 5 (bis), 13.24). The other 8 are: 3.2.14, 211.21, 13.14.159, 16.25, 18.53, 74.24, 135.139, and 18.5.33).

In Fitzgerald's observation, a closer look at the contents of this pair of texts makes for an interesting reading in the history of Indian philosophy and the textual history of the Mokṣadharmaparva; also a bit about the history of the being called ''Nārāyaṇa''.

The incorporation of Sāṁkhya elements into the epic requires further discussion. The Mokṣadharmaparva of Sānti, the 12th parva, deals with Sāṁkhya philosophy in a developed form, more of a lucid manner, as an account of a conversation between King Janaka and the sage Pañcaśikha on the fate of the individual after death. Angelika Malinar's essay ''Narrating Sāṁkhya Philosophy: Bhīṣma, Janaka and Pañcaśikha at Mahābhārata 12.211-12'' (2017) explains how Sāṁkhya philosophy is embedded in the epic as a tale of philosophical discourse that was meant to be a tool to get the philosophical doctrines more widely accepted. This study differs from earlier studies in that it does not only analyze the philosophical contents of the whole text, but also the narrative framework in which the philosophical discourse is embedded. Malinar points out that Bhīṣma acts as an external narrator in the text, who relates and interprets the dialogues as well as

characterizes the protagonists, thereby influencing the ways in which text is received by the audience. She observes that the text gains more importance when viewed from the perspective of teaching philosophical terms and issues in the epic and adjacent non-expert texts (Purāṇas) to a non-expert audience through a tale of philosophical discourse.

The conflict between the Vedic religion and other dissenting religions is the prominent part that appears in the two speeches of Pañcaśikha, which are presented in two chapters. Although the Cārvākas are not mentioned by name, their philosophical position is questioned by Pañcaśikha in the initial phase of the first speech. In the next phase of the same speech, the doctrines of Buddhism are severely criticized. Janaka, who was listening to all this, was led to more fundamental dissatisfaction (nirveda). ''At this point, apparently having prepared the ground for taking the instruction to the next level, Pañcaśikha takes on the role of the soothing teacher and offers Janaka not a decision on the binary opposition between continuation and annihilation of the individual, but a more complex view, which includes perishable and imperishable levels of existence and therefore is able to reject both of the earlier views.'' According to Malinar, through the narrator Bhiṣma, the epic poet(s) deliberately created a plot here to place Sāṁkhya above the dissenting knowledge systems, thereby establishing ''liberation according to Sāṁkhya.''

Malinar argues that this episode aims to describe how to follow Sāṁkhya philosophy by presenting Sāṁkhya doctrines as the supreme method for liberation. As a result, the text as a whole becomes a privileged object of study. Malinar summarizes the teachings of Sāṁkhya embedded in the epic as follows: although there is an entity exempt from annihilation, the gain comes at a price: the loss of individual characteristics, no linga (individual, transmigrating body or distinct mark) and no saṃjñā

(consciousness) will survive or return. However, the entity that remains is not characterized by those features and thereby dwells in a state of existence that cannot be subject to change. Due to the fact that following Sāṁkhya philosophy means changing one's view of the body from ''mine'' to ''not mine,'' from ownership to relinquishment, the loss of individuality is negligible. Those who follow ''incorrect philosophical views'' which identify the body with the self are those who insist on individuality. Philosophers who got it right can bring true happiness by presenting correct knowledge. Furthermore, it calls for a detachment from one's corporeal existence and possessions, and a willingness to relinquish them. But it does not require renunciation of the social world. The teachings of Pañcaśikha correspond to the Sāṁkhya emphasis on knowledge as the only form (instrument) of liberation. Thus, based on this episode, Malinar observes that the epic is not only a valuable source for reconstructing the history of Indian philosophy, but is also a medium for documenting the way epic composers and audiences viewed and received philosophical discourses and teachings.

The encounter between king Janaka and Pañcaśikha and their discourse on Sāṁkhya philosophy is an episode in the epic that is repeatedly taken up for discussion by scholars. The interests of those studies diverge into whether Pañcaśikha is actually a teacher of Sāṁkhya, what kind of Sāṁkhya philosophy he teaches, and what are the textual sources that form the basis of Pañcaśikha's teaching. Following are some of those studies: O. Strauss[31] (Über den Stil der philosophischen Partien des Mahābhārata, 1908), R. Garbe[32] (Die Sāṁkhya-Philosophie, eine Darstellung des indischen

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31 O. Strauss, ''Über den Stil der philosophischen Partien des Mahābhārata,'' *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Vol. 62 (1908), 661-670.

32 R. Garbe, *Die Sāṁkhya-Philosophie, eine Darstellung des indischen Rationalismus nach den Quellen*, 2nd ed. Revised, (Leipzig: H. Haessel, 1917).

Rationalismus nach den Quellen, 1917), S. N. Dasgupta[33] (A history of Indian philosophy, Vol. 1, 1922), E. Frauwallner[34] (Untersuchungen zum Mokṣadharma II: Die Sāṁkhyistischen Texte, 1925), V. M. Bedekar (Studies in Sāṁkhya: Pañcaśikha and Caraka,[35] and The teaching of Pañcaśikha in the Mahābhārata,[36] both works in 1957), P. Chakravarti[37] (Origin and development of the Sāṁkhya system of thought, 1975), J. Brockington[38] (Epic Sāṁkhya: Texts, teachers, terminology, 1999), S. Motegi[39] (The teachings of Pañcaśikha in the Mokṣadharma, 1999), and J. Bronkhorst[40] (Greater Magadha: Studies in the culture of early India, 2007).

The essay ''A Cārvāka in the Mahābhārata'' included as appendices in the work ''Greater Magadha: Studies in the culture of early India'' (2007) is a study that puts forward a very different argument from the studies mentioned above regarding the episode known as Pañcaśikha-vākya. In this study, Bronkhorst raises the question of who the Pañcaśikha really is. Is he someone who denies everything, including Brahmanism and the prevailing

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33 S. N. Dasgupta, *A history of Indian philosophy*, Vol. 1, (Cambridge: Cambridge UP, 1922).

34 E. Frauwallner, ''Untersuchungen zum Mokṣadharma II: Die Sāṁkhyistischen Texte,'' *Wiener Zeitschrift fur die Kunde des Morgenlandes*, Vol. 32 (1925), 179-206.

35 V. M. Bedekar, ''Studies in Sāṁkhya: Pañcaśikha and Caraka,'' *Annals of the Bhandarkar Oriental Research Institute,* Vol. 38 (1957), 140-147.

36 V. M. Bedekar, ''The teaching of Pañcaśikha in the Mahābhārata,'' *Annals of the Bhandarkar Oriental Research Institute*, Vol. 38 (1957), 233-244.

37 P. Chakravarti, *Origin and development of the Sāṁkhya system of thought* (New Delhi: Munshiram Manoharlal, 1975).

38 J. Brockington, ''Epic Sāṁkhya: Texts, teachers, terminology,'' *Asiatische Studien/Ětudes Asiatiques*, Vol. 53, (1999), 473-490.

39 S. Motegi, ''The teachings of Pañcaśikha in the Mokṣadharma,'' *Asiatische Studien/Ětudes Asiatiques*, Vol. 53, (1999), 513-535.

40 J. Bronkhorst, *Greater Magadha: Studies in the culture of early India*, Vol. 19 (Leiden: Brill, 2007), 309-328.

heretical religions such as Buddhism and Jainism? Bronkhorst takes the position that Pañcaśikha is not a Sāṁkhya teacher, but a rather staunch Brahmin who followed the materialist view of the Brahmanical Cārvāka School (Brahmin Lokāyatika). Therefore, according to him, the second chapter teaching Sāṁkhya doctrines in Pañcaśikha-vākya, an episode expounded in two chapters (xii, 211 and 212), is a later interpolation. It is noteworthy that he cites an instance to prove it: the doctrines discussed up to that point in chapters 211 and 212 are challenged by several verses in the triṣṭubh meter that occur at the end of chapter 212. ''Whereas, up to this point, the two chapters had given expression to a point of view according to which there is no transmigration determined by one's deeds, these triṣṭubh verses present a different position altogether. Verse 44, in particular, speaks of someone who diligently seeks himself and who is not smeared with the undesirable fruits of his actions. Karmic retribution plays a role in the following verses, too, which seems to go against all we have met so far in these two chapters.'' This leads him to assume that these verses (44-49) were not originally part of Pañcaśikha's teaching in chapter 212. Thus, in brief, according to his assumption the teaching of Pañcaśikha in chapter 211 is very close to the ideas presented by the Cārvākas in the classical period, in a more coherent fashion, and chapter 212, at least verses 44 to 49, is a later interpolation.

In addition, in this study, Bronkhorst criticizes the de-contextualized approach of Motegi (1999) on Pañcaśikha-vākya. However, Frauwallner's (1925) study corroborates Bronkhorst's observations by suggesting that the doctrinal parts of the 12.212 (212th chapter of the 12th parva) contains interpolations.

Furthermore, Ram Murti Sharma's essay ''Sāṁkhya elements in the Mahābhārata'' (1995) is another study which, as its title suggests, highlights

the influence of Sāṁkhya philosophy on the Mahābhārata.[41] First of all, according to him, the Sāṁkhya doctrines mentioned in the epic are similar to the Sāṁkhya views expressed by Caraka in 78 AD. And because of the theistic character of the epic philosophy, the Sāṁkhya elements prevalent in the epic are also bounded by theistic nature. Secondly, Sāṁkhya elements in the epic are founded in two ways: 1) attributed to Pañcaśikha and 2) the independent views. He observes that the prevalent Sāṁkhya elements in the epic, with few exceptions, are quite identical to the well-known later Sāṁkhya views, although Pañcaśikha is presented in the epic differently from the Pañcaśikha of the traditional Pañcaśikha cult. Prakṛti and Puruṣa, the dominant principles of Sāṁkhya philosophy, figure prominently in the epic. The distinction between Prakṛti and Puruṣa is very clearly described in the Anu-gīta. The Anu-gīta describes Puruṣa as Kṣetrajña, and the body as Kṣetra, which means that all activity belongs to Kṣetrajña, the empiric self. Bhagavadgīta also puts forward the same view. In classical Sāṁkhya, the three qualities Satva, Rajas, and Tamas, which are the constituents of nature, are discussed very well as the fetters of the Puruṣas. They are also highly regarded in the Mahābhārata. According to Anu-gīta, it is through the ramp of nature that Puruṣa enters the darkness, and they are connected like the fly and the big leaf and the fish and water. Describing the functioning of senses, mind and intellect in the epic (Anu-gīta), it is stated that the senses present the data, the mind raises doubts and the intellect is the deciding organ. Similarly, Sāṁkhya-Kārika also emphasizes these three. In this way, he establishes the connection of the epic with Sāṁkhya philosophy by listing several elements that can be related to Sāṁkhya. Finally, he concludes that the epic Sāṁkhya contains Sāṁkhya elements derived from the older

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[41] Ram Murti Sharma, ''Sāṁkhya elements in the Mahābhārata,'' *Modern evaluation of the Mahābhārata*, Ed. Satya Pal Narang (New Delhi: NAG Publishers, 1995), 221-227.

Upaniṣads like Bṛhadāraṇyaka and Chāndogya and later Upaniṣads like the Śvetāśvatara.

B. R. Ambedkar's essay titled ''The Philosophic Defence of Counter-Revolution: Kṛṣṇa and his Gīta,'' first published in 1987, is helpful in discovering the Buddhist doctrines embedded in the epic.[42] Ambedkar argues that Bhagavadgīta was composed only after the origin of Buddhism, Jamini's Pūrvamimāmsa and Badarāyaṇa's Brahmasūtra. He writes, ''For if it is true to say that Gīta is saturated with Sāṃkhya philosophy it is far more true to say that the Gīta is full of Buddhist ideas.''[43] The similarity between the two isn't all about ideas but in language too- Ambedkar opinionated. Ambedkar puts forward certain examples to justify his arguments.[44] Firstly, the Bhagavadgīta explains Brahma-Nirvāna by describing the stages by which one reaches Brahma-Nirvāna: (1) Śraddha (faith in oneself); (2) Vyavasāya (firm determination); (3) Smriti (remembrance of the goal); (4) Samādhi (earnest contemplation) and (5) Prajna (insight or true knowledge). Even the Upaniṣads do not mention the word Nirvāna. Therefore, according to Ambedkar, the idea of Nirvāna is peculiarly Buddhist, and the Bhagavadgīta borrows this idea from Buddhism. If we compare the Brahma-Nirvāna in the Bhagavadgīta with the Buddhist conception of Nirvāṇa set out in the Mahāpari-Nibbāna Sūtta, it can be understood that it is the same as the Brahma-Nirvāna stated in the Gita. Thus, he argues that the whole concept of Brahma-Nirvāna was borrowed instead of Nirvāna for no other reason than to hide the fact that the Bhagavadgīta stole the conception of Nirvāna from Buddhism. Secondly, in Chapter VII, verses 13-20, there is a discussion about who is dear to Kṛṣṇa. Kṛṣṇa, who says that the devotee is

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42 B. R. Ambedkar, ''Kṛṣṇa and his Gīta,'' *The essential writings of B.R. Ambedkar*, Ed. Valerian Rodrigues (New Delhi: Oxford UP, 2002).

43 Ambedkar, ''Kṛṣṇa and his Gīta,'' 202.

44 Ambedkar, ''Kṛṣṇa and his Gīta,'' 203-204.

dear to him, prescribes that the true devotee should practice the following qualities: (1) Maitri (loving kindness); (2) Karuṇa (compassion); (3) Mudita (sympathizing joy); (4) and (4) Upekṣa (unconcernedness). According to Ambedkar, Buddhism itself is the source of these qualities that a true devotee must practice. As proof of this, he asks to compare Mahāpadāna-Sūtta and Tevijja-Sūtta, where the Buddha preached what mental attitudes one needs to cherish the training of the heart. Then, it can be understood that the whole ideology is borrowed word for word from Buddhism. As a third illustration, in chapter XIII, the Bhagavadgīta explains the subject of Kṣetra-Kṣetrajña. In verses 7-11 Kṛṣṇa says what knowledge is and what ignorance is in the following way:

> Pridelessness (humility), Unpretentiousness, Non-injury or Harmlessness, Forgiveness, Straightforwardness (uprightness), Devotion to Preceptor, Purity, Steadiness, Self-restraint, Desirelessness towards objects of sense, Absence of Egoism, Reflection on the suffering and evil of birth, death, decrepitude and disease, Non-attachment, Non-identification of oneself with regard to son, wife and home and the rest, Constant even- mindedness of approach to both (what is) agreeable and (what is) disagreeable Unswerving devotion to Me with undivided meditation of Me, Resort to sequestered spots (contemplation, concentration, in solitude), Distaste for the society of worldly men, Incessant application to the knowledge relating to self, Perception or realisation of the true purport of the knowledge of the Tattvas (Sāṃkhya Philosophy), all this is called 'knowledge'; what is Ajñāna (ignorance) is the reverse thereof.

Ambedkar argues that no one who knows about the gospel of the Buddha can deny the fact that the Bhagavadgīta has reproduced word for

word the major doctrines of Buddhism in these stanzas. Furthermore, the Bhagavadgīta gives a new metaphorical interpretation of karmas under different titles (in chapter XVII, verses 5, 6, 18, 19): (1) Yajñas (sacrifices); (2) Dāna (gifts); (3) Tapas (penances); (4) Food and (5) Svadhyāya (Vedic study). Where does this new interpretation of old ideas come from? Ambedkar asks. He points out that these verses are also a verbatim reproduction of what the Buddha said in Majjhina-Nikāya I, 286 Sūtta XVI. In this way, by selecting a few illustrations of major doctrinal importance, Ambedkar establishes that no parallel can be closer than what exists between Buddhism and the Bhagavadgīta.

In addition, another important argument of Ambedkar is that the Bhagavadgīta provides philosophical justification for the dogmas contained in Jaimini's Pūrvamimāmsa, which he regards as the Bible of counter-revolution. Bhagavadgīta tries to renovate and strengthen the dogmas in the Pūrvamimāmsa. According to Ambedkar, as we discussed in the first chapter, by referring to Karma-yoga or action, Gīta denote the dogmas embedded in Jaimini's Karma-kānda and Jñāna-yoga or knowledge would mean those dogmas contained in Badarāyaṇa's Brahmasūtra. Moreover, while discussing action (Karma) Gīta refers to religious acts and observances and not activity or inactivity, quieticism or energism in general terms. Accordingly, Ambedkar observes that Bhagavadgīta is concerned with the particular and not the general.

In parallel with Ambedkar's observations, V. M. Bedekar's article entitled ''The Dhyānayoga in the Mahābhārata (12.188): its similarity with the jhāna of early Buddhism''[45] (1963) argues that there is Buddhist

[45] V. M. Bedekar, ''The Dhyānayoga in the Mahābhārata (12.188): its similarity with the jhāna of early Buddhism,'' *Bhāratīya Vidya*, (1963), 116-125, https://dokumen.tips/documents/the-dhyanayoga-in-the-mahabharata.html?page=1

influence in the Dhyānayoga practice expounded in the Mahābhārata. According to him, the Dhyānayoga expounded in 12.188 of the epic reveals many phraseological and ideological parallels with early Buddhistic treatments of meditation practice. For instance, he points out that Bhīṣma's description of Dhyānayoga practice as being fourfold (caturvidha) along with Vitarka, Vicāra, Viveka, and Nirvāṇa. According to him, what can be seen in this fourfold practice in Dhyānayoga is nothing but the phraseological and ideological influence of Buddhism.

In the work ''Moral Dilemmas in the Mahabharata'' edited by Bimal Krishna Matilal, the article ''Conceptions of Dharma in the Śramaṇical and Brāhmaṇical traditions: Buddhism and the Mahābhārata'' (1989) by Peter Della Santina unravels the relationship between the Bhagavadgīta and Buddhism. In this article, Santina argues that the evolution of Indian philosophy and religion can best be understood by recognizing the history of the interaction and eventual synthesis of two ancient and originally quite different traditions, called Śramaṇical and Brāhmaṇical. ''The names of the traditions are, of course derived from the key terms, ' Śramaṇa' and 'Brāhmaṇa' which refer, on the one hand, to the figure of the ascetic and, on the other, to that of the priest.'' According to Santina, although the evidence from archaeological and literary sources is inconclusive, there are strong grounds to imply that the Śramaṇical tradition was originally associated with the pre-Aryan Indus valley civilization and that the Brāhmaṇical tradition was originally the province of the Aryan migrants who came to India later in prehistoric time. Generally, he believes that Buddhism, Jainism, and Sāṁkhya-Yoga are direct descendants of the Śramaṇical tradition, while Mimāṃsa, due to its conservatism, is the best example of a school that is directly descended from the Brāhmaṇical tradition.

According to Santina, the Bhagavadgīta is an example of popular Hindu synthesis of Śramaṇical and Brāhmaṇical elements. Several Śramaṇical and Brāhmaṇical elements can be found in the opening dialogue between Krsna and Arjuna. It is clear, however, that the Śramaṇical content in the opening dialogue of the Bhagavadgīta is subordinated and manipulated by the Brāhmaṇical content. It has therefore been suggested that the Gīta represents a popular Hindu synthesis in which Śramaṇical goals, practices and conceptions are clearly subordinate to the essentially secular and social concerns of the Brāhmaṇical tradition, which remains dominant. Additionally, it may be suggested that the Gīta represents the earliest and most unsystematic attempt to incorporate, and perhaps even emasculate, Śramaṇical religious culture, whose potency was evident not only by the impact it had on the Brāhmaṇical tradition, but also by the enormous popularity achieved by Buddhism during the millennia from the 5th century BCE to the 5th century CE.

Another work that can be relied upon to understand this inextricable connection between the Bhagavadgīta and Buddhist literature is the Bhagavadgīta translated by K. T. Telang in ''Sacred books of the East,'' edited by Sanskrit philologist Friedrich Max Muller and published as a series in 50 volumes (1879-1910). Telang points out the connection of the Bhagavadgīta with the Dhammapada and the Sutta Nipata through footnotes where he explains each chapter. By reading the footnotes one can understand here how much similarity Buddhistic doctrines have with Bhagavadgīta. S. D. Budhiraja's study of the Bhagavadgīta, ''Shrīmad Bhagawad Gīta: A study'' (1927), is similarly noteworthy. Throughout the book the author tries to draw the reader's attention to the similarities between the Bhagavadgīta and Buddhism.

In addition, in the post-war parts of the epic, it can be seen that the views of dissenting religions such as Bauddha and Jaina prevail over the views of the Vedic religion. Wendy Doniger, in her work ''The Hindus: an alternative history,'' (2015) points out that the five hundred years between the 3rd century BCE and the 3rd century CE were important in the construction of the Mahābhārata, and finds that Buddhism played a role in the characterization of a major character in the epic, which had a decisive influence on the society of that period. According to Doniger, Yudhistira, who is deeply saddened by the end of the Kurukṣetra war, is the epitome of Emperor Asoka, who is tempted to reject violence after the battle of Kalinga. Asoka soon became attracted to Buddhism, which adopted non-violence as a way of life, and spread the Buddha's doctrines throughout his kingdom. ''Commentators have sometimes regarded Yudhiṣtira as a Brahmin king (like Puṣyamitra) or a Buddhist king (like Asoka), or both, a Brahminical Asoka, who is tempted to reject violence much as Asoka, by the testimony of his edicts, hoped to do. Yudhiṣtira's refusal to rule after the war may have been a response to Asoka's thirteenth Major Rock Edict or to legends about Asoka that circulated after his death (Aspects of the life and character of Arjuna too may have been created in response to Asoka).''[46]

Doniger's arguments discussed above apparently lead to the realization that the epic poem before us today has evolved along with history. It is also worth noting that the history of the epic by incorporating the general thoughts of the time it was formed leads us to the inextricable intertwinement between history and art. Observation on Mahābhārata by S. Radhakrishnan is notable here. In the work ''Indian philosophy'' (1923)

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[46] Wendy Doniger, *The Hindus: An alternative history* (New Delhi: Speaking tiger publishing, 2015), 256.

Radhakrishnan opines[47] that it is the general thoughts of the era that had created Mahābhārata and thus it is impossible to state which canon it follows as it contains different philosophical tendencies: the Vedic scripture is generally considered to be valid. Pratyakṣa, or perception, anumāna, or inference, and āgama, or authority, are identified. The four canons of the Nyāya philosophy are recognized (XII.56.41). Certainly, he observes, it opposes those who deny the authority of Vedas. ''The Nāstika creed of the dissenters (II.31.70) is refuted by Pañcaśikha, a follower of the Sāṁkhya (XII.218). The lokāyatas are also mentioned (I.70.46). The dialectical pundits (hetumantaḥ), who deny the reality of souls and despise immortality, ''wander over the whole earth'' (XII.19.23). A reference to the Jains may be found in the passage where a priest is said to have ''tramped around Benares, astounding the people, clothed in air…like a mad man'' (XIV.6.18). Opposition to Buddhism is also found. ''What makes you so glorious?'' asks one woman of another, and the reply is: ''I did not wear the yellow robe or bark garments, nor go shorn or with matted hair'' (XIII.123.8; see also XII.18.32).'' It was believed that heresy and repudiating the Vedas would land us in hell and set off a cycle of low births. He quotes: ''The reason why I was born a Jackal,'' says a character in the Mahābhārata (XII.180. 47-48), ''is that I was a counterfeit pundit, a rationalist and critic of the Vedas, being devoted to logic and the useless science of reasoning, a proclaimer of logical arguments, a talker in assemblies, a reviler and opposer of priests in arguments about Brahman, an unbeliever, a doubter of all, who thought myself a pundit.'' The Purāṇas and the Itihāsas are also recognized (XII.343.20). The view of Upaniṣad, he observes, that for those who had abandoned routine the Vedas are meaningless, is also reflected in the epic (''Deceitful is the Veda'', XII.329.6).

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[47] S. Radhakrishnan. *Indian philosophy*. Vol. 1. (Delhi: Oxford UP, 1989), pp.484-485. Originally published in 1923.

K. Damodaran argues[48] that the Sānti parva in the Mahābhārata contains references to atheistic-materialistic doctrines in a more developed form than those found in the Rāmāyaṇa or the Upaniṣads. His arguments can be considered as indications of the influence of Cārvāka philosophy manifesting itself in the epic. In ''Indian thought: A critical survey'' (1967) Damodaran observes that atheistic and materialistic doctrines are dealt with in Bhīṣma's discourses with Yudhiṣtira; the different views of different thinkers are explained here. Bharadwaja, for example, he observes, argued that physical and physiological causes accounted for life functions, and the existence of a soul was unnecessary. Haitukas are referred to as well-read people without a belief in the afterlife. It also includes references to others who are moral and learned who believed that the material elements are at the heart of being, but who did not believe in the soul or its transmigration. In this way, according to Damodaran, the Mahābhārata contains and also clarifies various materialistic doctrines such as Svabhāvavāda or naturalism, Yādriścyavāda or accidentalism, and Pariṇāmavāda or evolutionism.

The first stage of the literature analysis related to the theme of 'Epistemic paradigm' of Mahābhārata is concluded here. Only a few studies, which are capable of providing evidence of the incorporation of dominant knowledge systems in the Indian epistemological tradition have been considered here, such as Vedānta, Brahmasūtra, Pūrvamīmāṁsa, Nyāya, Viśeśika, Yoga, Sāṁkhya, Cārvāka, Bauddha, and Jaina in the Mahābhārata. When 'Epic philosophy' is categorized as 'philosophy in the epic' and 'philosophy of the epic', all these systems have to be considered as 'philosophy in the epic'. Of the two positions that can be found as 'philosophy of the epic', one is Sāṁkhya proposed by Dahlmann and the

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[48] K. Damodaran, *Indian thought: A critical survey* (1967), https://archive.org/details/IndianThought-ACriticalSurvey-English-K.Damodaran/page/n7/mode/2up

other is Deism, which Hopkins considers as the single thought that unites the different philosophical positions in the epic (see figure 2.1). Therefore, we can say that the literary analysis at this stage presents the Mahābhārata as an epitome of Indian epistemological tradition or as a preservation center of various knowledge systems in ancient India. Does the evidence provided by the epistemic traces so far in the Mahābhārata enable the epic to be considered the epitome of the Indian epistemological tradition? Yes, indeed, the philosophy of Mahābhārata is marked by the history of Indian philosophy itself. Isn't this the same message that the extensive literature review that developed in parallel with Hopkins's arguments gives us?

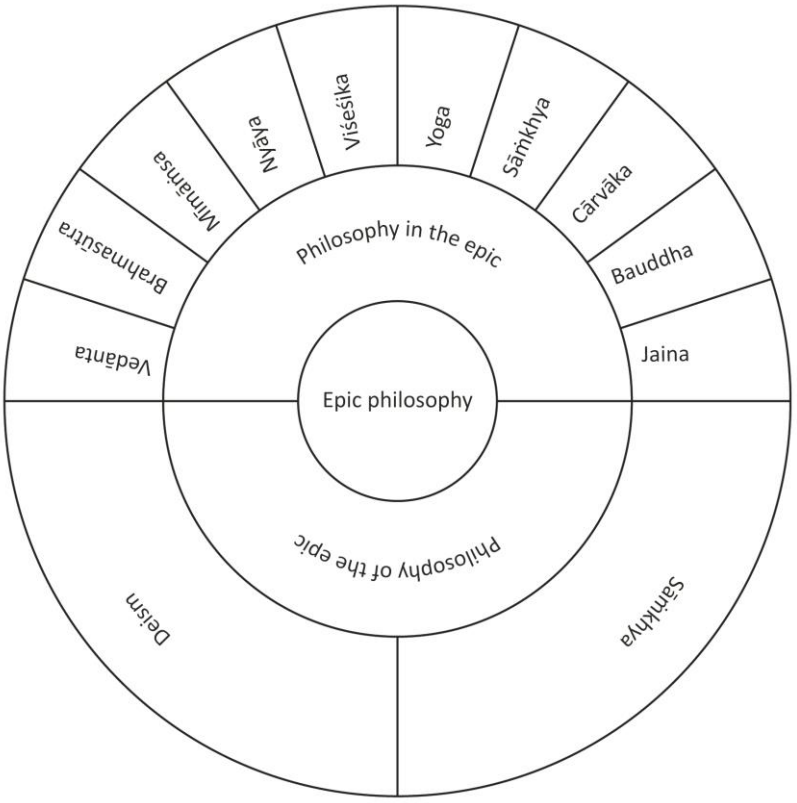

Figure 2.1: Epistemic paradigm of the Mahābhārata

Angelika Malinar's ''Philosophy in the Mahābhārata and the history of Indian philosophy'' (2016) is an extensive study that responds to the aforementioned question in detail. In this study, Malinar argues that studying of philosophical terms and doctrines in the Mahābhārata touches not only on important aspects of the content, composition, and historical contexts of the epic, but also on the historiography of Indian philosophy. Malinar points out that some scholars argue that the epic was composed exactly as it was transmitted; by including didactic parts, whereas others contend the epic was the result of a history of composition in which new parts were added to an old nucleus over time. For her, both positions have certain implications for the evaluation of the philosophical parts of the epic. However, from a text-historical point of view, she says, the inclusion of didactics on different topics has been taken as a criterion for distinguishing older layers of epic narrative from younger layers. Most work on the philosophical parts of the epic were composed by scholars interested in the intertextual and historical connections of the philosophical texts, particularly the Upaniṣads, and the texts of the different schools in ancient India. By analyzing the terms and doctrines of individual texts and finding and comparing such terms and doctrines in the narrative of the epic, the Mahābhārata is gradually placed in the history of Indian philosophy. But they all belonged mainly to different historical periods and social environments. Thus, she observes, they are characterized by specific intellectual concerns and incorporated into the epic at various stages of its composition.

It is also important to consider why the dominant knowledge systems developed here over such a long period of time have been linked to the Mahābhārata in one way or the other, so as to remain an epitome of the Indian epistemological tradition. Proponents of each system choose the Mahābhārata perhaps because they recognized its remarkable capacity as

an artistic work to constantly cultivate the imagination of those who engaged in it, even a non-expert audience. The narrative strategies of the epic poets set the structure of the epic narrative in such a way so as to create new patterns in the imagination of the connoisseurs of all generations. In the next section, we will explore the literature related to the narration of the epic.

2.2 Epic Narration: Differing Views in the Light of Modern Narratology

The Mahābhārata occupies an unparalleled position in terms of narrative in literary history. Along with existing as an epitome of the epistemological tradition of India, the different narrative modalities that prevailed during the time of its formation, find a place in it on many levels. Therefore, modern narratology can offer several approaches to the analysis of narrative techniques in the Mahābhārata. However, the Mahābhārata, which developed multi-dimensionally and non-linearly, does not seem to have been explored in an extensive manner in those directions. Very few studies have been found that turn to the narrative aspects of the Mahābhārata. At the same time, using the possibilities of modern narratology, the Iliad, Odyssey, Gilgamesh, Shahnameh, Faerie Queene, and Kalevala have all been studied in detail, but since the situation does not require such an extensive literature survey, the analyst pays special attention to the narrative of the Mahābhārata. But if such studies based on other epics shed light on our research, if they enrich our research situation, the literature survey is expanded by incorporating them.

In order to analyze the structural aspects of a narrative, narratology is particularly concerned with components such as theme, plot structure, setting, characters, time, place, conflict and resolution. Therefore, as part of analyzing the narrative aspects of the Mahābhārata in this research, the analyst attempts to understand the narrative techniques of the epic poets to

some extent by categorizing the text into three categories: 'Mediacy' (mediacy of presentation), 'Spatiality' and 'Temporality' (spatial and temporal perspectives in storytelling). In this way, the analyst is able to approach the text in such a way so as to encompass each of the above-mentioned narrative components that help to understand the structural aspects of a narrative. The category 'Mediacy' is further classified into three related categories: 'Person', 'Perspective' and 'Mode'. Since these related categories have already been presented by Franz K. Stanzel, the analyst has adapted them as such, but made some modifications to the binary oppositions of these categories that he proposed. The 'Spatiality' is classified into three related categories: 'Earth', 'Sky' or 'Heaven' and 'Hades'. The ' Temporality' is also classified into three: 'Past', 'Present' and 'Future'. Thus, the main aim at this stage of the analysis is to find the literature that helps to develop the possibilities of the narrative by further categorizing the text while exposing the narrative background of the Mahābhārata.

Stanzel's observations play a key role in analyzing the narrative text of the Mahābhārata by basing the narratological preposition of 'Mediacy'. Approaching 'Mediacy' as a generic characteristic that distinguishes narrative from drama, Stanzel's study ''Teller characters and reflector characters in narrative theory''[49] (1981) analyzes the mediacy of presentation in a narrative based on the elements of Person, Perspective, and Mode. These narrative elements have been explained, respectively as, ''in the form of the following oppositions of distinctive features: identity and non-identity of the realism of the fictional characters and of the narrator (first-/third-person narration); internal and external perspective (limited point of view/omniscience); teller-character and reflector-character as

[49] Franz K. Stanzel, ''Teller-characters and reflector characters in narrative theory,'' *Poetics today*, Vol. 2:2, (Duke UP, 1981), 5-15. https://www.jstor.org/stable/1772187.

agents of transmission (telling/showing).''[50] But we do not use these binary oppositions as they are looking at the analysis chapter, but with certain changes. Thus the elements are treated as categories, and not merely as binary oppositions. When the elements/categories- person, perspective and mode are linked to the narrative of the Mahābhārata, the following sub-elements/categories are derived: identity of the fictional characters as the narrator and the audient (person); mundane or material, ethical or dharmic and the transcendental or metaphysical viewpoint of the epic (perspective); and teller-character and reflector-character as agents of transmission (mode). The three different perspectives of the Mahābhārata presented by V. S. Sukhtankar, which are elaborated in this chapter, are thus adapted here as narrative perspectives of the epic.

Many modern authors prefer the teller mode of narrative in which the agent of transmission has most of the attributes of a teller-character, but occasionally the teller-character acts as a reflector-character. For example,[51] Stanzel points to the teller-characters who act as reflector-characters and often appear in Mansfield's stories. A general characteristic of their narratives is the withdrawal of the personalized narrator and the prominence of the reflector-characters as agents of narrative transmission. The teller and reflector functions seem to merge in such a narrative, as he observes. It is surprising for him that the same phenomenon is encountered in the novels and stories of another writer, Thomas Mann, who generally prefers to entrust the transmission of his stories to well-personalized characters. Stanzel points out that in the opening sections of some of his stories, such as ''Difficult Hour,'' Thomas Mann holds off on deciding whether his main agent of narrative transmission is going to be a teller or a reflector. One linguistic critic found this kind of narrative strategy in the

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50 Stanzel. ''Teller-characters and reflector characters in narrative theory,'' 5.

51 Stanzel. ''Teller-characters and reflector characters in narrative theory,'' 13.

story ''Tristan'' confusing because it alternated between the narrative roles of teller and reflector, as well as the concomitant shifting of viewpoints. However, in the case of the Mahābhārata, shifting from the teller mode to the reflector mode of a narrative opens up a new possibility. But it does not take place in a form suggested by narrative theorists. By understanding the inward narrative strategy of the epic poets and from the analysis chapter, we realize how the teller-characters act as reflector-characters in the Mahābhārata.

A study by Adrian Kelly titled ''How to end an orally-derived epic poem''[52] (2007) proposes that the extant works of early Greek hexameter poetry reveal a standardized strategy of closure, which is based on manipulations of doublet structure. Specifically, the discussion focuses on the 'increasing' doublet (ID), in which a smaller element is placed directly before a larger one in order to demonstrate their widespread use and variety, as well as their common function: ''to encourage the audience to summon their memory of the first element, and so augment the importance of the current, larger one.''[53] Following that, study turned to the endings themselves, in order, of the Iliad, Odyssey, Works and Days, Theogony and Shield of Herakles. Employing the similar retrospective aesthetic, the poets highlight the significance of the prior, larger element, by using a 'decreasing' doublet. By leading the audience to this disparity in scale, the poets discourage them from expecting continuity, thus marking the end of their texts.

Kelly introduces the 'increasing' and 'decreasing' doublet as a common narrative strategy for ending hexameter epic poems that were

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52 Adrian Kelly, ''How to end an orally-derived epic poem,'' *Transactions of the American Philological Association*, Vol.137, no.2 (2007), 371-402, http://www.jstor.org/stable/4543319.

53 Kelly, ''How to end an orally-derived epic poem,'' 371.

originally orally transmitted and later changed to textual form. In narratology, 'narrative doublet' means presenting a particular narrative sequence in another narrative situation using a different set of characters in such a way that the two situations mirror each other. The doublet construction in the narrative of the epics observed by Kelly in this study applies to the Mahābhārata as well. The narrative technique followed by 'Vyāsa' in the Mahābhārata is that a narrator first summarizes a narrative event to arouse curiosity in the audience and then expands the said event as much as possible according to the needs of the audience. The strategy of 'increasing' doublet should be understood here as a technique called 'Vyāsa' which expands a narrative sequence as much as possible according to the ability of the narrator to tell the story. Meanwhile, the narrative strategy of 'decreasing' doublet introduced by Kelly discourages the audience from wanting the continuation of a particular event and thereby ends the narration where the narrator wants.

The study ''Narrative doublets in the epic cycle''[54] (2013) by Benjamin Sammons also suggests that ancient accounts of the epic cycle are characterized by a special compositional device called an 'anticipatory doublet'. These observations contribute to the understanding of the narrative and thematic structure of these poems, as well as to the view that these epic poems were familiar with the compositional methods used in the oral tradition.

In three of the four lectures delivered by V. S. Sukhtankar under the auspices of Bombay University in 1942, later published under the title ''On

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[54] Benjamin Sammons, ''Narrative doublets in the epic cycle,'' *The American journal of philology* Vol.134, no.4 (2013), 529-556, http://www.jstor.org/stable/24559881

the meaning of Mahābhārata'',[55] the different perspectives of the Mahābhārata are discussed in great detail. In the course of these lectures, Sukhtankar attempts to demonstrate that there are three clear perspectives from which the Mahābhārata can be viewed: Material or Mundane plane, Dharmic or Ethical plane, and the Transcendental or Metaphysical view-point. Three different levels of 'Perspective' that can be considered as the narrative 'Focalizations' of the Mahābhārata are briefly presented below.

> In the material or mundane level, from beginning to end, the main concern is focused on the character. On this plane, as Sukhtankar observes, the plot revolves around a fierce war of annihilation supposedly waged between two families of cousins, which ends in the victory of one of the claimants to the throne. But this is actually based on some historical events that are entirely in the background, rather than an invention. Second, there is what might be referred to as the dharmic or ethical view-point. At this level, he observes the Kurukṣetra war as a battle between the principles of 'dharma' and 'adharma'. The Pāṇḍavas stand for 'dharma' and the 'Kauravas' for 'adharma': they are 'incarnations of Devas and Asuras respectively. And the war ends with the victory of 'dharma' (yato dharmastato jayaḥ). And there is, thirdly and finally, the transcendental or metaphysical view-point. He observes:[56]

This aspect of the story is only suggested and gains in interest and importance by being that, having all the power and beauty of a chiaroscuro from the brush of a master painter, which produces its ethereal effects by the power of suggestion. On this transcendental plane, which is the view-

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55 V. S. Sukhtankar. *On the meaning of the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 2016). It was originally published in 1957.

56 Sukhtankar, *On the meaning of the Mahābhārata,* 121-122.

point beyond 'Dharma' and 'Adharma', beyond good and evil, the epic develops what may be termed the philosophy of the self, which may properly be regarded as an attempt at a synthesis of life. In doing this, the epic poets stage a war between the higher self and the lower self of man, symbolized by the family of cousins, who are fighting for sovereignty over the kingdom of the body. In this conflict the Superman (Arjuna) under the guidance of the Superself (Sri Kṛṣṇa), acquiring insight into the nature and character of his own self and realizing the fundamental identity between the individual self and the Superself, cleaves with the sword of knowledge his own ignorance, manifested in the shape of all the illegitimate desires and doubts, passions and prejudices, ideas and idiosyncrasies, which had crystallized round him in the course of his separate existence and which he had falsely considered as innately and intimately belonging to himself, as an inalienable and indivisible part of his own personality, his own individuality, his own being.

The term 'Focalization' was coined by the narratologist, Gerard Genette. It is defined as the selection or control of narrative information based on the experiences and knowledge of the narrator, characters, or other fictional elements in the story world.[57] In his work ''Narrative Discourse: An Essay in Method''[58] (1972), Genette distinguishes three types or degrees of 'Focalization': Zero, Internal, and External. He explains the three-term typology of 'Focalization' in relation to the previous theories as follows:

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57 Burkhard Niederhoff, ''Focalization,'' *The living handbook of narratology* (Hamburg: Hamburg University, 2019), http://www.lhn.uni-hamburg.de/article/focalization

58 Gerard Genette, *Narrative Discourse*: *An Essay in Method*, translated by Jane E. Lewin (Oxford: Blackwell, 1980). It was originally published in 1972.

> ''The first term (Zero focalization) corresponds to what English-language criticism calls narrative with omniscient narrator and Pouillon 'vision from behind,' and which Todorov symbolizes by the formula Narrator>Character (where the narrator knows more than the character, or more exactly, says more than any of the characters knows). In the second term (Internal focalization), Narrator=Character (the narrator says only what a given character knows); this is narrative with 'point of view' after Lubbock, or with 'restricted field' after Blin; Pouillon calls it 'vision with.' In the third term (External focalization), Narrator<Character (the narrator says less than the character knows); this is the 'objective' or 'behaviorist' narrative, what Pouillon calls 'vision from without.' ''[59]

The aforementioned three perspectives of Mahābhārata, presented by Sukhtankar, are not entirely based on the 'point of view' of the epic characters. Therefore, epic narrators do not have a position that is equivalent to characters as in 'Internal focalization' (the narrator says only what a given character knows). Likewise, these perspectives cannot be linked to the possibility of 'External focalization' (the narrator says less than the character knows). However, we can relate this to 'Zero focalization' (where the narrator knows more than the character, or more exactly, says more than any of the characters knows), or 'vision from behind', in the three term typology suggested by Genette.

Similarly, Garima Sharma's ''The Mahābhārata: A study in the light of modern narratology'' (2016) is a study[60] that finds and analyzes narratological prepositions like 'Verb', 'Tense', 'Mood', and 'Voice' from the

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59 Gerard Genette, *Narrative Discourse*: *An Essay in Method*, 188-189.

60 Garima Sharma, ''The Mahābhārata: A study in the light of modern narratology'' *The criterion: An international journal In English*, Vol. 7, Issue 6 (2016), 50-54, https://www.the-criterion.com/V7/n6/007.pdf

narrative of Mahābhārata. It is noteworthy here as it considers the Mahābhārata as a basic text for analyzing modern narrative style. By pointing out the complex and extensive narrative structure of the Mahābhārata, Garima Sharma raises a question whether the Mahābhārata comes under the narratological possibility of the expansion of a verb. In this case, she takes the position that it is an expansion of a verb, considering the facts that point to the ethical and didactic background of the epic. Second, she observes, the ancient Indian poets' conception of time (tense) is extremely deceptive. By considering the argument of narratologist Gerard Genette[61] that the temporality of written narrative is conditional because it needs time to 'consume', she tries to analyze the conception of time in the epic and finds that Mahābhārata does not have a proper reference to time. ''The narrative sequence of the epic is pulled back to the past, pushed forward to the future and stretched through the present.''[62] It is not about a day or a month or a year that epic poets discuss, but about yugas. Therefore, she asserts that the reader is left with no choice but to create his/her own 'pseudo-temporality', especially when reading classical narratives like the Mahābhārata. Thirdly, the narrative category 'Mood' is analyzed. In the context of modern narratology, she observes, ''the variations brought up by the narrator in the narrative representation and their operative methods come under the category of 'Mood'.''[63] Hence, it is commonly referred to as the modalities of the narrative representation. It is possible for a narrator to tell less or more, from one point of view or another. The epic begins with traditional puranic narration, where Ugraśravas, the puranic narrator,

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61 Gerard Genette, *Narrative Discourse*, translated by Jane E. Lewin (Oxford: Basil Blackwell, 1980)

62 Garima Sharma, ''The Mahābhārata: A study in the light of modern narratology,'' 52.

63 Garima Sharma, ''The Mahābhārata: A study in the light of modern narratology,'' 52.

narrates the story to the Śaunaka sages. In narrative terms, this is called the extra-diegetic narrative level. It is Sage Vyāsa who is the real author-narrator of the epic and he has introduced the first narrator Ugraśravas merely to adhere to puranic narrative norms. Another possibility, which she points out, is a narrative without a narrator. It appears that characters and events speak or manifest themselves 'not uttered by anyone'. In relation to narrative discourse, Genette opposes this possibility as narrative discourse ought to have both a 'narrator and a narratee'. Similarly, one cannot think of the possibility of the characters and events showing or telling themselves in the Mahābhārata. Therefore, she observes, narration without a narrator is an illusion. Fourth and finally, the narrative category of 'Voice' is considered. According to Genette, every narrative is explicitly not in the first person. Consequently, at each moment the narrator may use the pronoun 'I' to designate him/herself. But in the Mahābhārata the situation is different. ''When 'aham' or a verb in first person singular occurs, it is an imitation of Vyāsa's words by some other narrator.''[64] Thus, she says, Vyāsa prefers to remain hidden amidst the plurality of narrators and keeps his voice 'unidentified'.

Moreover, Garima analyzes the repetition of events in the Mahābhārata, basing Genette's argument that neither an analysis nor a simple description can differentiate the complex narrative situation. Furthermore, it is impossible to encompass everything at once in a critical discourse. The birth of Droṇa, the enmity between Droṇa and Drupada, and Droṇa's victory over Drupada with the help of the Pāṇḍavas; each of these events have already taken place in the narrative. But at one point in the Ādiparva, a Brāhmin narrator narrates the same content to the Pāṇḍavas again without being able to recognize who the Pāṇḍavas are. This is an

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64 Garima Sharma, ''The Mahābhārata: A study in the light of modern narratology,'' 53.

example of the repetition of events in a complex narration. Garima thus suggests that the narrator's non-identity with his narratives plays an important role in differentiating the narrative situation.

In addition, Garima applies two other narrative possibilities as proposed by Genette in the Mahābhārata. First, the reader realizes that the author is ostensibly speaking about him/herself, but pretending to be speaking about someone else. The second is that the author is speaking ostensibly about him/herself, but pretending that someone else is speaking about him/her. The first case is when Vyāsa speaks of himself but pretends to speak of the Pāṇḍavas and Kauravas. Here Vyāsa cannot be differentiated from Ugraśravas, Vaiśaṁpāyana or Sanjaya. Secondly, Vyāsa speaks of himself but pretends to be Ugraśravas, Vaiśaṁpāyana or Sanjaya speaking about him. The first possibility is completely rejected here as Vyāsa never appears before the reader as an independent narrator. However, there is a strong inclination to accept the latter. Vyāsa is certainly not a first-person narrator because his 'I' comes through the consciousness of another. As Genet suggested, every narrative is a combination of narration and description. Narration in its strict sense is the verbal representation of actions and events. Narrative is impossible without description. Thus, by applying some of the important narrative arguments put forward by Genette in the narrative of the Mahābhārata, this study asserts that almost all the narrative possibilities and devices envisioned by modern narratologists are applicable in the Mahābhārata.

It is noteworthy here that Vishwa Adluri puts forward a different argument regarding the narrative architecture of the Mahābhārata through his study titled ''Hermeneutics and narrative architecture in the Mahābhārata'' (2013).[65] According to Adluri Mahābhārata contains two 'equally' original beginnings: 1) A cosmological beginning in 'The list of

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[65] Vishwa Adluri, ''Hermeneutics and narrative architecture in the Mahābhārata,'' *Ways and reasons for thinking about the Mahābhārata as a Whole*, Ed. Vishwa Adluri (Pune: Bandarkar Oriental Research Institute, 2013), 1-27.

contents,' and 2) A genealogical beginning in the 'Paulomaparva'. But in addition to these beginnings, he argues that the redactor created a third beginning between the two, the hermeneutical one. Thus, he observes that, by embedding Vyasa's original narrative in the first level of the sacrifice (Janamejaya's Sarpasatra), and then embedding this sacrifice in a further sacrifice (Śaunaka's sacrifice at Naimiṣāraṇya), the redactor duplicated the outermost level of the text, thereby created a forked structure in which he placed the textual apparatus: content, summary, hermeneutic and pedagogical devices (see figure 2.2.1).

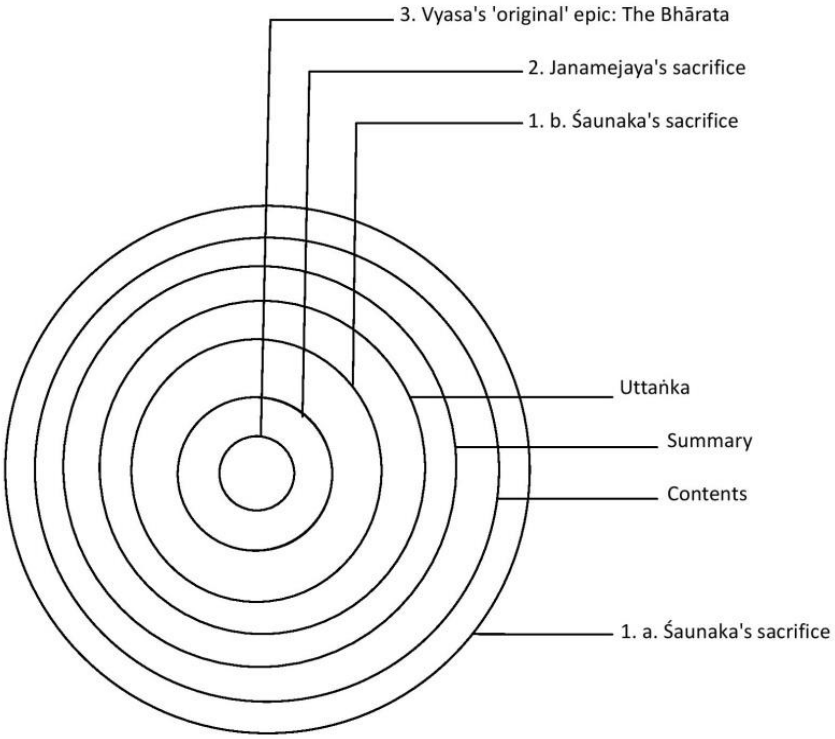

Figure 2.2: The narrative architecture of the Ādiparva in the Mahābhārata

(''The arrangement of the Mahābhārata: the Ādiparva showing how Vyāsa's ''authoritative narrative'' is embedded in two sacrifices representing two narrations, one embedded within the other. The outermost level is duplicated to embed the textual apparatus: contents, summary and hermeneutic tools.'')[66]

[66] Adluri, ''Hermeneutics and narrative architecture in the Mahābhārata,'' 15.

In addition, the article is an extended study based on the Uttaṅka story narrated at the beginning of the Mahābhārata. Analysis of Uttaṅka narratives enables him to distinguish multiple levels of the text: Narrative (Vaiśaṁpāyana), Allegorical-sacrificial (Sarpasatra) and, thirdly, Interpretive (Uttaṅka cycle), the latter constitutes the outermost level of the text and providing insight into how the text is to be read.

It can be seen that only a few studies have been explored from the narrative point of view of the Mahābhārata, but those studies are capable enough to prove that the innovative narrative devices put forward by modern narratologists are applicable in the Mahābhārata. In one way or the other, the narrative arguments put forward by Stanzel and Genette are not only applicable to the narrative of the Mahabharata, but also shed new light. In that case, we have to understand that the narrative techniques of the epic poets transcend time and space in a way that can be adapted even to new situations. It is this narrative structure that constantly creates new patterns in the imagination of the connoisseurs of all generations that enables the Mahābhārata to be explored in the context of Knowledge Architecture and Management.

2.3 Knowledge Architecture and Management Perspectives

Mahābhārata has not yet been studied from the perspective of KM in Library and Information Science (LIS). Not only the Mahābhārata but other epics are also not studied in the context of KM. Therefore, it is not possible to find literature related to it, which makes this study relevant. However, some important observations can be added here which establish the Mahābhārata as a preservation center by revealing the possibilities of knowledge architecturing in it. Those observations mark how the epic keeps such a possibility alive by incorporating different knowledge from different eras.

Arthur A. Macdonell opines:

''The Mahābhārata, arising in the western half of the country, is a congeries of parts, the only unity about which is the connectedness of the epic cycle with which they deal; its epic kernel, moreover, which forms only about one-fifth of the whole work, has become so overgrown with didactic matter, that in its final shape it is not an epic at all, but an encyclopedia of moral teaching.''[67]

W. Norman Brown writes,

''The Mahābhārata has often been characterized by students of Indian civilization as the most informative work in all that country's ancient literature. It is a growth over many centuries, which incorporates material of many varieties drawn from many sources-possibly a little history, certainly much myth, legend, fairy tale, fable, anecdote, religious and philosophical writing, legal material, even anthropological items, and miscellaneous data of other kinds. It is a genuine folk epic in basic character, which has been enlarged to a kind of Indian-at least Hindu-cultural encyclopedia.''[68]

Wendy Doniger reminds,

True, it was like an ancient Wikipedia, to which anyone who knew Sanskrit, or who knew someone who knew Sanskrit, could add a bit here, a bit there. But the powerful intertextuality of Hinduism ensured that anyone who added anything to the Mahābhārata was well aware of the whole textual tradition behind it and fitted his or

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67 A. A. Macdonell, *A history of Sanskrit literature* (New York: D. Appleton and company, 1900),.281-282.

68 Irawati Karve, *Yugānta: the end of an epoch* (Hyderabad: Orient BlackSwan, 2007), 5-6.

her own insight, or story, or long philosophical disquisition, thoughtfully into the ongoing conversation. However diverse its sources, for several thousand years the tradition has regarded it as a conversation among people who know one another's views and argue with silent partners. It is a contested text, a brilliantly orchestrated hybrid narrative with no single party line on any subject. The text has an integrity that the culture supports (in part by attributing it to a single author, Vyāsa, who is also a major player in the story) and that it is our duty to acknowledge. The contradictions at its heart are not the mistakes of a sloppy editor but enduring cultural dilemmas that no author could ever have resolved.[69]

Rajagopalachari observes,

''The Mahābhārata was composed many thousand years ago. But generations of gifted reciters have added to Vyāsa's original a great mass of material. All the floating literature that was thought to be worth preserving, historical, geographical, legendary, political, theological and philosophical of nearly thirty centuries, found a place in it. In those days, when there was no printing, interpolation in a recognized classic seemed to correspond to inclusion in the national library.''[70]

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69 Wendy Doniger, *The Hindus: An alternative history*. (New Delhi: Speaking tiger publishing, 2015), 264.

70 C. Rajagopalachari, *Mahābhārata* (Mumbai: Bharatiya vidya bhavan, 2017), xi. It was originally published in 1951.

Monier Williams says,

''The great epic, however, is not so much a poem with a single subject as a vast encyclopedia or thesaurus of Hindu mythology, legendary history, ethics and philosophy.''[71]

Gurcharan Das opines,

''The Mahābhārata winds its way leisurely, with a steady aim, through masses of elaborate treatises on law, philosophy, religion, custom, even geography and cosmography, together with a formidable array of episodes and legends, piled up at various distances along its course . . . Indeed, the Mahābhārata is a virtual encyclopedia of ancient India. It is an important source of information about the life of the times and the evolution of Hinduism and the influence of Buddhism.''[72]

Sukhtankar says,

We are the inheritors of the great book, this book of books composed at a time when Great Britain was not yet entered on the map of civilized nations . . . Whether we realize it or not, it remains a fact that we in India still stand under the spell of the Mahābhārata . . . the Mahābhārata is the national saga of India. It is, in other words, the content of our collective unconscious. And just for that reason it refuses to be discarded. We must therefore grasp this great book with both hands and face it squarely. Then we shall recognize that it is our past which has prolonged itself into the

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71 Monier Williams, *Indian wisdom or examples of the religious, philosophical and ethical doctrines of the Hindus* (Delhi: Indian reprint publishing, 1974), 371.

72 Gurcharan Das, *The difficulty of being good: On the subtle art of dharma* (New Delhi: Penguin Group, 2009), xlviii-xlix.

present. We are it: I mean the real WE! Shall we be guilty of strangling our own soul? Never![73]

How can we summarize these observations? Macdonell hails Mahābhārata as an 'Encyclopedia'. Norman Brown calls it a 'Cultural encyclopedia'. As far as Doniger and Rajagopalachari are concerned, they understand this expansive tradition of Mahābhārata by comparing it to the functions of 'Wikipedia' and 'National library'. For Monier Williams, it is seemingly an 'Encyclopedia' and 'Thesaurus' at the same time. For Gurcharan Das, Mahābhārata is like a 'Virtual encyclopedia.' And Sukhtankar called it the 'Book of books'. Along with stressing the diversity of knowledge imbibed in Mahābhārata, all these observations give us a real view of the epic evolving, in course of centuries, into an archive, or a preservation center. In this sense, the epic transforms as a way to preserve and disseminate the produced knowledge and ideas. It's evolved that way, likewise a KM system.

2.4 Summary

What can we conclude from the literature analysis that relates to the epistemic, narrative and KM perspectives of the Mahābhārata in order to understand the background and context of the objectives proposed by this research? In the first stage of the analysis, by combining the literature that helps to reveal the epistemic paradigm of the Mahābhārata, by marking the different systems of knowledge that have entered the Mahābhārata in different periods, the analyst has been able to present the epic as an epitome of the Indian epistemological tradition. The literature that we have considered for analysis shows that all the dominant knowledge systems of

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[73] V. S. Sukhtankar, *Critical studies in the Mahābhārata*, Vol.1 (Bombay: Karnatak Publishing House, 1944), 438-439.

the time when the Mahābhārata was formed were assimilated into it in one way or another. So we have to understand that Mahābhārata was once a center for preserving dominant knowledge systems in India. When we consider the Mahābhārata tradition which began at least from 600 BCE and is still evolving on many levels, it becomes a 'Dynamic Living Library' rather than a preservation center. Furthermore, Mahābhārata has to be considered as a KM system when the knowledge architecture and management perspective of it is understood in relation to the narrative techniques of the epic.

3

METHODOLOGY

What of a truth that is bounded by these mountains and is falsehood to the world that lives beyond?
-Michel Eyquem de Montaigne, Complete Essays

The research, either qualitative or quantitative, is ultimately aimed at the production of knowledge, positioning its epistemological and ontological stances and ensuring conceptual and thematic clarity. According to Michael Crotty,[1] four questions form the basis of any research; ''1) what methods do we propose to use? 2) What methodology governs our choice and use of methods? 3) What theoretical perspective lies behind the methodology in question? 4) What epistemology informs this theoretical perspective?'' Further, Crotty clarifies what he means by each of them; methods-''the techniques or procedures used to gather and analyze data related to some research question or hypothesis,'' methodology-''the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking those choices and use of methods to the desired outcomes,'' theoretical perspective-''the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria,'' epistemology-''the theory of knowledge embedded in the theoretical perspective and thereby in methodology.'' Crotty's theory of

[1] Michael Crotty, *The foundations of social research process: meaning and perspective in the research process* (Thousand Oaks: Sage, 1998), 2-3.

framework (Figure 3.1)[2] in research design, based on these four questions, is very flexible and highly consistent; it, therefore, fits here to design the research question at hand. The prime motive to adapt this design strategy is to develop a theory in the context that the phenomenon under this study occurs.

It is important to see how this particular research proposal can be shaped when there are several epistemological positions, numerous theoretical stances, varied methodologies and almost countless methods in the field of social science research. Crotty's attempt to list a representative sampling of each category or element (Table 3.1)[3] assures significance as it sheds proper light into the epistemological, theoretical and methodological assumptions underlying the research question in this study.

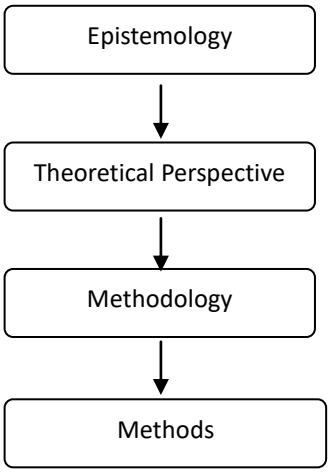

Figure 3.1: Four basic elements of research (Michael Crotty, 1998)

[2] Crotty, *The foundations of social research process*, 4.

[3] See, Crotty, *The foundations of social research process*, 5.

Epistemology	Theoretical Perspective	Methodology	Methods
Objectivism	Positivism (& Post-Positivism)	Experimental research	Sampling
Constructionism	Interpretivism ▪ Symbolic Interactionism ▪ Phenomenology ▪ **Hermeneutics**	Survey research	Measurement and scaling
Subjectivism (& their variants)	Critical inquiry	Ethnography	Questionnaire
	Feminism	Phenomenological research	Observation ▪ Participant ▪ Non-Participant
	Postmodernism Etc.	**Grounded theory**	Interview
		Heuristic inquiry	Focus group
		Action research	Case study
		Discourse analysis	Life history
		Feminist standpoint research Etc.	Narrative
			Visual ethnographic methods
			Statistical analysis
			Data reduction
			Theme identification
			Comparative analysis
			Cognitive mapping
			Interpretative methods
			Document analysis
			Content analysis
			Conversation analysis Etc.

Table 3.1: List of representative sampling for four elements of research (Michael Crotty, 1998)

3.1 Designing the Research

It is found that no major study has been conducted in the epistemic aspects of the Mahābhārata in the context of KM in Library and Information Science, though there are studies worked out from the religious, historical, sociological, philological and philosophical point of view. The current research is basically hermeneutical and theoretical with a historical perspective, and attempts to extrapolate the texts themselves, rather than just doing a bibliometric analysis. By adapting Crotty's model, the research at hand uses hermeneutics as a theoretical perspective from the epistemological stance of constructionism, using Constructivist Grounded Theory (CGT) as the methodology, where qualitative and thematic content analysis is used to generate data interpretation.

3.1.1 Epistemological Assumptions

Epistemology is ''a way of understanding and explaining how we know what we know.''[4] Epistemology is also ''concerned with providing a philosophical grounding for deciding what kind of knowledge is possible and how can we ensure that they are both adequate and legitimate.''[5] Constructionism, in Crotty's view, is the epistemology to be found somewhere between the extremes of objectivism and subjectivism:

> Epistemology-constructionism-rejects this (objective) view of human knowledge. There is no objective truth waiting for us to discover it. Truth, or meaning, comes into existence in and out of our engagement with the realities in our world. There is no meaning without a mind. Meaning is not discovered, but constructed. In this understanding of knowledge, it is clear that different people may construct meaning in different ways, even in

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4 Crotty, *The foundations of social research process*, 3.

5 M. Maynard, ''Methods, practice and epistemology: The debate about feminism and research,'' in *Researching women's lives from a feminist perspective*, ed. M. Maynard and J. Purvis (London: Taylor and Francis, 1994), 10.

relation to the same phenomenon. Isn't this precisely what we find when we move from one era to another or from one culture to another? In this view of things, subject and object emerge as partners in the generation of meaning.[6]

This context of epistemological positioning should also be considered with the question of what the researcher's assumptions about the world are. ''We do not quickly or easily reach any sort of conclusion or resolution about our own view of the nature of truth and reality. We are all influenced by our history and cultural context, which, in turn, shape our view of the world, the forces of creation, and the meaning of truth. Often these underlying assumptions about the world are unconscious and taken for granted.''[7] ''This is to espouse an out-and-out subjectivism and to reject both the existentialist concept of humans as beings-in-the-world and the phenomenological concept of intentionality. . . According to constructionism, we do not create meaning. We construct meaning.''[8] It rejects the notions of emergence and the existence of objective reality. There is 'no true knowledge or valid interpretation'. Therefore, the efforts to build-theory through interpreting an ancient text in relation to pre-existing theory and practice fit into the framework of constructionism; particularly in the approach of Constructivist GT.

3.1.1.1 Constructivist GT Approach

Kathy Charmaz is the leading proponent of constructivist GT. ''Ontologically relativist and epistemologically subjectivist, constructivist GT reshapes the interaction between researcher and participants in the research process and

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6 Crotty, *The foundations of social research process*, 8-9.

7 Jane Mills, Ann Bonner and Karen Francis, ''The development of constructivist grounded theory,'' *International journal of qualitative methods,* 5 (1), Article 3 (March 2006): 26, https://doi.org/10.1177/160940690600500103.

8 Crotty, *The foundations of social research process*, 43-44.

in doing so brings to the fore the notion of the researcher as author.''[9] Charmaz perfectly blended the constructivist paradigm into the method of GT approach, where ''data do not provide a window on reality. Rather, the 'discovered' reality arises from the interactive process and its temporal, cultural, and structural contexts.''[10] Here, building a theory deals with the understanding and interpretation of the researcher; reality is constructed and not value-free.

Foundational Assumptions ▪ Assumes multiple realities ▪ Assumes mutual construction of data through interaction ▪ Assumes researcher constructs categories ▪ Views representation of data as problematic, relativistic, situational, and partial ▪ Assumes the observer's values, priorities, positions, and actions affect views
Objectives ▪ Views generalizations as partial, conditional, and situated in time, space, positions, action, and interactions ▪ Aims for interpretive understanding of historically situated data ▪ Specifies range of variation ▪ Aims to create theory that has credibility, originality, resonance, and usefulness
Implications for data analysis ▪ Acknowledges subjectivities throughout data analysis ▪ Views co-constructed data as beginning the analytic direction ▪ Engages in reflexivity throughout the research process ▪ Seeks and (re)represents participants' views and voices as integral to the analysis

Table 3.2: An overview of the Constructivist GT approach (Kathy Charmaz, 2014)[11]

9 Mills, Bonner and Francis, ''The development of constructivist grounded theory,'' 31.

10 Kathy Charmaz, ''Grounded theory: Objectivist and constructivist methods,'' in *Handbook of qualitative research*, 2nd ed. ed. N. Denzin and Y. Lincoln (Thousand Oaks, CA: Sage, 2000), 524.

11 Kathy Charmaz, *Constructing grounded theory*, 2nd ed. (London: Sage, 2014), 236.

3.1.2 Theoretical Perspective

The word 'Hermeneutics' is derived from the Greek word 'hermeneuin', which means to understand or to interpret. The idea comes from the Hermes. Hermes is the fleet-footed divine messenger of the Greek gods; he has wings on his feet. His task is to explain the decisions of the Gods to humans. As a messenger, he is the bearer of knowledge. Hermeneutics originated as a theory or methodology of interpretation in the 17_{th} century in connection with biblical studies.[12] The contributions of St. Augustine (354-430), Friedrich Schleiermacher (1768-1834), Wilhelm Dilthey (1833-1911), Martin Heidegger (1889-1976), Hans-Georg Gadamer (1900-2002), and Jacques Derrida (1930-2004) are important in making hermeneutics into a philosophical branch today. According to Schleiermacher, ''the principles of hermeneutics may be used for the study of all humanity and not confined to either Classics or the Bible.''[13] If agrees with Heidegger, it is ''the business of interpretation.''[14] As noted by Gadamer Hermeneutics is ''the classical discipline concerned with the art of understanding texts.''[15] Interpretive hermeneutics approaches ''universe as language''[16] to rediscover its hidden meaning.

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12 See, Crotty, *The foundations of social research process*, 87.

13 Kerry E. Howell, *An introduction to the philosophy of methodology* (London: Sage, 2013), 154.

14 Martin Heidegger, *Being and time*, trans. John Macquarrie and Edward Robinson (Oxford: Blackwell, 1962), 62.

15 H. G. Gadamer, *Truth and method*, trans. Joel Weinsheimer and Donald G. Marshall, 2nd rev. ed. (London: Continuum Press, 2004), 157.

16 Ben Vedder, ''Schleiermacher,'' in *A companion to continental philosophy*, Ed. Simon Critchley and William R. Schroeder (Oxford: Blackwell, 1999), 417, https://epdf.pub/download/a-companion-to-continental-philosophy-blackwell-companions-to-philosophy.html.

It is also noteworthy, in the context of constructivist approach, that Gadamer explores how the anticipation of meaning governs the understanding of a text:

The anticipation of meaning that governs our understanding of a text is not an act of subjectivity, but proceeds from the commonality that binds us to the tradition. But this commonality is constantly being formed in our relation to tradition. Tradition is not simply a permanent precondition; rather, we produce it ourselves inasmuch as we understand, participate in the evolution of tradition, and hence further determine it ourselves. Thus the circle of understanding is not a ''methodological'' circle, but describes an element of the ontological structure of understanding.[17]

According to Kerry E. Howell,[18] in hermeneutical research, a researcher should perceive intuition and empathy as the important aspects to interpret a situation; the distinction between subjective and objective, empathy, intuition and self-consciousness, as well as the level of part and whole, has led to the emergence of three different hermeneutical approaches: Objectivist, Alethic, and phenomenological (Table 3.3).[19] This particular approach of interpretivism-constructionism-is well removed from the objectivism found in the hermeneutics, as it relies on Alethic hermeneutics. Thus, objectivity and subjectivity are always subsumed; the understanding is pre-determined by historical and cultural pre-conditioning.

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17 Gadamer, *Truth and method*, 293-294.

18 Howell, *An introduction to the philosophy of methodology*, 158-159.

19 Howell, *An introduction to the philosophy of methodology*, 159.

Objectivist hermeneutics	A clear distinction exists between objectivity and subjectivity; an objective stance exists.
Alethic hermeneutics	Objectivity and subjectivity are always subsumed; researchers are historically and culturally bound so an objective stance is impossible. Understanding is pre-determined by our historical and cultural pre-conditioning.
Phenomenological hermeneutics	Rejects the notions of subjective and objective positions; the researcher continually exists in the world. Worlds and individuals are merged prior to any reflection, thinking or construction.

Table 3.3: Hermeneutical approaches (Kerry E. Howell, 2013)

3.1.3 Research Methodology and Method

The GT (1967) methodology was introduced to legitimize qualitative research by two sociologists; Barney G. Glaser and Anselm L. Strauss. They defined GT is facilitating ''the discovery of theory from data.''[20] ''Generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research.''[21] ''Fundamentally, GT attempts to improve theory as one can only replace existing theoretical frameworks with

[20] Barney G. Glaser and Anselm L. Strauss, *The discovery of grounded theory: strategies for qualitative research* (New Brunswick: Aldine transaction, 2006), 1. Originally published in 1967.

[21] Barney G. Glaser and Judith Holton, ''Remodeling grounded theory,'' *The grounded theory review: An international journal*, Vol. 4, No. 1 (November 2004): 11, http://www.sxf.uevora.pt/wp-content/uploads/2012/05/GTReviewVol4no1.pdf.

improved or enhanced theories.''[22] In the late 1960s Glaser and Strauss suggested, ''The person who applies the theory will, we believe, be able to bend, adjust or quickly reformulate a GT when applying it, as he tries to keep up with and manage the situational realities that he wishes to improve.''[23] Not long after they defined their research approach in the sixties, the two of them underwent a difference in opinion. Strauss and Juliet Corbin would allow the research problem to be stated at the start of a research project, which was totally countered by Glaser as he believed that this would preempt the development of theory.[24] This means that there is no single method which a grounded theorist must follow. However, it doesn't mean that GT processes are not scientific; it allows freedom to be pursued, but it has to be done in a systematic way. Kathryn May has clearly described this cognitive process as follows:[25]

Doing qualitative research is not a passive endeavor. Despite current perceptions and student's prayers, theory does not magically emerge from data. Nor is it true that, if only one is patient enough, insight wondrously enlightens the researcher. Rather, data analysis is a process that requires astute questioning, a relentless search for answers, active observation, and accurate recall. It is a process of piecing together data, of making the invisible obvious, of recognizing the significant from the insignificant, of linking seemingly unrelated facts logically, of fitting categories one with another, and of attributing consequences to antecedents. It is a process of

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22 Barney G. Glaser and Anselm L. Strauss, *The discovery of grounded theory* (New York: Alpine, 1967), cited in Kerry E. Howell, *An introduction to the philosophy of methodology*, 135.

23 Glaser and Strauss, *The discovery of grounded theory*, 242.

24 Colin Fisher, *Researching and writing a dissertation: an essential guide for business students*, 3rd ed. (Harlow: Pearson education limited, 2010), 138.

25 Kathryn May, ''The case for magic in method'', in *Critical issues in qualitative research methods*, ed. Janice Morse (Thousand Oaks, CA: Sage, 1994), 10.

conjecture and verification, of correction and modification, of suggestion and defense. It is a creative process of organizing data so that the analytic scheme will appear obvious.

Glaser observes that the GT process, which is based on an analytical scheme that appears to be constructed to a particular research situation as mentioned above, essentially relies on four elements; fit, work, relevance, and modifiability. ''Theoretical categories must emerge and be developed from data analysis; they must fit. GT should order the data so as to explain the phenomena; it should work. It should have relevance in terms of dealing with actual problems and processes located in the research setting. In addition, through accounting for variation GT is durable and flexible.''[26] In this research, epistemological constructionism and the theoretical perspective of hermeneutical notions are employed to meet the basis of these criteria. Modifiability and the adaptability of GT methodology make this process more flexible. The method of qualitative and thematic content analysis is aided to generate appropriate conceptual categories and theoretical themes.

3.1.3.1 Qualitative and Thematic Content Analysis

Thematic analysis is a research method used for qualitative data analysis, and is more effective in hermeneutical research which is purely based on an ancient text. Textual data does not simply exist, but it contains patterns relating to certain themes. Thematic analysis explores the patterns of themes, the researcher categorizes the data on theme basis, which is coded into core categories, subcategories, related categories and subsequent

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[26] Barney G. Glaser, *Advances in the methodology of grounded theory: Theoretical sensitivity* (Berkeley, CA: University of California, 1978); *Emergence vs forcing: Basics of grounded theory analysis* (Mill Valley: CA: Sociology Press, 1992), cited in Kerry E. Howell, *An introduction to the philosophy of methodology*, 136.

related categories to generate a hierarchical structure of code and helps to understand the different dimensions of the phenomenon that the data represents. Finally, the analyst presents the result obtained by analyzing the incidents in each core category as a conceptual map, or model. The conceptual models lead to a general theory through inductive reasoning. Therefore, when using thematic analysis in constructivist GT for hermeneutical research, which is purely based on Mahābhārata, few elements have been identified: 1) text; the data to interpret 2) research question; the problem to be answered 3) theoretical samplings; the tentative idea about the data 4) method of analysis; constant comparative analytical techniques which involves 4.1) coding 4.2) memoing and 4.3) sorting and writing up 5) validating evidence; the ultimate justification of the data and 6) formulating theory; constructing a general theory from the evidence. Let us examine each of these elements in more detail.

3.1.3.1.1 The Text

There are so many versions, editions, numerous commentaries, and less number of unabridged translations of Mahābhārata offered in different languages which includes Sanskrit, English and other vernaculars. Popular published editions of Mahābhārata in Sanskrit are; The Calcutta edition, Asiatic Society, the Editio Princeps (1834-1839); The Bombay edition (1863); The Madras Edition (1890); The Southern Recension, by P.P.S. Shastri (1932); and The Poona Recension, the first critical edition known as Bandarkar Oriental Research Institute (BORI) edition, completed in 1966. Further, there are many commentaries by different commentators like Devabodha (Jñānadīpika, Mahābhārata-Tātparyaṭīka, Tātparydīpika), Vimalabodha (Viṣamaślokaṭīka, Durghatārtha-prakāśini, Durbodhapadabhañjini), Sarvajña Nārāyaṇa (Bhāratārthaprakāśa, Ante 1300), Arjunamiśra (Mahābhārata-Pradīpika, Bhāratasaṁgrahadīpika, Ante 1534), and Nīlakaṇṭha Caturdhara

(Bhāratabhāvadīpa, Ca 1700). The researcher has no pedantry in the Sanskrit language, due to which, the Sanskrit versions of the epic cannot be used for this study. Consequently, the analyst relies on the unabridged translations of the epic in English.

The unabridged translations of Mahābhārata in English are extremely rare. There are many unabridged versions, but only six unabridged translations exist.[27] Of these, only three editions are complete; others are still in progress. Among the completed editions, Bibek Debroy's translation, a very recent one, is purely based on the critical edition of the Mahābhārata. During the time of Kisari Mohan Ganguli and Manmatha Nath Dutt, earliest translators of the other two completed editions, Critical edition did not exist. Out of these three editions, each of them has their own merits and limits. There are some ślokas which the two earliest translators decided not to include, believing them to be untranslatable in those times. But the language in these versions is really poetic, especially in Ganguli's version. In the translation of Debroy, which is based on the critical edition, some parts are excluded due to their critical apparatus. The researcher acknowledges that Mahābhārata is all about tradition; not a mere literary text. It has an inclusive nature to imbibe different cultural phenomena, and is really chaotic and dynamic in nature. It exists and still evolves as a tradition. There is no point in thinking of a pure (critical) edition. Hence, this particular research is

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[27] The Mahabharata translation of Kisari Mohan Ganguli, which came out as 'The Mahābhārata of Kṛṣṇadvaipāyana Vyāsa', began in 1883 and was completed in 1896. The translation of Manmatha Nath Dutt ('A prose English translation of the Mahābhārata') began in 1895 and was completed in 1905. The translation of Bibek Debroy ('The Mahābhārata') began in 2010 and was completed in 2014. The translations initiated by the University of Chicago Press and J.A.B van Buitenen ('The Mahābhārata', 1973 onwards), by the P. Lal and Writers Workshop ('The condensed Mahābhārata of Vyāsa', 2005 onwards), and by the Clay Sanskrit Library (2005 onwards) is still incomplete. See, Bibek Debroy. *The Mahābhārata*, Vol. 1 (New Delhi: Penguin books, 2010), xxvii.

deliberately based on the translation of Kisari Mohan Ganguli; the first and foremost unabridged edition. The analyst also takes assistance from the other two unabridged versions when the situation demands.

3.1.3.1.2 Formulating Research Question

According to the classical grounded theorists, stating the problem in the beginning of the study hinders the spontaneous formulation of theory. But a text like Mahābhārata cannot be approached so freely, or without any prerequisites. Mahābhārata has always been in many ways tied to our, especially in Indians, socio-cultural perception. We always approach the Mahābhārata, from a certain set of ambiguous prejudices. Therefore, the first approach is itself a reapproach. This context forces the researcher to read the text with a prejudiced notion in mind. Therefore, after stating the problem, objectives are set based on it and tentative theoretical samplings, which can replace the hypotheses, are then formulated accordingly. The analyst approaches the first two of the three objectives set out for the study by formulating tentative theoretical samplings. However, theoretical sampling cannot be set for the third objective as it has to be examined based on the findings of the first two objectives.

3.1.3.1.3 Theoretical Samplings

Theoretical samplings are generated from the initial foreshadowing questions of the analyst that aim to answer the research question at hand. For the sake of convenience, the analyst has formulated the following two tentative theoretical samplings:

- Clothing the technicalities of KM in literary beauty and elegance, the epic poets have set a timeless paradigm for efficient management of such huge amount of information and knowledge

- As such, the epic could be viewed as a 'dynamic living library or knowledge system' conceived in the ancient times as a primordial form or foundation of Information Science and KM, which has evolved ever since and is still evolving, and, therefore, can serve as an ideal paradigm for KM

3.1.3.1.4 Constant Comparative Method of Analysis

The constant comparative method involves systematic and explicit coding and analytic procedures in order to develop a theory. Glaser and Holton observe:[28]

The process involves three types of comparison. Incidents are compared to incidents to establish underlying uniformity and its varying conditions. The uniformity and the conditions become generated concepts and hypotheses. Then, concepts are compared to more incidents to generate new theoretical properties of the concept and more hypotheses. The purpose is theoretical elaboration, saturation and verification of concepts, densification of concepts by developing their properties and generation of further concepts. Finally, concepts are compared to concepts. The purpose is to establish the best fit of many choices of concepts to a set of indicators, the conceptual levels between the concepts that refer to the same set of indicators and the integration into hypotheses between the concepts, which becomes the theory.

As it is a very flexible analytic method, the constant comparative method can be modified to fit specific research situations. It can be developed by following the instructions of classical theorists or adding new ones to their existing method of constant comparison; and analysts can even develop another method of comparison by completely negating them.

[28] See, ''Remodeling grounded theory,'' 15.

Glaser and Strauss describe the constant comparative process in four stages:[29] 1) comparing incidents applicable to each category 2) integrating categories and their properties 3) delimiting the theory, and 4) writing the theory. According to them, the method of generating theory is an ever-growing process-each stage transformed into the next-the earlier stages do remain throughout the analysis, each providing continuous development into its successive phase until the analysis is completed. Data analysis in this research is based on these basic principles, the text itself constitutes the data; coding, memoing, and sorting and writing up are used to analyze the text (Figure 3.2).

3.1.3.1.4.1 Coding

For classical grounded theorists, data coding is the fundamental analytical tool that reveals an emerging GT from the field of inquiry.[30] Codes are generally used in three forms: open, theoretical, and constant comparative.[31] Analyzing the textual data, the analyst divided the text into two core categories: Narrative techniques and Knowledge architecture and Management. The core categories, each of them representing different themes, are located on the basis of tentative theoretical samplings; which are generated from the initial foreshadowing questions that intend to answer the research question at hand. Open coding is completed when the

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29 See, Glaser and Strauss, *The discovery of grounded theory*, 105.

30 See, Mills, Bonner and Francis. ''The development of constructivist grounded theory,'' 29.

31 Barney. G. Glaser says, ''Open coding is the initial step of theoretical analysis, developing codes from the data. This form of coding ends when it locates a core category. Theoretical codes are 'conceptual connectors' that develop relationships between categories and their properties. Constant comparative coding describes the method of constant comparison that imbues both open and theoretical coding.'' See, Barney. G. Glaser, *Emergence vs forcing: Basics of grounded theory analysis* (Mill Valley: CA: Sociology Press, 1992), 38, cited in Mills, Bonner and Francis. ''The development of constructivist grounded theory,'' 29.

analyst locates these key areas that are designed to understand the exact research situation so that the analyst can clearly answer the question posed by the study. After locating these core categories, the analyst identifies the properties for each core category. The more theoretically sensitive[32] the analyst, the more effective the process becomes. In this stage of analysis, subcategories are generated for both core categories; subcategories have related categories and this categorization may be an enduring process. Theoretical codes are developed in this process, which can act as conceptual connectors that are helpful in developing the relationship between theoretical categories and their properties. These theoretical codes cause the emergence of certain theoretical themes and concepts. The constant comparative codes provide useful evidence for testing tentative theoretical samplings or answering research questions. When coding an incident for a category, it is compared with the previous incidents in the same category, as well as different groups coded in that same category.[33] This constant comparison of the incidents helps to generate constant comparative codes; it can often be based on both memory and memoing. All the shreds of evidence are validated by the analyst through constant comparison that imbues both open and theoretical coding.

3.1.3.1.4.2 Memoing

Memos reveal the subtleties of the researcher's theoretical sensitivity of the constructs over time. In GT, theory articulation is facilitated through an

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[32] Barney G. Glaser and Judith Holton opinionates, ''A researcher requires two essential characteristics for the development of theoretical sensitivity. First, he or she must have the personal and temperamental bent to maintain analytic distance, tolerate confusion and regression while remaining open, trusting to preconscious processing and to conceptual emergence. Second, he or she must have the ability to develop theoretical insight into the area of research combined with the ability to make something of these insights. He or she must have the ability to conceptualize and organize, make abstract connections, visualize and think multivariately.'' See, ''Remodeling grounded theory,'' 11.

[33] See, Glaser and Strauss, *The discovery of grounded theory*, 106.

extensive and systematic memo writing that parallels data analysis. Memos serve as theoretical notes about the data and conceptual connections between categories.[34] It is with the help of theoretical memos that the concepts for the theory are formulated, elaborated and integrated. It is not possible to incorporate or revise concepts without the help of memos. It is a continuous process that extends until the very end of the research scheme. The memos, in this research, were prepared by analyzing the incidents separately for each core category. It is in this manner that the subcategories and subsequent related categories are formed. Memo writing continues in the stages of the literature reading, sorting and writing up, validating evidence and formulating theory. Thus, each step of the thematic analysis progresses, in this fashion, through memoing.

3.1.3.1.4.3 Sorting and Writing Up

The sorting of memos gives a conceptual layout with a complete theoretical saturation of the research. It ''provides theoretical completeness. Sorting generates more memos-often on higher conceptual levels-furthering and condensing the theory. It integrates the relevant literature into the theory, sorting it with the memos. . . Sorting prevents over-conceptualization and pre-conceptualization.''[35] In this research, evidence for the formation of theory emerged when the ideational memos constructed by analyzing the properties of the two core categories were accurately sorted. The constant comparative sorting continued in writing while validating the emerging evidence for shaping general theory.

3.1.3.1.5 Analytical Rules Developed During Validating Evidence

When analyzing evidence by sorting, some analytical rules are generally developed according to the research situation. Review of literature, which is

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[34] See, Glaser and Holton, ''Remodeling grounded theory,'' 17.

[35] See, Glaser and Holton, ''Remodeling grounded theory,'' 19.

considered as a secondary source of data, is important in setting the background and context for the research. In the stage of literature analysis, it is evident here that the Mahābhārata remains the epitome of the epistemic tradition of ancient India, containing the various knowledge systems of the time in which it was formed. Here, art becomes an archive in itself. It is this epistemic background of the Mahābhārata that forms the basis of this research, and the analyst begins data analysis with this realization. The analysis has been done in three stages by categorizing the properties of two core categories and its related categories. The core category, Narrative techniques, is considered in the first stage of the analysis. The other one, Knowledge architecture and Management, was analyzed in the next stage. In the third and final stage, the analyst concludes the analysis by validating the evidence developed in the first two stages. The summary of the analysis is as follows:

- The first stage, based on the first objective of the study, explains how the technicalities of KM are clothed by the epic poets using their literary devices, or narrative techniques. The first stage of the analysis is completed by formulating a narrative theory based on the origin, growth and developments of the epic. Thus, the first theoretical sampling gets justified.
- In the second stage, based on the second objective, the analyst technically justifies the epic as an ancient art of KM by juxtaposing modern KM practices with the epic narrative. By developing a KM theory, the second stage of the analysis is completed here. Thus, the second theoretical sampling is also justified. The KM model developed by Irma Becerra Fernandez and Rajiv Sabherwal is relied upon here to understand the epic narrative juxtaposed with modern KM practices. The question on which basis the said model was selected is important despite the fact that there are many other KM

models. Fernandez and Sabherwal have developed four of the seven set of KM sub-processes in their model by adapting the knowledge conversion elements of Ikujiro Nonaka's model (1995), which is more notable among the existing KM models. The other three are based on Robert M. Grant (1996), Janine Nahapiet and Sumantra Ghoshal (1998). Therefore, the KM model selected here is noteworthy not only because it is recent, but also because it epitomizes dominant existing KM practices in certain ways.

- In the third and final stage, based on the third objective, the researcher examines the relation between the evidence developed in the first two stages of the analysis and constructs a general theory that restructures the present day practices of KM. When bringing essential structural changes to KM practices, the researcher has to confront the question of *what is knowing*. In other words, the question of what constitutes the structure of knowing must be addressed in order for the KM theory to have an epistemological and ontological basis. In this context, the researcher's attention turns to the parallels to the Polanyian epistemological approach, which has been misapplied throughout the KM literature for so long, with the process of knowledge formation in the Mahābhārata, which ultimately leads the study to interesting detours. Hence, the researcher examines the proposed theory on the basis of Polanyi's epistemology and envisions an approach that transcends the bifurcation of knowledge, thereby resolving the problem of the subject-object dichotomy that has maintained the epistemic gap between the knower and the known. Thus, a KM theory is developed from the narrative of Mahābhārata, on the basis of Polanyi's epistemology. Thus, the question of 'why' the Mahābhārata is answered.

3.1.3.1.6 Formulating Theory

Generating GT is a time consuming process. The theoretical sensitivity of the analyst leads to important theoretical realizations, which bring growth and maturity in the data, and most of these realizations are outside the analyst's awareness until preconscious processing becomes conscious.[36] The properties generated in the two core categories and their related categories, which were created to analyze the textual data by approaching the Mahābhārata as an epitome of the Indian epistemological tradition, or as a dynamic living library, reveal two important realizations in the craft of the Mahābhārata. Firstly, the epic poets have covered the technicalities of KM with their narrative techniques. The analyst reaches this realization by validating the different narrative elements in the Mahābhārata; it then creates a conceptual model and thereby forms a narrative theory. Secondly, when validating the narrative of the epic in the context of the existing KM practices, the epic is understood as a KM system itself. The analyst illustrates this situation by juxtaposing the epic narrative with the present day KM processes, as well as their subprocesses. This realization leads to the creation of another conceptual model, thus developing a KM theory. Finally, by combining these theories, or validating the evidence that led to these theories together, we form a general theory that restructures the existing KM practices.

How a researcher frames a research, theoretically, is important, but why that particular design is set up by the researcher is even more important. The table below summarizes what the research design is, and illustrating the factors that inspired the researcher to adapt Constructivist GT for this research.

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[36] See, Glaser and Holton, ''Remodeling grounded theory,'' 17.

Consideration	Constructivist Grounded Theory
Kind of knowledge	▪ Identifying and explaining the contextualized phenomenon ▪ Exploring an ancient text to develop a theory through inductive reasoning that is grounded in qualitative data ▪ Concepts, themes and categories emerge from the data and are identified by the researcher
Assumptions about the world	▪ Uses hermeneutics as the theoretical perspective from the epistemological stance of constructionism; meaning is not discovered but constructe
Conceptualization role of the researcher	▪ The researcher actively constructs understanding about the phenomenon under investigation ▪ The researcher tries to clarify one's own assumptions and expectations while analyzing
Type of analysis	▪ Qualitative and thematic content analysis; iteratively moving between data, codes, concepts and categories to result in a theory
Mode of working in this research	▪ Opening research question ▪ Data analysis + constructing theoretical samplings + open coding + generating core categories ▪ Memo writing + Identifying properties to core categories ▪ Further analysis and memoing + generating subcategories and related categories ▪ Theoretical coding + generating theoretical themes and concepts ▪ Writing advanced memos + constant comparative coding + refining conceptual categories ▪ Theoretical memo writing and sorting + focused themes and concepts ▪ Testing theoretical samplings ▪ Writing the first draft ▪ Writing the final grounded theory
Challenges	▪ If the researcher's assumptions and socio-cultural background are not properly acknowledged they will be too dominant in the analysis ▪ Study is very time consuming
Application to the hermeneutical research	▪ Constructivist GT seemed to be very appropriate to the hermeneutical research; the theory that evolves through analysis should be used to set up an ideal paradigm for the given situation

Table 3.4: Motivation for applying Constructivist Grounded Theory [37]

[37] Adapted and expanded from Sjored Gehrels, ''Grounded theory application in doctorate research,'' in *Research in hospitality management*, 3:1, (2013): 21, https://doi.org/10.1080/ 22243534.2013.11828299.

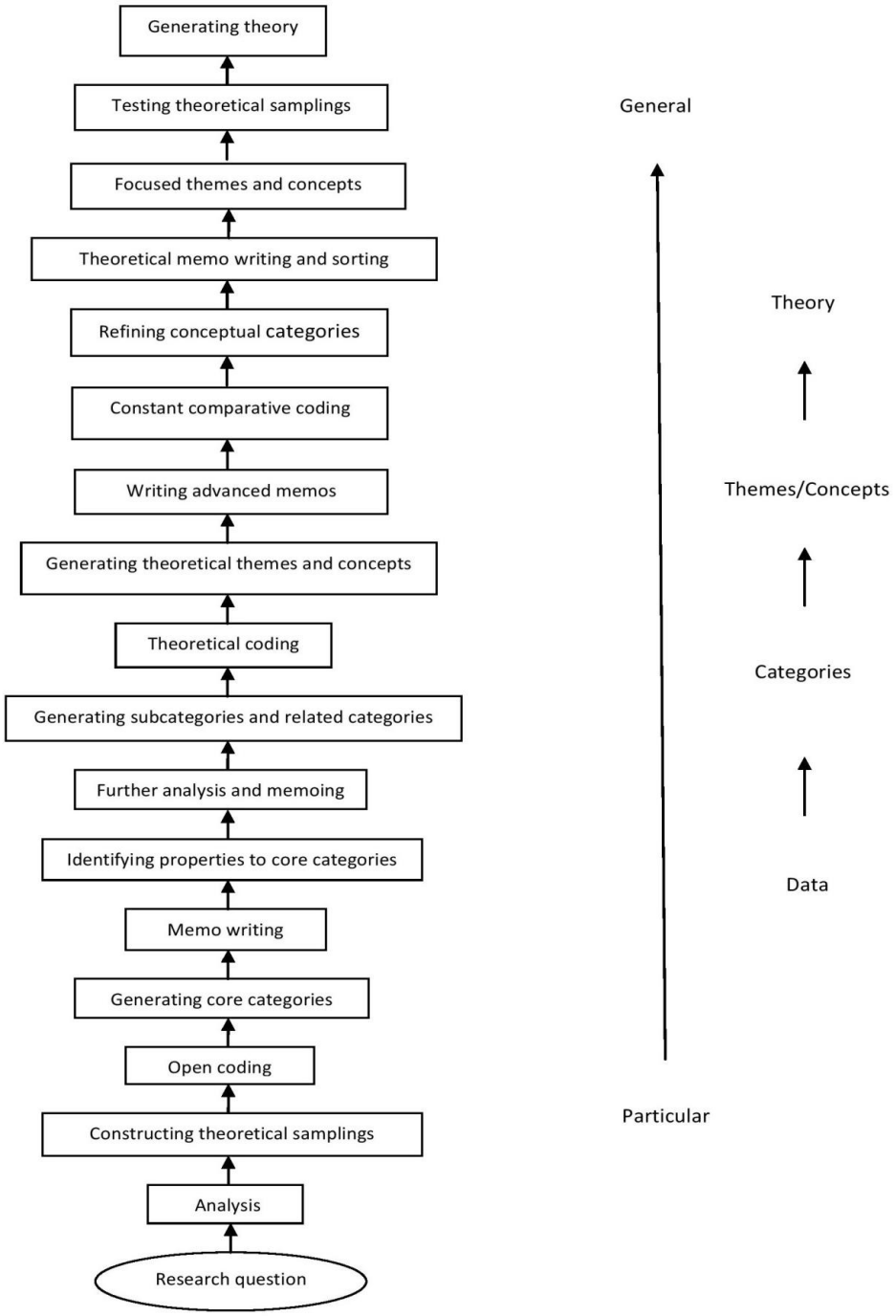

Figure 3.2: Constructivist Grounded Theory process in this research

3.2 Conclusion

When the researcher attempts to explore the relationship between art and knowledge, the question of whether the art conceals any particular reality or true knowledge is considered. Basically GT is an explorative research, when exploring a theory that too in constructivist perspective truth or meaning gets constructed, not discovered. The intersubjectivity of the theorist becomes the central point; the emerging theory is an interaction between the self and the other. Therefore, an art cannot be said to contain or reveal any particular knowledge. It is to be understood that the exegetical and hermeneutical skill of the interpreter who looks at that art is shaped by it. The constructivist GT, in this way, continues to explore the subjective notions of the researcher and keeps him/her active immensely in this analytical discourse. . . GT ''looks back into its past, explores its present, and turns forward to the future.''[38] It is merely abandoned; never completed. This might be the nature of any constructed human theory.

[38] Charmaz, *Constructing grounded theory*, 338.

4

DATA ANALYSIS AND DISCUSSIONS

Ye that are of good understanding, note the doctrine that is hidden under the veil of the strange verses!
-Dante Alighieri, The Divine Comedy

The analysis proceeds in three stages, as described in the last chapter. The analyst categorizes the textual data into two categories, based on the theme of the first two objectives set for the study. Two categorized themes are identified as two core categories. The two core categories, Narrative techniques and Knowledge architecture and Management, are thus analyzed in the first two stages, respectively. Once the core categories are identified by the analyst, the open coding of the analysis is completed. In the third stage, based on the third objective, the analyst examines the connection between the evidence developed in the first two stages of the analysis and constructs a general theory that restructures the existing KM practices.

4. 1 Art of Narration: Methodological Realities in the Craft of Mahābhārata

Why is Mahābhārata exceptional in terms of narrative? It is not possible to respond to this question without referring to the art of narration, comprising of methodological realities, techniques of narration and objective correlatives, as employed by the epic poets in storytelling. Some elements can be relied upon mainly to describe the narrative techniques of the epic; mediacy of presentation and spatio-temporal perspectives in storytelling are

thus considered, along with an understanding of the particular narrative techniques and devices. Several components form a part of these elements like the thematic texture of the story, style of description and dialogues, spatial and temporal boundaries, living-perspectives and conflicts, rhythmic unity and growth, poetic implications and so on. The effort here is to reveal the methodological realities in the craft of Mahābhārata with the aid of these narrative elements. This thought progress from 'how it is', rather than 'what it is'.

Mahābhārata is a 'toolbox of methodologies'.[1] Many methods, in many ways, blend in with the narrative method of the Mahābhārata. Therefore, the narrative of the poem becomes the narrative history; the origin, growth, and evolution are described in detail as part of the narrative itself. The narrative tells us not only who first told the story where and to whom, but how long, in what context it was written, and how the story evolved over time. When all the traditional narratives employed to view the knowledge systems of that era are amalgamated with this poetic tale, it becomes a narrative of narratives. The concept of Vyāsa here turns out to be that of a narrator of narrators. With regard to the thematic content the epic becomes the theme of themes; it is ancient, legendary, historical, geological, philosophical, religious, socio-political and cultural. In one sense it could be understood as a biography, or an autobiography (The story of Vyāsa is told by Vaiśaṁpāyana, but the Mahābhārata says that it is the words of Vyāsa come out through him). Thus, there is a vast and versatile frame of themes in the epic; a collective record of age old wisdom.

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[1] The metaphor 'toolbox of methodologies' appears to be used by Wendy Doniger. See, *The implied spider: politics and theology in myth*, *lectures on the history of religions*, (New York: Columbia University Press, 1998), 153. The toolbox metaphor first appears in Wendy Doniger's *Women, androgynes, and other mythical beasts* (Chicago: University of Chicago Press, 1982), 5-6.

There are eighteen parvas in Mahābhārata. They are as follows: Ādi, Sabha, Āraṇyaka, Virāṭa, Udyoga, Bhīṣma, Droṇa, Karṇa, Śalya, Sauptika, Strī, Śānti, Anuśāsana, Aśvamedhika, Āśramavāsika, Mausala, Mahāprasthānika and Svargārohaṇa. Each of these has sub-divisions; they too are parvas. These upa-parvas are further divided into adhyāyas. If an Upa-parva doesn't have an adhyāya division, it is deemed as a chapter in itself. Considering The Critical Edition of the Mahābhārata, it contains 18 parvas of 1995 adhyāyas and 73784 ślokas. It doesn't close in to one lakh ślokas. A śloka is a four lined verse of eight syllables each.[2] Even if we add the 6073 ślokas divided amongst the 118 chapters of Harivamśa; an earlier annexure of Mahābhārata, which is no longer one, the one lakh mark cannot be attained. This would be a mere attempt to perfect the number. Apart from the anuṣtubh-ślokas, dīrkhachandas[3] and prose has been employed. The count is structured by adding up thirty-two letters each from such similar parts to the total number of ślokas.

From the descriptions given above, the analyst explains not only the narrative structure of the epic but also how the core category evolves. The analyst relies mainly on three elements to describe the narrative techniques of the epic; mediacy of presentation, spatial and temporal perspectives in storytelling. Thus, the analyst identifies the subcategories 'Mediacy', 'Spatiality' and 'Temporality' from the core category of 'Narrative techniques'.

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2 A metrical form, consisting of four lines of eight syllables each is called Anuṣtubh-śloka.

3 Chandas are the number of syllables in a line in a verse.

4.1.1 Mediacy of Presentation

The mediacy can be understood as a phenomenon by means of which the voice of the narrator, or mediator by which a piece of information or event is communicated to another person. Dialogues, descriptions, embellishments, parables which help in creating a dramatic effect in a story line come under this phenomenon. Therefore, all the objective correlatives that make up a narrative can be considered to fall within the scope of narrative mediation.

The main story of the epic is represented as an inner story that is recollected in a conversation between two persons, who have no direct contact with the epic kernel or poet. The narrator named Ugraśravas stands at the actual narrative position of the epic, with Śaunaka sages being the foremost listeners. Further, the epic progresses through several narratives given by different narrators. Narrators include Vyāsa, Ugraśravas, Vaiśaṁpāyana and Sanjaya; and listeners being Gaṇeśa, Śaunaka, Janamejaya, Dhritarāṣtra and several others. Each narrator finds his own place in the epic, according to the context. Didactic parts are also structured in the same manner; what Bhagavadgīta, Śāntiparva and Viduravākya have imbibed is the conversation of Kṛṣṇa to Arjuna, Bhīṣma to Yudhisthira and Vidura to Dhritarāṣtra respectively. Kṛṣṇa, Bhīṣma and Vidura become narrators here and they give permanent solace to the restless minds of Arjuna, Yudhisthira and Dhritarāṣtra. Such several narrators find place either inside or outside the epic kernel. While Ugraśravas and Vaiśaṁpāyana perform the narration from outside, Sanjaya does it from inside the main plot of the story. Vyāsa, who exists and oversees everything, becomes the narrator of narrators. At the same time, he interferes from inside and outside and also dwells as a character in the story line.

The narrative features of Mahābhārata are notable; the epic follows certain general characteristics throughout the narration. None of the stories in Mahābhārata is narrated unless it is an answer for a question. There is no Mahābhārata in the absence of a person to ask questions. The method to represent any story in Mahābhārata is by a person saying to a third person that someone had said that story. The details of any theme or knowledge system are given as a reply to a question. The method of 'a person to ask' and 'someone else to answer' is one of the main characteristics of this epic. The story, in discussion, is presented in brief, before the narrator enters into its details. The whole of Mahābhārata, the main events of the eighteen parvas, is briefed in the words of Ugraśravas in the Parvasaṁgraha of Ādi. This is followed by the narrator entering into the detailed narration. 'First a briefing, further explaining the story according to the interest of the listeners'; Mahābhārata follows this method for every relevant contexts. This art of narration, which expands on the request of the listeners, 'Say, say it in detail', is another feature of narration in Mahābhārata. This situation could be understood by examining the narrative development of Mahābhārata.

One day, Ugraśravas, the son of Lōmaharṣaṇa, surnamed Sauti, reached the forest of Naimiṣa. He approached the twelve years long sacrifice ground of sage Saunaka. Further, he spoke out to the audience of sages, clarifying his history:

> Having heard the diverse sacred and wonderful stories which were composed in his Mahābhārata by Kṛṣṇadvaipāyana, and which were recited in full by Vaiśaṁpāyana at the Snake-sacrifice of the high-souled royal sage Janamejaya and in the presence also of that chief of Princes, the son of Parīkṣit, and having wandered about, visiting many sacred waters and holy shrines, I journeyed to the country venerated by the Dwijas (twice-born) and called Samantapanchaka

> where formerly was fought the battle between the children of Kuru and Pāṇḍu, and all the chiefs of the land ranged on either side. Thence, anxious to see you, I am come into your presence.[4]
>
> The sage replied:
>
> The Purana, first promulgated by the great Rishi Dwaipayana, and which after having been heard both by the gods and the Brahmarṣis was highly esteemed, being the most eminent narrative that exists, diversified both in diction and division, possessing subtile meanings logically combined, and gleaned from the Vedas, is a sacred work. Composed in elegant language, it includeth the subjects of other books. It is elucidated by other Śāstras, and comprehendeth the sense of the four Vedas. We are desirous of hearing that history also called Bharata, the holy composition of the wonderful Vyasa, which dispelleth the fear of evil, just as it was cheerfully recited by the Rishi Vaiśaṁpāyana, under the direction of Dvaipāyana himself, at the snake-sacrifice of Rāja Janamejaya?[5]

The Mahābhārata is the product of this wish of the Śaunaka sages. Thus, Ugraśravas started the narration of Mahābhārata, which he had structured into eighteen parvas, for the sages assembled there. There is a reflection of the vast narrative history of oral transmission. The father of Ugraśravas, Lōmaharṣaṇa, was a narrator of such a stature. He was famous by the name 'Lōmaharṣaṇa', because he created goose bumps amongst listeners with this narration of ancient stories. Śaunaka, who had listened to

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4 See, The Mahābhārata of Kṛṣṇadvaipāyana Vyāsa. Vol. 1. Trans. Kisari Mohan Ganguli. (New Delhi: Munshiram Manoharlal Publishers, 1993), 1 (Ādiparva, section I).

5 See, The Mahābhārata, Vol. 1, Trans. Ganguli, 2 (Ādiparva, section I).

the narration of Lōmaharṣaṇa, earlier, asks in such a manner in the beginning:

> Child, thy father formerly read the whole of the Puranas, O son of Lōmaharṣaṇa, and the Bharata with Kṛṣṇadvaipāyana. Hast thou also made them thy study? In those ancient records are chronicled interesting stories and the history of the first generations of the wise men, all of which we heard being rehearsed by thy sire. In the first place, I am desirous of hearing the history of the race of Bhrigu. Recount thou that history, we shall attentively listen to thee.[6]

The reply of Ugraśravas is also notable:

> By me hath been acquired all that was formerly studied by the high-souled Brahmanas including Vaiśaṁpāyana and repeated by them; by me hath been acquired all that had been studied by my father.[7]

Thereby, Ugraśravas also clarifies the sources through which he had learnt Mahābhārata in this occasion. By revealing a great tradition of orality, Ugraśravas states here that the origin, growth and development of this epic are in that tradition. Here, Ugraśravas is not just reading out the 'Bhāratasaṁhita', written by Vyāsa, for the Śaunaka sages but he is trying to reproduce the poem from his memory, which he had heard being recited by Vaiśaṁpāyana, the disciple of Vyāsa to whom Vyāsa had sung the epic poem in the first place. Thus, Mahābhārata entirely follows a narrative technique, which is a transfer from memory to memory through words. This method of orality is yet another beautiful and peculiar characteristic which could be found from the epic.

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6 See, The Mahābhārata, Vol. 1, Trans. Ganguli, 44 (Ādiparva, section V).

7 See, The Mahābhārata, Vol. 1, Trans. Ganguli, 44 (Ādiparva, section V).

Further, Ugraśravas, on entering into his narration of Mahābhārata story, doesn't disclose the Kuru-Pāṇḍava story; the epic kernel. He travels back with time to explain in detail the origin of the universe beginning with earth, wind, moon, fire, cardinal directions, seasons, months, night, day etc. and the birth of one of the Prajāpatis Dakṣa. After presenting each incident briefly, the story is explained in detail according to the request of the listeners. When Ugraśravas says that Āstika saved the serpents from the Serpent-sacrifice of King Janamejaya, Śaunaka asks him to explain the story in detail. With that, the story is presented, in detail, by Ugraśravas; the story of Kadru and Vinata are said in the background. The Anukramaṇikaparva, Parvasaṁgrahaparva, Pauṣyaparva, Paulōmaparva and Āstika parva are narrated by Ugraśravas himself; the Śaunaka sages are listeners here. But, from Amśāvataraṇaparva the narration is handed over to Vaiśaṁpāyana and Janamejaya becomes the listener. With this, Vaiśaṁpāyana becomes the main narrator and Janamejaya, a good listener, who keeps on asking questions. This is the transmigration of the chief narrator Ugraśravas by another narrator named Vaiśaṁpāyana; because even then, Ugraśravas remains at the helm of affairs. It is only from within Ugraśravas that Vaiśaṁpāyana can perform his narration. The narration expands in the method of 'first a briefing; followed by the explanation'. When Vaiśaṁpāyana glorifies the rule of Duṣyanta, while briefing one of the most famous Upākhyāna of Mahābhārata; the Śakuntalōpākhyāna, Janamejaya says by interrupting:

> I desire to hear from thee about the birth and life of the high-souled Bharata and of the origin of Śakuntala. And, O holy one, I also desire to hear all about Duṣyanta-that lion among men-and how the hero

obtained Śakuntala. It behoveth thee, O knower of truth and the first of all intelligent men, to tell me everything.[8]

Further, Vaiśaṁpāyana says the story of Duṣyanta and Śakuntala, in detail, from the birth of Bharata, his ascendancy as emperor and how he set the stage for the Bharata-dynasty. Refer to the story of Yayāti; when Vaiśaṁpāyana presents in brief the story of Yayāti, beginning with his children from Devayāni and Darmiṣta and he enjoying the material pleasures of life for so many years with the youth bartered from his son for his old age, Janamejaya asks him to narrate it in detail. Thus, the story is narrated in detail by Vaiśaṁpāyana. Further, the story of Vyāsa, who saved the Kuru-dynasty by inseminating the wives of Vichitravīrya upon the request of his mother, is narrated. But when, Vaiśaṁpāyana says that Dharma got born in the womb of a śūdra woman, free from bodily afflictions, as Vidura due to a curse by Sage Maṇḍavya, Janamejaya wishes to hear that story in detail. Therefore, Vaiśaṁpāyana explains the sub-story of that curse. From beginning to the end, hundreds of such sub-stories are explained in Mahābhārata by the narrators for the curiosity of the listeners, even when they didn't have any connection with the central plot.

When Vaiśaṁpāyana briefs the story of Pāṇḍavas and Kunti fleeing from the lac house burnt for the destruction of Pāṇḍavas due a conspiracy by Dhritarāṣtra and Duryodhana in Jatugrihaparva, Janamejaya requests to narrate the story in detail. With this, the narrator gets in to the explanations. Part of Digvijaya is also notable in this fashion; when Vaiśaṁpāyana says that, "Arjuna, the son of the chastiser of Paka then brought under subjugation that direction (the North) which was presided over by the Lord of treasures. And Bhīmasena overcome by force the East and Sahadeva the

[8] See, The Mahābhārata, Vol. 1, Trans. Ganguli, 147 (Ādiparva, section LXIX).

South, and Nakula, O king, acquainted with all the weapons, conquered the West"[9], Janamejaya interferes and asks to explain the Digvijaya of Pandavas. Thus, the narrator enters into the detailed description of the Digvijaya.

Āraṇyakaparva, containing several Upākhyānas, is also notable for this narrative style. Certain events become relevant here. Refer to Nalōpākyāna; it is neither Ugraśravas nor Vaiśaṁpāyana who takes up the role of the chief narrator. The narration of the detailed story of Nala and Damayanti is done by the sage named Brahadaśva. Yudhisthira asks Brahadaśva, who had come to meet him during his exile, after describing his past life:

Is there a king on this earth who is more unfortunate than myself? Hast thou ever seen or heard of any such before? To my thinking, there is no man more wretched than I am.[10]

As an answer to this question, Brahadaśva narrated the story of a king who had suffered more than Yudhisthira; this is Nalōpākyāna. Here you can see how Vaiśaṁpāyana swaps his role as the narrator to Brahadaśva. Yudhisthira becomes the main listener here. Further, in Tīrthayātraparva the duo of Vaiśaṁpāyana and Janamejaya retains the duty of taking forward the narration. Further, the portions including Agastyopākyāna, Riṣisringōpākhyāna, Sukanyōpākhyāna, Mānthāthopākhyāna, Janthupōkhyāna, Aṣtravakrakatha, Yavakrītakatha and Narakāsurakatha are narrated by the sage Lōmaśa, whereas Kārtavīryopākhyāna is narrated by Ākratavraṇa. In this manner, sage Mārkaṇḍheya is also a main narrator of Āraṇyakaparva.

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9 See, The Mahābhārata, Vol. 1, Trans. Ganguli, 56 (Sabhāparva, section XXV).

10 See, The Mahābhārata, Vol. 1, Trans. Ganguli, 114 (Vanaparva, section LII).

The main events in the Mārkaṇḍheyasamasyaparva such as Brāhmaṇamahātmyakadana, the stories of kings like Śibi-Nahuṣa-Indradyumna and Āngirasopākhyāna is performed by sage Mārkaṇḍheya himself. Further, in the Rāmopākhyānaparva, which narrates the story of Rāma and Rāvaṇa, and Sāvitriōpākhyāna which narrates the story of Satyavān and Sāvitri is again narrated by Mārkaṇḍheya. Vaiśaṁpāyana opines that through such sub-stories, Brahadaśva and Mārkaṇḍheya were trying to console and persuade the king Yudhisthira, who was suffering intensely during his exile. It is over the questions, rising out of the curiosity of Yudhisthira, that each sub stories expanded. As a listener, Yudhisthira continuously creates the possibility of expanding the story by asking situational questions. Another important portion, the Mudgalōpākhyāna, is directly narrated by Vyāsa himself. Other important portions such as Yakṣaparīkṣa, Kuṇḍalāpaharaṇa of Karṇa and the story behind the birth of Karṇa are explained by the duo of Vaiśaṁpāyana and Janamejaya. Keeping aside Ugraśravas and Vaiśaṁpāyana, one can find the direct act of narration by several sub narrators such as Brahadaśva, Mārkaṇḍheya and Vyāsa in Āraṇyakaparva.

This is followed by Virāda parva; sub-narrations are limited there and therefore narrators too. It is found that the duo of Vaiśaṁpāyana and Janamejaya narrates this portion completely. But upon reaching the Udyogaparva, Vidura, Sanatsūjāta, Nārada, and Bhiṣma are proclaimed to the role of chief narrators. Vidurahitavākya; by Vidura to Dhritarāṣtra, Sanatsūjātavākya; Sanatsūjāta to Dhritarāṣtra, Gālavacarita; by Nārada to Duryodhana in the presence of Dhritarāṣtra and Ambōpākhyāna; Bhīṣma to Duryodhana are thus narrated.

Bhīṣmaparva succeeds this; the Kurukṣetra war and its descriptions are its themes. The Kurukṣetra war, spanning for eighteen days, and

Bhagavadgīta are narrated in the conversation between Dhritarāṣtra and Sanjaya. This narration is a response of Sanjaya to the question of Dhritarāṣtra about what transpired between his sons and the children of Pānḍu during the war. If not for this question, there wouldn't be any descriptions. The main events of the war are first briefed by Sanjaya and further the narrator moves towards the details. Here, Sanjaya takes over the helm of affairs from Vaiśaṁpāyana. The portion from Bhīṣmaparva to the ones in Sauptikaparva, that narrates the death of Duryodhana, is narrated by Sanjaya. Dhritarāṣtra is the listener here. Droṇaparva, Karṇaparva and Śalyaparva are included in this narration. In the end, by narrating the death of Duryodhana in Sauptikavadaparva, the narrator takes leave after informing Dhritarāṣtra that ''after thy son had ascended to heaven, I became afflicted with grief and the spiritual sight which the Riṣi gave hath been lost by me!''[11]

The narration of Bhagavadgīta is also notable here; Bhagavadgīta, comprising of around 700 (as per critical edition 974) ślokas divided into eighteen chapters, has found a place in the beginning of Bhīṣmaparva. Kṛṣṇa is the main narrator of this portion which is adjudged as the conversation between Kṛṣṇa and Arjuna. Neither Vaiśaṁpāyana nor Sanjaya interferes here as a narrator. But it is inside the chief narrator Sanjaya that the narrator Kṛṣṇa resides. As a narrator, Kṛṣṇa is able to imbibe Vedic knowledge and other traditional knowledge systems into Gīta; Arjuna, the listener, also gives a chance for the narrator to explain in detail such didactical contents through his continuous questions.

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[11] Even though sage Vyāsa was about to give the vision to view the war to the blind Dhritarāṣtra, it was decided to be given to Sanjaya up on the request from Dhritarāṣtra.

See, The Mahābhārata, Vol. 3, Trans. Ganguli, 27 (Sauptikaparva, section IX).

The Strīparva is narrated by the duo of Vaiśaṁpāyana and Janamejaya, without any sub-chapters or sub-narrators, by representing the complete brutality of war. Bhīṣma takes over the role of chief narrator when it reaches the Śāntiparva. Śāntiparva is a lengthy conversation between Bhīṣma and Yudhisthira; it expands through the ideas based on Rājadharma, Āpaddharma, and Mokṣadharma. The central theme in Anuśāsanaparva, which should be considered as the continuation of Śāntiparva, is Dhānadharma. Even though Bhīṣma is the main narrator in all these situations, several narrators come forth situationally with Upākhyānas. Refer to Mokṣadharmaparva; several conversations find their place amongst the conversation between Bhiṣma and Yudhisthira such as the one between Bhṛgu and Bharadwaja, Manu and Brahaspati etc. Bhīṣma presents the conversation between Bhṛgu and Bharadwaja to Yudhisthira, from the past, in response to a question asked by Yudhisthira regarding the origin of life and Universe. With this, it is Bhṛgu who responds to this question; that conversation progresses with the descriptions on the qualities of the five elements, the descriptions about life force, the existence and eternity of life, the origin of all objects and the descriptions of four modes of life and their duties. Yudhisthira finds the answers through the responses given by Bhṛgu to Bharadwaja. In the same manner, the conversation between Manu and Brahaspati finds its way as an ancient story which comes in as a response to the question from Yudhisthira on Jñāna-yoga and Vedic teachings. Here, the responses which Manu gives to the questions of Brahaspati, becomes the answers for Yudhisthira too. Bhīṣma tries to recreate a lengthy discourse, which is said to be done by Vyāsa and his son Śuka, when Yudhisthira wishes to comprehend about the origin and end of all creatures, the nature of their meditation, divisions of time and allotted periods of time in each epoch. Hereby, Bhīṣma face each question with a conversation from an ancient story from the past.

Refer to the following ancient discourses narrated by Bhīṣma; the Brāhmaṇa-Senajith discourse; a response to the question on what is the intellectual method to face situations such as death of wife, son, father or loss of wealth, the conversation between Father-Son (Medhavi); the response to the question on what is the good way with which one should tackle time, which runs its course without waiting for anyone, taking in with it the destruction of every creature created, the Ajagara-Prahlāda discourse; the response to the question on what should man do to remain free from all sorrows on earth, the Sringāla (Indra)-Kāśyapa discourse; the response to the question as to what is the solace for man among kinsmen, property and intellect, the discourse between Śakra (Indra) and Prahlāda; the response to the question on the fruits of one's own act, the Bali-Vāsava discourse; the response to the question on what intellectual method should a king, who had been divested of prosperity, must follow on his life on earth, the Sri-Vāsava (Srīdevi-Indra) discourse; the response to the question on what will be the indications of future greatness and future fall of man, the discourse between Jaigiṣavya and Asita; the response to the question on what kind of disposition, what course of duties, what knowledge, and what energy, does one need to succeed in attaining to Brahma which is immutable and which is beyond the reach of primordial nature, the Mrityu-Prajāpati discourse; the response to the question on what is death, the Dyumatsena-Satyavān discourse; the response to the question on how a king should serve his subjects without resorting to violence, the discourse between Yajñavalkya and Janaka; the response to the question on ''which is freed from duty and its reverse, which is freed from every doubt, which transcends birth and death, as also virtue and sin, which is auspiciousness, which is eternal fearlessness, which is Eternal and Indestructible, and Immutable, which is

always Pure, and which is ever free from the toil of exertion''[12], the Indra-Brahaspati discourse (Anuśāsana parva); the response to the question on what is greater than any form of gift. In this manner, Bhīṣma resorts to ancient discourses to answer the questions arising from Yudhisthira. Finally, Bhīṣma takes leave from his position of narrator with his death.

The rather smaller parvas such as Aśvamedha, Āśramavāsika, Mausala, Mahāprastānika, and Svargārohaṇa which follows the Anuśāsanaparva are narrated by the duo of Vaiśaṁpāyana and Janamejaya itself. The 'Anu-gīta', found in Aśvamedhaparva, is structured similar to the Kṛṣṇa-Arjuna discourse in the Bhagavadgīta. Here, Kṛṣṇa and Arjuna enter as the chief narrator and listener respectively. In the Svargārohaṇaparva, Vaiśaṁpāyana retires from the position of narrator by handing over the helm of affairs to the first narrator Ugraśravas.

These methods and narrative devices of Mahābhārata lead to another narrative speciality. Mahābhārata becomes authentic as a narrative in the act of the narrator being the witness. Kṛṣṇadvaipāyana, who witnessed the story of Kuru-Pāṇḍavas and has been a witness to seven generations from Śantanu to Janamejaya, is the chief creator of Mahābhārata. This witnessing underlines the right of narrator to narration and the authenticity of the narration from being questioned. Also, it is notable that Vaiśaṁpāyana, who narrates the Mahābhārata story, does so in the presence of Kṛṣṇadvaipāyana, the chief creator. The context of the Kurukṣetra war is also relevant here; first of all, the role of the narrator, Sanjaya, as the witness is underlined here, Vyāsa gives the divine vision, to see the unseen, to him, and thus the descriptions which Sanjaya gives to Dhritarāṣtra becomes the testimony of the witness. Thus, like Śakuntala,

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12 See, The Mahābhārata, Vol. 4, Trans. Ganguli, 34 (Śāntiparva, section CCCXI).

Nārada and Bhīṣma several teller characters present their testimonies as the narrator. Ambopākhyāna is a testimony of Bhīṣma. The testimonies of Bhīṣma in Śāntiparva become relevant in the same manner. Thus, the term Itihāsa (thus it happened) becomes valid, literally, through these testimonies.

4.1.1.1 Person, Perspective and Mode

The mediacy of presentation discussed in this poem, mainly, considers three narrative elements; person, perspective and mode of narration. These elements have already been presented by Franz K. Stanzel, respectively as, ''in the form of the following oppositions of distinctive features: identity and non-identity of the realism of the fictional characters and of the narrator (first-/third-person narration); internal and external perspective (limited point of view/omniscience); teller-character and reflector-character as agents of transmission (telling/showing).''[13] However, these binary oppositions can't be used here exactly as they are, but with certain changes; thus the elements are treated as categories, and not merely as binary oppositions. When the elements/categories- person, perspective and mode are linked to the narrative of the epic, the following sub-elements/categories are derived: identity of the fictional characters as the narrator and the audient (person); mundane or material, ethical or dharmic and the transcendental or metaphysical viewpoint of the epic (perspective); and teller-character and reflector-character as agents of transmission (mode).

It is evident that the related categories 'Person', 'Perspective' and 'Mode' are derived from the subcategory of 'Mediacy'. Subsequent related categories 'Narrator' and 'Audient' are then generated from the related

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[13] See, Franz K. Stanzel. ''Teller-characters and reflector characters in narrative theory,'' *Poetics today*, Vol. 2:2, (Duke UP, 1981), 5. https://www.jstor.org/stable/1772187.

category 'Person'. 'Perspective' is divided into 'Mundane or Material', 'Ethical or Dharmic' and 'Transcendental or Metaphysical', and 'Mode' of presentation into 'Teller-character' and 'Reflector-character'. V. S. Sukhtankar has already analyzed the epic from three different perspectives. The analyst thus adapts his viewpoints here as another source of data to analyze the 'perspective' of the epic; note that these observations were recorded earlier as part of the review of literature. No other point of view is sought as his views are more apt to present the 'perspective' of the epic.

The thought that each character in the epic is either a teller or a listener prompts us to analyze the narrative element of the 'person' as binary oppositions of narrator and audient. But at the same time, there is an exceptional situation in the narrative in which a narrator becomes an audient over time, and an audient becomes a narrator. Vyāsa (narrator) narrates the epic story to his five disciples, including Vaiśaṁpāyana (audient), and later Vaiśaṁpāyana (narrator) narrates the entire Mahābhārata story he learned from Vyāsa to King Janamejaya in front of Vyāsa (audient) at the time of Sarpasatra. Later, Ugraśravas, who was one among the audience who listened to Vaiśaṁpāyana, narrated the Mahābhārata for Śaunaka sages with some changes of his own at Naimiṣāraṇya. There is also a possibility that a person in the audience listening to Ugraśravas may tell this story to another in a different way; it should be kept in mind that there is an unknown narrator in the narrative of the epic, and that narrator narrates the entire epic story to us, including Ugraśravas's arrival in Naimiṣāraṇya from the venue of Sarpasatra.[14]

When analyzing the element 'perspective' based on the Mahābhārata, it is necessary to understand what exactly the feature, the no-

[14] The observation of the C. V. Vaidya, regarding the narrators of the epic, recorded in the review Chapter is relevant in this situation.

one-sidedness, of the epic is. The Mahābhārata offers all the possibilities for the reader to construct meaning according to their own awareness. On the material or mundane perspective, ''it is the lively story of a fierce war of annihilation said to be waged between two families of cousins, which ends in the victory of one of the claimants to the throne, a story which in all probability is not entirely an invention but has some historical basis, which is however, entirely in the background.''[15] On the ethical or dharmic perspective, ''the war is regarded as a conflict between the principles of 'Dharma' and 'Adharma', the Pāṇḍavas standing for 'Dharma' and the Kauravas for 'Adharma', they being the incarnations of the 'Devas' and the 'Asuras' respectively, and the war ends in the victory of 'Dharma' (yato dharmas tato jayah).''[16] Finally, there is, the transcendental or metaphysical view-point:

On this transcendental plane, which is the view-point beyond 'Dharma' and 'Adharma', beyond good and evil, the epic develops what may be termed the philosophy of the self, which may properly be regarded as an attempt at a synthesis of life. In doing this, the epic poets stage a war between the higher self and the lower self of man, symbolized by the family of cousins, who are fighting for the sovereignty over the kingdom of the body. In this conflict the Superman (Arjuna) under the guidance of the Superself (Sri Kṛṣṇa), acquiring insight into the nature and character of his own self and realizing the fundamental identity between the individual self and the Superself, cleaves with the sword of knowledge his own ignorance, manifested in the shape of all the illegitimate desires and doubts, passions and prejudices, ideas and idiosyncrasies, which had crystallized round him in the course of his separate existence and which he had falsely considered as

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15 See, V. S. Sukhtankar, *On the meaning of the Mahābhārata* (Delhi: Motilal Banarsidass publishers, 2016), 121-122.

16 Sukhtankar, *On the meaning of the Mahābhāratha,* 121-122.

innately and intimately belonging to himself, as an inalienable and indivisible part of his own personality, his own individuality, his own being.[17]

The teller and reflector modes are two different realizations of the mediacy of presentation. The main function of the teller-character is ''to tell, narrate, report, to communicate with the reader, to quote witnesses and sources, to comment on the story, to anticipate the outcome of an action or to recapitulate what has happened before the story opens.''[18] The reflector characters perform differently from this, their ''function is to reflect, i.e., to mirror in his consciousness what is going on in the world outside or inside himself. A reflector-character never narrates in the sense of verbalizing his perceptions, thoughts and feelings, since he does not attempt to communicate his perceptions or thoughts to the reader.''[19] Therefore, in narrative transmission, the teller and reflector modes represent the narrative realizations of telling and showing, respectively: ''on the one hand (teller mode) the process of narrative transmission may even form part of the story, mediacy thus being one of the many thematic strands of the narrative, and on the other hand (reflector mode) mediacy may be dissimulated into immediacy, thus creating the illusion that the reader watches the events and characters of the story in action as if they were part of a dramatically presented scene.''[20] In brief, as Stanzel observes, in the teller mode the narrative transmission is performed by personalized narrators, and in the reflector mode the characters are transformed into a figural medium.

The narrative of the epic is, of course, in the teller (telling) mode. At the same time, the teller characters (narrators) are quite reflective (showing). But, the epic characters do not have a reflective mode as the

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17 Sukhtankar, *On the meaning of the Mahābhāratha,* 121-122.

18 See, Stanzel, ''Teller-characters and reflector characters in narrative theory,'' 6.

19 See, Stanzel, ''Teller-characters and reflector characters in narrative theory,'' 7.

20 See, Stanzel, ''Teller-characters and reflector characters in narrative theory,'' 6.

narrative theorists suggest. The agent of transmission switches to reflective mode through an inward narrative strategy. The epic places a narrator in the original narrative position and later places another narrator within that narrator. Within the second narrator comes a third narrator and within that third narrator a fourth narrator; this strategy continues until the end of the story. Although there are explicit narratorial signals, in a sense it is clear that each event in the epic finds its place in the showing/reflective mode, as a retrospective narrative, along with the other sub-narrators within the first narrator. By understanding the inward narrative strategy in the epic, we can understand how teller characters also act as reflector characters.

4.1.1.1.1 Inward Narration

It all starts with a question, the narrator will then briefly state the respective story from the beginning till the end as a response to this question, further that story is expanded to the maximum according to the curiosity of the listener, the Upākhyānas are then added to the epic kernel with sub-narrators, situationally, without disrupting its cohesion, thereby traverse deep into the past; travel towards future by stating past in present. This is the narrative technique which Mahābhārata follows throughout. The central theme of Mahābhārata, the Kuru-Pāṇḍava story itself proceeds in the similar fashion of the request from the curious listener to the narrator to narrate the story in detail. 'Vyāsa' would refer to this methodology of expanding a briefly stated story line.

A special situation, brought out by Mediacy in the narration of Mahābhārata, is relevant here; several questions of several listeners, many answers of many narrators; one can experience a strange and beautiful world of narration through the Mediacy of the epic. Very rare narrative devices; narrative modes that goes inwards, deeper and deeper. Ugraśravas, the narrator at the Naimiṣa forest, stands at the actual narrative position of the epic. Vaiśaṁpāyana, who comes as the chief narrator at a later stage, not chronologically but in terms of appearance, actually solidifies his position

inside Ugraśravas. Vaiśaṁpāyana, who fills inside Ugraśravas through his narratives, outgrows Ugraśravas as a narrator; becomes the complete controller of the narration. The position of Sanjaya, who comes later, as a narrator is inside Vaiśaṁpāyana; Kṛṣṇa who succeeds him as a narrator finds his position inside Sanjaya. But Kṛṣṇa could not become larger than Sanjaya as a narrator and Sanjaya, too, could not outgrow Vaiśaṁpāyana. Refer to Śāntiparva; several discourses like that of Bhṛgu and Bharadwaja find its place inside the discourse between Bhīṣma and Yudhistira. And this Bhīṣma-Yudhisthira discourse happens inside that of Vaiśaṁpāyana and Janamejaya, whereas the discourse between Vaiśaṁpāyana and Janamejaya takes place within the discourse between Ugraśravas and Saunaka. No matter how many sub-narrators come in, Vaiśaṁpāyana retains his position at regular intervals. As a narrator, Vaiśaṁpāyana gets a special consideration because Kṛṣṇadvaipāyana Vyasa, the narrator of narrators, witnesses his narration at the snake sacrifice of Janamejaya. Finally, the first narrator, Ugraśravas, returns in the eighteenth parva; the Svargārohaṇa, and concludes his narration of Mahābhārata by saying that "I have told you the story that Vaiśaṁpāyana had glorified". Here, we come to acknowledge that it is within the narrator Ugraśravas that all those several sub-narrators such as Vaiśaṁpāyana, Sanjaya, Kṛṣṇa and Bhīṣma reside. In fact, by making Ugraśravas a reflector narrator, all events are reflected in his consciousness as if in a mirror with the sub-narrators. If so, then where is the position of Ugraśravas? Who narrates the arrival of Ugraśravas at Naimiṣa forest to us? We can see that an invisible narrator, as mentioned earlier in this chapter, had efficiently imbibed Ugraśravas inside him.

Figure 4.1 illustrates the inward narrative architecture of the Mahābhārata using the Bhagavadgīta as an example. Along with that, on one side, the presentation of the Bhṛgu-Bharadwaja discourse in the Śāntiparva is also depicted.

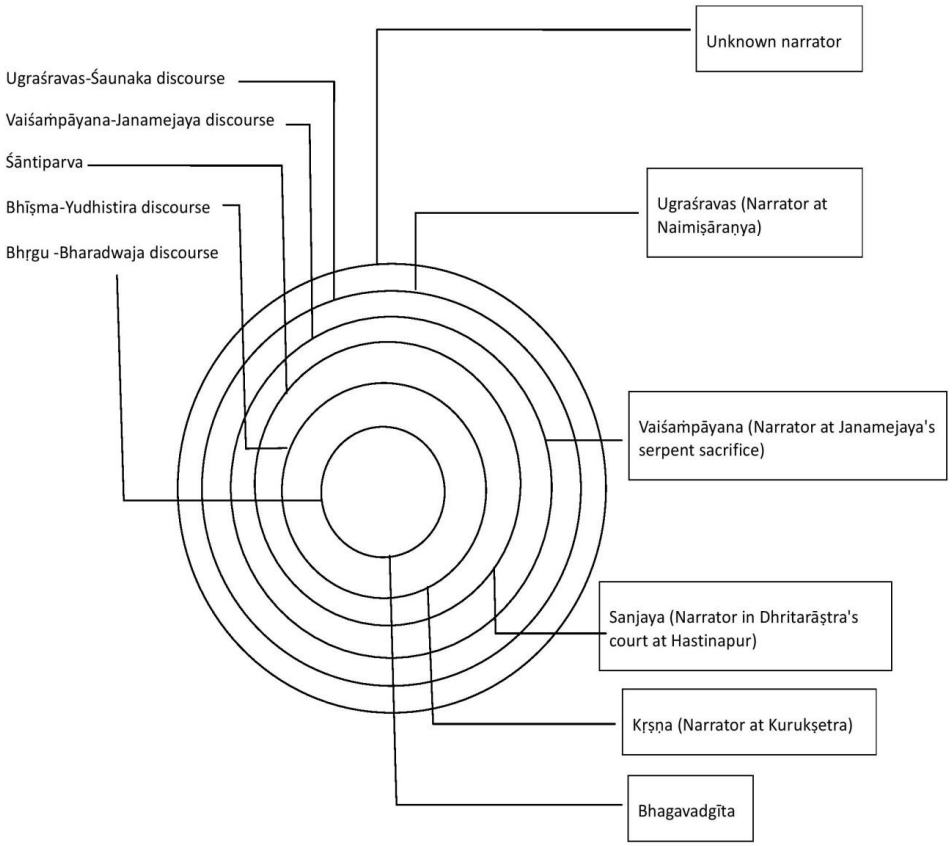

Figure 4.1: The inward narrative architecture of the Mahābhārata
(Arrangement of Bhagavadgīta (right) and Bhṛgu-Bharadwaja discourse in Śāntiparva (left).

In the core category of 'Narrative techniques', the analysis of properties in the subcategory of 'Mediacy' and their related categories are thus completed. Subcategories of 'Spatiality' and 'Temporality' and their properties are further analyzed.

4.1.2 Spatio-Temporal Perspectives

How did the epic poets apply space-time appellations in their narrative? How does it transcend both earthly and material limitations? To understand this situation, the analyst generates two more sub-themes called 'Spatiality'

and 'Temporality' in the core category of 'Narrative techniques'. In the sub-theme 'Spatiality', the analyst identifies three related themes: 'Earth', 'Sky' or 'Heaven' and 'Hades'. Out of these three related themes, the subsequent theme, 'Hyper Spatiality', emerges. The sub-theme 'Temporality' evolved into three related themes: 'Past', 'Present' and 'Future'. Out of these three, the subsequent theme, 'Dissolution of Time', emerges. What follows describes how Space and Time are transformed into the themes of 'Hyper Spatiality' and 'Dissolution of Time', respectively, in the narrative of the epic.

4.1.2.1 Hyper Spatiality

For epic poets, space is not merely an existential reality. Their spatial reality represents a mixed situation that cannot be distinguished as real or unreal; but the physical and the metaphysical, the earthly and the ethereal, both natural and supernatural. The epic story finds its place not only on earth, but in the sky (heaven) and in the hades. It develops, seamlessly, with no borders to its sides, but up and down. When one can reach heaven on a chariot, the journey towards hades is either a fall or seeping into an abyss. In heaven, the characters are gods (devas) with supernatural powers, while in hades they are serpents or others. The characters of the earth are wholly human or the resonance of other natural forces with divine qualities. What, then, is the spatiality imagined by epic poets? The phenomenon of space here becomes a universal state in which humans, gods, animals, birds, insects, worms and other natural forces can move freely without barriers. This particular narrative style makes the spatiality of the epic a hyper spatiality that transcends all geographical boundaries, and encompasses both living and non-living things. Then the concept itself falls in a hyper spatial position when it becomes a state of a mixture of mundane and supernatural powers that can be a part of the whole existence.

4.1.2.2 Dissolution of Time

Mahābhārata is not the creation of a particular era. The contemporary consciousness of several poets over several ages created Mahābhārata. To relate Mahābhārata with a particular period is to commit injustice to the epic. Even archaeologists have not been able to find any strong evidence proving that the Mahābhārata is a historical reality in the same way as it is described in the poem. Other chronological arguments are inferences, certain calculations; they don't have a historical existence. The three stages of the epic; Jaya, Jayabhārata and Bhāratasaṁhita analyzed by historians are relevant here. The core text of 8800 slokas, structured by Vyāsa, begins at the point where the Pāṇḍavas return from exile; this work, perhaps narrated for Yudhisthira, has turned into an epic called Jaya. This epic kernel, at a later stage, was expanded into entire 24,000 ślokas, without further episodes, by Śukāchārya and Vaiśaṁpāyana for Parīkṣit and Janamejaya respectively. This epic, also known as Jayabhārata and Bhāratetihāsa, begins with the story of Manu and ends with the victory of Yudhisthira. In the last stage, this epic was transformed into the present day Mahābhārata, or Bhāratasaṁhita, comprising of around one lakh ślokas, by Lōmaharṣaṇa and Ugraśravas for Saunaka sages.[21] It is made clear that the Mahābhārata epic is the product of a process lasting for several centuries. The Mahābhārata text itself comments on these evolutionary stages. These historical evidences prompts one to consider the period of thousand one hundred years beginning from the later Vedic age, BCE 600 to CE 500, as the time period of Mahābhārata text. The earliest epigraphical reference in the 6th century, Śatasahasrīsaṁhita on the Khoh (Satna District, Madhya Pradesh) Copper-

[21] See, R. V. Vaidya, *A study of Mahābhārata: A research* (Poona: 1967), 11, cited in P. Gupta and K. S. Ramachandran, *Mahābhārata: myth and reality, differing* views, ed. S. P. Gupta and K. S. Ramachandran (New Delhi: Agam Prakashan, 1976), 3.

Plate inscription, approves that by then Mahābhārata had attained its complete growth. No such efforts withstand, historically, to take up the time period of Mahābhārata five thousand years from now by taking the Rg-Veda period way back in the past to place the later Vedic age much before BCE 1000. A linguistic approach, which can clearly identify the age of syllables that entered into the Mahābhārata epic at different eras, can suggest the time period of each addition; but this method is also not enough to accurately determine the time period which the epic represents. If so, this question regarding the time period of Mahābhārata will have no meaningful existence.

In a sense, the Mahābhārata epic is an experiment of the art of narration on time. The Mahābhārata poets created a new epic age by fabricating the ancient Vedic age. The existent histories of that time period were glorified in the past or the future, away from the direct access of historians. The imagination of the epic poets traversed to the past and future from the present. A narrative technique, which entwined the all three tenses (times), was followed throughout the epic. How? The story teller named Ugraśravas is the narrator in the present, one who performs the actual act of narration, whereas the other narrators and listeners are the representatives of some uncertain past. The narrative style, which travels into the unknown chambers of time and from there to the uncertain future, clarifies that the main narrators Ugraśravas, Vaiśaṁpāyana and Vyasa are the representatives of present, past and future respectively. Vyāsa, who travels before time, is a narrator of superhuman powers; and a far-sighted being. He establishes his far-sightedness by making his presence felt several times in the storyline as a teller character. The narrator, Vyāsa, becomes the controller of future. It is also notable that this narrator is the savior of the Kuru dynasty, who protected its future through insemination. In a way, Vyāsa is a narrator who

exists as a symbol of future. In a very famous event in Bhagavadgīta, Kṛṣṇa says:

> Beings are unmanifest in their beginnings, manifest in the middles and unmanifest again in their ends, O Bhārata (Arjuna), what is there in this for lamentation? (II: 28)[22]
>
> I, O Guḍākeśa (Arjuna), am the self seated in the hearts of all creatures. I am the beginning, the middle and the very end of beings. (X: 20)[23]
>
> ''The world is a living whole, a vast interconnectedness, a cosmic harmony inspired and sustained by the One Supreme.''[24] This is the manifestation of Vyasa's concept of time. 'Time matures everything. Strength, intellect and insight are formed when the path of time falls at its place. Time is the source of every living being. It is the cosmic seed. Time is the only one which takes out everything from us.' Kṛṣṇa proclaims that he is time; past, present and future. That the soldiers assembled there are dead indeed. This situation should be understood on the basis of the mysterious relation between Vyāsa and Kṛṣṇa. Kṛṣṇadvaipāyana Vyāsa is the creator Nārāyaṇa himself. Krishna is also an incarnation of Viṣnu-Nārāyaṇa.

Refer to Śāntiparva; it is from several past discourses that Yudhisthira finds the answer for each of his questions. It is Yudhisthira's preparation for the future as a proposed ruler. Present (Yudhisthira) finds the answer to the future from the past (Prior discourses). The narrator Bhīṣma

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22 S. Radhakrishnan, *The Bhagavadgīta* (New Delhi: HarperCollins, 2004), 111. Originally published in 1948.

23 Radhakrishnan, Bhagavadgīta, 262.

24 Radhakrishnan, Bhagavadgīta, 262.

becomes a tool here to unite the three times. It is notable, here, that how Dhritarāṣtra briefs the past in the present in Dhritarāṣtravilāpa of Adi. This portion which should have found a place at the end of narration, after the war, finds a place at the beginning of the narration. This lamentation of Dhritarāṣtra, structured in post-facto perspective, provides a concise form of the Mahābhārata story to the listeners. The words of Sanjaya, consoling Dhritarāṣtra, give stress to the future. Sanjaya says:

> Existence and non-existence, pleasure and pain all have Time for their root. Time createth all things and Time destroyeth all creatures. It is Time that burneth creatures and it is Time that extinguisheth the fire. All states, the good and the evil, in the three worlds, are caused by Time. Time cutteth short all things and createth them anew. Time alone is awake when all things are asleep: indeed, Time is incapable of being overcome. Time passeth over all things without being retarded. Knowing, as thou dost, that all things past and future and all that exist at the present moment, are the offspring of Time, it behoveth thee not to throw away thy reason.[25]

The main event of the epic, the Kurukshetra war, finds its place as the deconstruction of the past memories of the narrator; a war of eighteen Akṣauhiṇis; 2,18,700 people makes one Akṣauhini (21870 chariots, 21870 elephants, three times the number (65610) of horses and five times the number (109350) of foot soldiers). If so, the Kurukshetra is a war in which around four million (39, 36,600) people participated according to the descriptions in the epic. A nation with a two hundred million population can

[25] See, The Mahābhārata, Vol. 1, Trans. Ganguli, 14 (Ādiparva, section I).

only assemble such a big army.[26] It was never possible for the Indian population to surpass two hundred million before the British period. Thus the poets place the epic in the future, far from reality. One can find a cyclic narration, connecting the three times in a circle throughout the epic unlike the one dimensional linear presentation. Why does Mahābhārata represent time in this manner? The intention is very clear; it might be due to a conscious effort of the epic poets to make this creation an eternal one that they have represented time in this manner. According to Indian puranic tradition, Vyāsa, the creator of the epic, is immortal; one who had outdone time. If so, Mahābhārata is a work which tells the story of a time unknown by a creator belonging to an unknown era. Thus, time is only a metaphor for the epic poets. An unconscious intuitive instinct to exist beyond time would have been inherent to epic poets. In a sense, Mahābhārata is the manifestation of the Upaniṣadic knowledge to exist beyond time and laws of nature. It is quite normal that time is irrelevant in their poetic repertoire which is based on Vedic tradition.

The process of generating properties related to the narrative of the epic is completed here. What follows is an overview of the subcategories, related categories and subsequent related categories generated in the core category of 'Narrative techniques'. When categorizing data by theme, sub-themes, related themes and subsequent related themes are formed in each core category. The hierarchical structure of code is generated in this way and the codes reveal different dimensions of the phenomenon that the data represents. Theoretical codes are formed at this stage of analysis, and they can serve as conceptual connectors that help develop the relationship between theoretical categories and their properties. It thus leads to certain

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[26] See, D. D. Kosambi, ''Social and economic aspects of the Bhagavadgīta,'' *Myth and reality: Studies in the formation of Indian culture* (Bombay: Popular Prakashan, 1962), 12-13.

important theoretical realizations. Further, the analyst generates constant comparative codes that provide useful evidence for testing tentative theoretical samplings. Constant comparative coding progresses by imbuing open and theoretical coding and thus constructs a theory.

- Narrative techniques: It consists of three subcategories; 'Mediacy', 'Temporality', and 'Spatiality'. The subcategory of Mediacy is further classified into three related categories: 'Person', 'Perspective' and 'Mode'. These three related categories are then classified as 'Narrator' and 'Audient' (Person), 'Mundane' or 'Material', 'Ethical' or 'Dharmic' and the 'Transcendental' or 'Metaphysical' (Perspective), and 'Teller Character' and 'Reflector Character' (Mode), respectively. Franz K. Stanzel's observations were helpful to explain the subcategory of Mediacy at this stage and the observations of V. S. Sukhtankar were also used here to describe the related category of 'Perspective'. The subcategory 'Spatiality' is classified into three related categories: 'Earth', 'Sky' or 'Heaven' and 'Hades'. Out of these three related categories, the subsequent related category, 'Hyper Spatiality', emerges. The subcategory 'Temporality' is classified into three: 'Past', 'Present' and 'Future'. Out of these three, the subsequent related category, the 'Dissolution of Time', emerges. These subcategories of 'Mediacy', 'Temporality', and 'Spatiality' were evolved accidentally while the content was analyzed.

4.1.3 Findings and Conclusion

The progress of the research so far needs to be summarized in order to analyze the major findings in the narrative of the Mahābhārata.

What do we call the Mahābhārata tradition? How to understand the cultural transmission of the Mahābhārata? How did it evolve over time? Why does the epic have such a fluid and dynamic nature? How the analyst responds to these questions is important in understanding the narrative of the epic. The analyst was already able to present this epic as a 'dynamic living library,' by setting the background and context of the research. Especially in the second chapter, the analyst reviews the literature on the epistemological aspects of the Mahābhārata and explains how it remains an epitome of the Indian epistemological tradition, incorporating different knowledge from different eras. The observations of some of the Mahābhārata scholars recorded in the review chapter itself can be analyzed in relation to this. Macdonell hails Mahābhārata as an 'Encyclopedia'. Norman Brown calls it a 'Cultural encyclopedia'. As far as Doniger and Rajagopalachari are concerned, they understand this expansive tradition of Mahābhārata by comparing it to the functions of 'Wikipedia' and 'National library'. For Monier Williams, it seems like an 'Encyclopedia' and 'Thesaurus' at the same time. For Gurcharan Das, Mahābhārata is like a 'Virtual encyclopedia.' And Sukhtankar called it the 'Book of books'. Along with stressing the diversity of knowledge imbibed in Mahābhārata, all these observations give us a real view of the epic evolving over the course of centuries, into an archive or a preservation center. In this sense, the epic transforms as a way to preserve and disseminate the produced knowledge and ideas. It's evolved that way, like a KM system. It is from this epistemological background of Mahābhārata that the narrative of the epic is to be understood.

The above observations make it clear that the epic is not merely stories, but also the medium for preserving and disseminating knowledge. If so, how can we understand the techniques of the epic poets in storytelling?

On the basis of the following narrative model, we can try to validate the evidence generated from the core category of 'Narrative techniques':

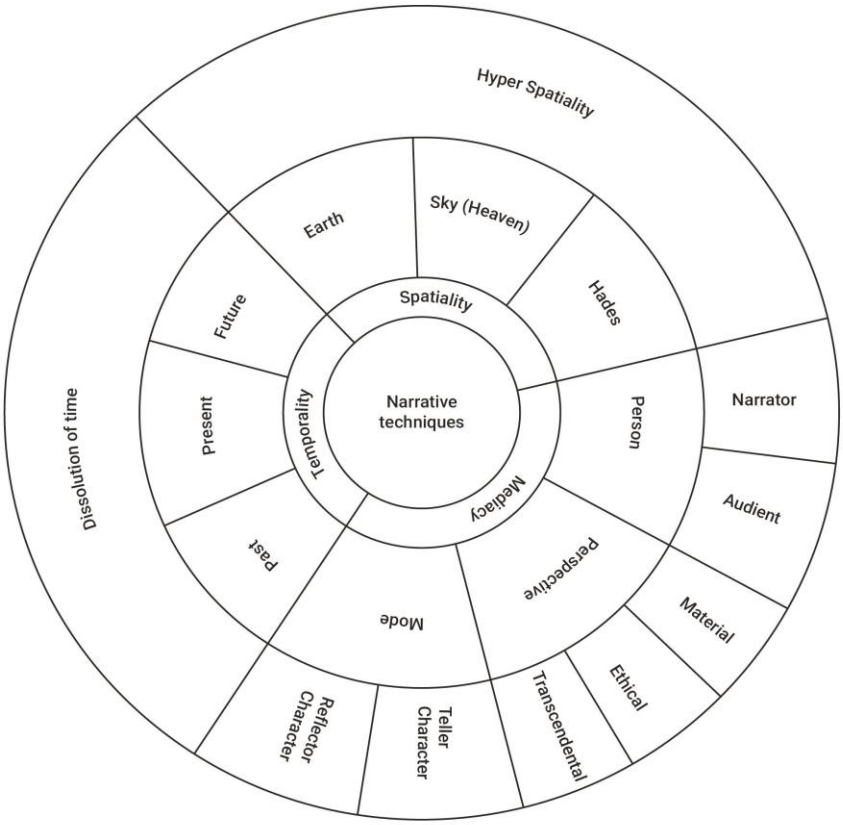

Figure 4.2: Conceptual model of Narrative techniques in the Mahābhārata

- Each character in the epic is either a narrator or an audient. The same character who becomes the audient is later seen shifting his position as the narrator. The audient then becomes the narrator as he was a good listener to that particular story in the first place. Thus, a person who is a listener today becomes a narrator, on the next. This divisional narrative strategy of either the narrator or the audient can be understood as the dissemination of internalized

knowledge and the recreation of disseminated knowledge in another form in a different context, respectively.

- Different perspectives of the epic, such as mundane or material, ethical or dharmic and transcendental or metaphysical, reveal the different dimensions to which a phenomenon can be viewed. This narrative perspective of the epic, which expands the possibilities of knowledge as wide as possible, can be understood as a symbol of the never-ending possibilities of knowledge.

- The mode of transmission of the epic narrative is expressed through both teller-characters and reflective-characters, or teller-characters acting as reflector-characters. This situation in the narrative of the epic reveals how the same phenomenon is expressed through two different modes of transmission. One (telling mode) is the presentation of an explicit form of knowledge, or externalization of knowledge. The other shows how the tacit form of knowledge or internalized knowledge is expressed through reflective narrative transmission (showing mode).

- The epic ensures the universal inclusiveness of narrative in all its senses through a hyper spatial narration that breaks all geographical boundaries and barriers, including all living and nonliving things, such as gods, humans, animals, birds, insects, worms, trees, plants, rivers, oceans, sun, moon, and stars, etc. Thus, in this way, epic ensures the universal inclusiveness of knowledge in all its senses through a hyper spatial narration that breaks all geographical boundaries and barriers.

- The epic dissolves time and ensures its timelessness through the temporal narrative strategy that combines the past, present, and

future. Thus, epic dissolves time and ensures the timelessness of knowledge.

It is clearly understood from analyzing the presentation of the mediacy and spatio-temporal perspectives of the narrative that the techniques employed by the epic poets were for knowledge dissemination itself. Therefore, each of the observations formed by validating the narrative techniques of the epic prompts us to approach this poem as an ancient art of KM. The mediacy of the epic created the knower and seeker (Narrator and Audient) division in the distribution of knowledge and designed a modus operandi in its narrative to maximize the perceptions (Perspectives) of knowledge. The teller and reflector characters here, on the other hand, become representations of the knowledge formed by hearing (telling) and perceived by seeing (showing), respectively. It is also conceivable that reflective narrative transmission reinforces the idea that knowledge is experience. Besides the evidence extrapolated from the narrative text of the epic, the transmission history of the epic by different narrators at different eras lends strength to these observations. The epic poets might have thought that space and time needs to be kept beyond those concepts when formulating the narrative as a medium to educate tradition and culture. Thus it was assumed that the tradition could be perpetuated, or that it could last for a long time. During that period, the epic was the most popular and practical way to preserve and transfer tradition and culture to the next generation. How, then, can we summarize the architecturing of knowledge in our epic poem? What does the presentation of mediacy in the narrative tell us? We can try to answer these questions by relating the knowledge architecturing in the epic to that of the formation process of stalagmites in caves.

4.1.3.1 Stalagmite Architecturing

Stalagmites are common in many caves. It is usually formed by the drippings of materials such as calcium carbonate, mud, sand, peat, and sinter from the ceiling of a cave, which then gets accumulated on the floor. It grows from the floor upwards. Each successive drop adds a thin layer of minerals to the growing stalagmite below, increasing its size by at least a fraction of an inch each year.[27] These are formed in various shapes and sizes. They grow from a few centimeters to several meters. 'Cueva San Martin Infierno' in Cuba is considered to be the largest stalagmite in the world with a height of about 70 meters and a diameter of 20 meters.[28] But the minerals grow not only from the cave floor upwards, but also towards the cave floor, hanging from the ceiling of the cave. In this way, cave formations, or speleothems, hanging from the ceiling of the cave and growing towards the floor are named as stalactites. Stalagmites are usually enriched by water dripping from hanging stalactites and they fused together over time to form 'Cave columns'. The 'Caverns of Sonora' in Texas were formed this way. The 'Column' then grows to form a series of cave formations, known as 'Cave popcorn'. When stalagmites and stalactites are fused together to form 'Cave columns' which later lead to the growth of a series of cave formations, the process is so chaotic that one cannot even discern its origin. These cave formations, or

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27 Katherine Kornei, ''How stalagmites get their shapes,'' *The New York Times*, November 27, 2019, https://www.nytimes.com/2019/11/27/science/stalagmites-physics-caves.html.

28 Wolfgang Dreybrodt and Douchko Romanov, ''Regular stalagmites: The theory behind their shape'', In *Acta Carsologica*, Vol. 37, No. 2-3 (2008), 176, https://doi.org/10.3986/ac.v37i2-3.145.

speleothems, document climate changes on earth from the Paleozoic age to the present.[29]

The chaotic growth of speleothems upwards and downwards, but also sideways, can be related to the narrative transmission of Mahābhārata.[30] The evolution of the Mahābhārata through narration and counter narration by different narrators at different eras paves the way for understanding its tradition as similar to the stalagmite process itself. The analyst has laid the foundation for this argument by analyzing the presentation of mediacy of the epic. The mediacy of the epic (Person, Perspective and Mode) generally reveals that when knowledge is constantly subjected to change through sharing and perceiving (Externalization and Internalization), not only the knower and the knowee (Seeker) enrich their knowledge, but also the knowledge itself. Therefore, the epic made its

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29 Silvia Frisia and Jon D. Woodhead, ''Stalactites and Stalagmites,'' In *Encyclopedia of Caves*, 2nd ed. ed. William B. White and David C. Culver (Academic Press, 2012), 805-810, https://www.sciencedirect.com/science/article/pii/B9780123832200116X?via%3Dihub.

30 In the Communication domain, Stalagmite theories describe how different factors reciprocally contribute to an effect, thereby negating the traditional concept of linear and direct effects of factors in creating behavior, cognition, and affection. Simply put, these kinds of theories talk about the formation of social cognition and consciousness through bi-directional discursive transactions of cognitive factors and constructing a social scenario of communication and awareness. Amongst these theories, George Gerbner's Cultivation Theory/Cultivation Analysis model is considered to be the most significant one. Therefore, in this research, this model of bi-directional transaction works in the case of an open and active discursive tradition and the subsequent construction of texts in the Mahābhārata, which, in effect, functions as a public discursive platform accumulating many from the public to form its own content as well as infusing to the society does a lot to make the society more flexible and open to any kind of knowledge and values through reciprocal determinism. See, George Gerbner, ''Toward ''Cultural Indicators'': The Analysis of Mass Mediated Public Message Systems,'' in *AV Communication Review*, Vol. 17, No. 2 (Springer, summer 1969), 137-148.

cultural transmission through the process of disseminating (sharing) as well as assimilating (perceiving) knowledge. In other words, the epic was developed by being externalized (disseminating) and internalized (assimilating) at different levels by different narrators and audients of different eras. Not only the narrator and the audient are enriched there, but the epic as well. It still persists in one form or another. The spatio-temporal perspectives (Past, Present and Future-Earth, Sky and Hades) of the epic, on the other hand, refer to the constant continuity and universal inclusiveness of this process. Thus, beyond space and time, the stalagmite process continues (See figure 4.3).

It is noteworthy that V. S. Sukhtankar compares the textual dynamics of the Mahābhārata to the growth of the banyan (Nyagrodha) tree and it helps to understand the stalagmite process in the Mahābhārata tradition as well. It is a condition wherein the branches grow not only upwards and downwards, but also sideways, evolving into roots without being able to identify where they came from. He writes:[31]

> In the Mahābhārata we have a text with about a dozen, more or less independent, versions, whose extreme types differ, in extent, by about 13,000 stanzas or 26,000 lines; a work which, for centuries, must have been growing not only upwards and downwards, but also laterally, like the Nyagrodha tree, growing on all sides; a codex which has been written in nearly a dozen different scripts assiduously but negligently copied, chiefly as a source of religious merit, through long vistas of centuries by a legion of devout and perhaps mostly uneducated and inefficient copyists, hailing from different corners of a vast sub-continent, and speaking different tongues; a traditional

[31] V. S. Sukhtankar, *Critical studies in the Mahābhārata*, Vol.1 (Bombay: Karnatak Publishing House, 1944), 98.

> book of inspiration, which in various shapes and sizes, has been the cherished heritage of one people continuously for some millennia and which to the present day is interwoven with the thoughts and beliefs and moral ideas of a nation numbering over 300 million souls! The classical philologist has clearly no experience in dealing with a text of this description, an opus of such gigantic dimensions and complex character, with such a long and intricate history behind it.

This observation makes it clear that the transmission history of Mahābhārata is related to the formation of the stalagmites which is a constant process. Hence, the entire Mahābhārata tradition has to be summarized as the process of stalagmite formation itself. As stalagmites and stalactites grow from both directions and fuse together to form 'Cave columns', which then lead to the growth of a series of cave formations, not only do the stalagmites and stalactites feed on each other over time, but their minerals also undergo chemical changes and are enriched. In the same way in Mahābhārata, when the narrator and the audient are enriched by each other through narration and counter-narration, not only the narrator and the audient are enriched, but also the text or the art form itself, which is constantly subjected to various narrative discourses. While stalagmite layers document climate changes at different times, Mahābhārata documents the different knowledge of the time it was formed. Thus, like Mahābhārata, stalagmites have to be understood as preservation centers or archives of knowledge. Knowledge is disseminated in addition to being preserved. Thus, by clearly understanding this process, we come to the point that not only the sharer (knower) and the perceiver (knowee) but also the knowledge that is constantly undergoing this process is nurtured through the sharing and perceiving of knowledge. How then can we understand the concept of 'Vyāsa' (the expander) other than this process of stalagmite formation?

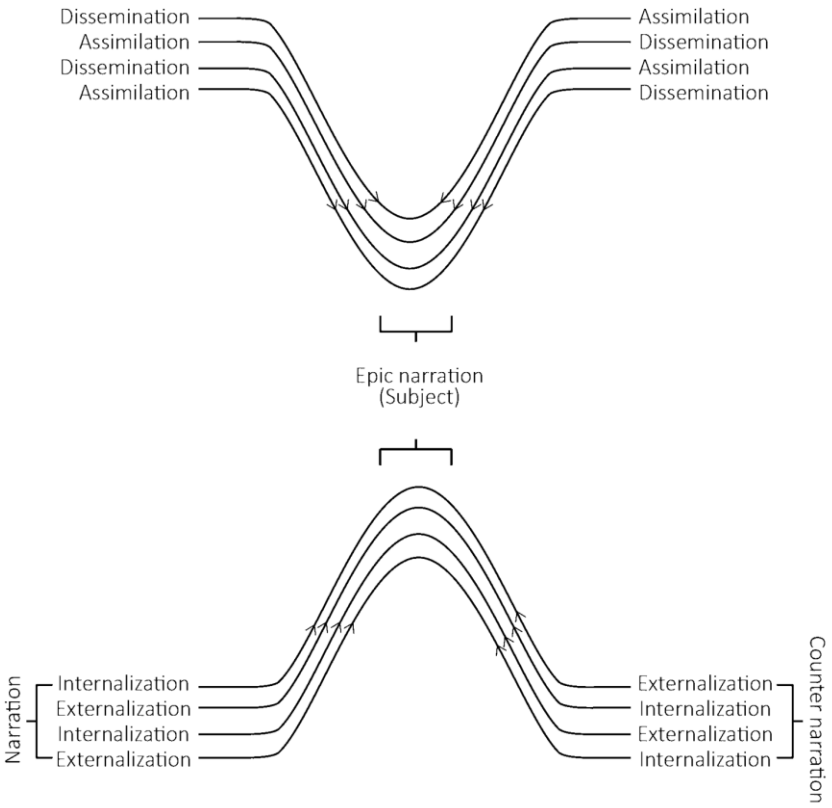

Figure 4.3: Stalagmite narrative transmission process in the Mahābhārata

The first stage of the analysis related to the narrative of the epic is completed here. It is clear from the validation of the narrative evidence that the poets have efficiently clothed the technicalities of KM with literary beauty and elegance. The first tentative theoretical sampling can therefore be justified here. But to what extent can this epic be understood as a KM system by validating each and every piece of evidence extracted from this narrative discourse? To respond to this question, technically, is important. Therefore, the analyst needs to understand the narrative techniques of the epic so far explained within the technicalities of knowledge discovery, knowledge capture, knowledge sharing, and knowledge application (KM processes) along with their subprocesses such as combination and socialization, externalization and internalization, socialization and exchange,

and direction and routines. We will enter into those technicalities in the next stage.

4. 2 Knowledge Production, Preservation and Dissemination: Juxtaposing Epic Narration with Modern KM Practices

In this stage of the analysis, the aim is to describe the narrative techniques of the epic in the context of modern KM practices and to understand how the epic existed as an ancient KM system, reflecting those KM technicalities. The observations of Irma Becerra Fernandez and Rajiv Sabherwal on KM and its processes are used as references to understand this situation. ''Knowledge consists of truths and beliefs, perspectives and concepts, judgments and expectations, methodologies, and know-how. It is possessed by humans, agents, or other active entities and is used to receive information and to recognize and identify; analyze, interpret, and evaluate; synthesize and decide; plan, implement, monitor, and adapt-that is, to act more or less intelligently. In other words, knowledge is used to determine what a specific situation means and how to handle it''.[32] KM defined as ''doing what is needed to get the most out of knowledge resources.''[33] It then elaborates; KM activities are broadly intended to: 1) discover new knowledge 2) capture existing knowledge 3) share knowledge with others, or 4) Apply knowledge.[34] Based on these elaborations, Fernandez and Sabherwal put forth a detailed definition of KM, ''KM can be defined as performing the activities involved in discovering, capturing, sharing, and applying knowledge so as to enhance, in a cost effective fashion, the impact

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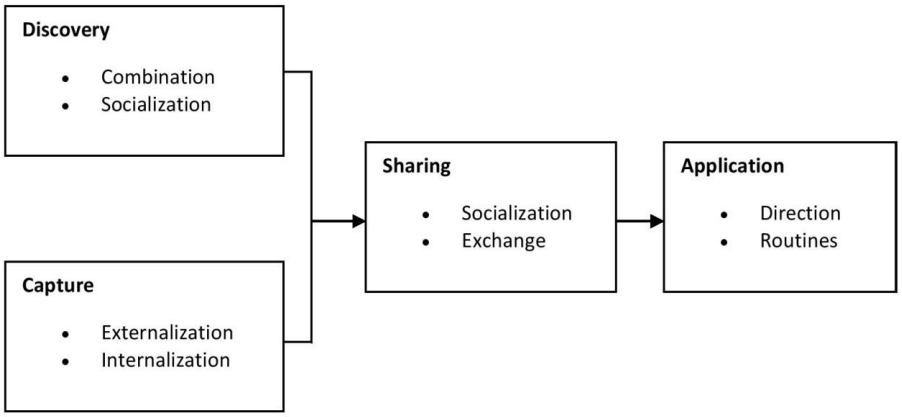
32 See, K. M. Wiig, ''Introducing knowledge management into the enterprise,'' In *Knowledge management handbook*, ed. Jay Liebowitz (Boca Raton, FL: CRC Press, 1999), 3-41.

33 See, I. B. Fernandez and Rajiv Sabherwal, *Knowledge Management: Systems and Processes*, ed. 2 (New York: Routledge, 2015), 39.

34 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 40.

of knowledge on the unit's goal achievement.''[35] Thus, they suggested four main kinds of KM processes that rely on KM. These four KM processes are supported by a set of seven KM subprocesses; combination and socialization, externalization and internalization, socialization and exchange, and direction and routines. One of these subprocesses, i.e. Socialization, supports two main KM processes, viz. Knowledge discovery and sharing (see figure 4.4).[36]



4.4: Figure of KM processes (Fernandez and Sabherwal, 2015)[37]

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35 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 40.

36 In the seven KM sub-processes of Fernandez and Sabherwal, four processes are based on Ikujiro Nonaka (1994). See, Ikujiro Nonaka, ''A dynamic theory of organizational knowledge creation,'' in *Organization science*, Vol. 5, No. 1 (Catonsville: Informs, 1994), 14-37. Fernandez and Sabherwal state, ''focusing on the ways in which knowledge is converted through the interaction between tacit and explicit knowledge, Nonaka identified four ways of managing knowledge: socialization, externalization, internalization, and combination.'' See, *Knowledge Management: Systems and Processes*, 58. The other three (exchange, direction, and routines) are based on Robert M. Grant (1996) and Janine Nahapiet and Sumantra Ghoshal (1998). See also, Robert M. Grant, ''Toward a knowledge-based theory of the firm,'' *Strategic Management Journal*, Vol. 17 (1996), 109-122, and Janine Nahapiet and Sumantra Ghoshal, ''Social capital, intellectual capital, and the organizational advantage,'' *Academy of Management Review*, Vol. 23, No. 2 (1998), 242–266.

37 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 59.

It is clear from the above description on what the second stage of the analysis aims at. At this stage, which discusses the production, preservation and dissemination of knowledge in the Mahābhārata and seeks to understand how the epic exists as a KM system, the analyst identifies the core category of 'Knowledge architecture and Management'. The analyst considers the four KM processes and their subprocesses as different themes and identifies them as subcategories and related categories, respectively. The subcategories of 'Knowledge discovery', 'Knowledge capture', 'Knowledge sharing' and 'Knowledge application' are developed from the core category of 'Knowledge architecture and Management'. Each subcategory is further divided into two related categories: 'Knowledge discovery'; 'Combination' and 'Socialization', 'Knowledge capture'; 'Externalization' and 'Internalization', 'Knowledge sharing'; 'Socialization' and 'Exchange' and 'Knowledge application'; 'Direction' and 'Routines'. It then discusses how the analyst identified these four KM processes, which are supported by a set of seven KM subprocesses, from the narrative of the epic.

4.2.1 Knowledge Discovery

Knowledge discovery is ''the development of new tacit or explicit knowledge from data and information or from the synthesis of prior knowledge. The discovery of new explicit knowledge relies most directly on combination, whereas the discovery of new tacit knowledge relies most directly on socialization. In either case, new knowledge is discovered by synthesizing knowledge from two or more distinct areas with explicit knowledge from two areas being synthesized through combination, and tacit knowledge from two areas being synthesized through Socialization.''[38] Combination and

[38] See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 59.

socialization, two components of seven set of KM subprocesses, are explained in detail as follows:[39]

New explicit knowledge is discovered through combination, wherein the multiple bodies of explicit knowledge (and/or data and/or information) are synthesized to create new, more complex sets of explicit knowledge (Nonaka 1994).[40] Through communication, integration, and systemization of multiple streams of explicit knowledge, new explicit knowledge is created-either incrementally or radically (Nahapiet and Ghoshal 1998).[41] Existing explicit knowledge, data, and information are reconfigured, recategorized and recontextualized to produce new explicit knowledge. For example, when creating a new proposal to a client, explicit data, information and knowledge embedded in prior proposals may be combined into the new proposal. Also, data mining techniques may be used to uncover new relationships amongst explicit data that may be lead to create predictive or categorization models that create new knowledge… In the case of tacit knowledge, the integration of multiple streams for the creation of new knowledge occurs through the mechanism of socialization (Nonaka 1994). Socialization is the synthesis of tacit knowledge across individuals, usually through joint activities rather than written or verbal instructions.

To understand how this relates to the narrative of the epic, one must first realize that no idea in the epic is purely new or fundamental. Every piece of knowledge presented in the epic is, in one way or another, a

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39 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 59-60.

40 See, Ikujiro Nonaka, ''A dynamic theory of organizational knowledge creation,'' *Organization Science*, Vol. 5(1), (1994), 14–37. http://www.jstor.org/stable/2635068,

41 See, J. Nahapiet, and S. Ghoshal, ''Social capital, intellectual capital, and the organizational advantage,'' *Academy of Management Review*, 23(2), (1998), 242–266, https://doi.org/10.2307/259373.

synthesis of prior knowledge. Epic poets were constantly trying to combine thoughts existing at different levels to produce new knowledge. The epic has captured the Vedic teachings, along with its subsidiary Vedas such as Āyurveda (medicine), Dhanurveda (archery), Gāndarvaveda (music) and Sthāpatyaveda[42] (architecture). Doctrines of Brahmasūtra (Uttaramimāmsa) and Dharmaśāstras are brought together at different levels. The Upaniṣadic teachings get their place through Bhagavadgīta. The verses of Śvetāśvatara Upaniṣad, Kāṭhaka Upaniṣad, Māitri Upaniṣad and Atharvaśiras Upaniṣad are found in several places. The doctrines of Sāṁkhya and Yoga are also clearly visible. The knowledge systems, such as Nyāya, Viśeśika, and Pūrvamimāmsa are also found. Even when the Bauddha and Jaina religions are found to be criticized in certain places, the extreme influence of those dogmas is evident at the end of the story. When the atheistic or materialistic doctrines (Cārvāka) are found to be reflected, especially in Śāntiparva, in a more developed form, the elucidations of Svabhāvavāda (naturalism), Yādriścyavāda (accidentalism), and Pariṇāmavāda (evolutionism) are also visible in this manner.[43] Thus, when we take the ideas of the epic for a close examination, it becomes evident that the epic is a perfect blend; a synthesis of prior knowledge.

The epic not only captures the different forms of knowledge that were in practice over the course of its formation in the Indian epistemic premises but also constructs a new form of knowledge by synthesizing such knowledge; prior knowledge is transformed and presented in a way that is

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42 The term Sthāpatyaveda does not appear to be recognized in the epic, but refers to architecture as Vāstuvidya. See, E. W. Hopkins, *The great epic of India: character and origin of the Mahābhārata*, (Delhi: Motilal Banarsidass, 1993), 11.

43 See, K. Damodaran. *Indian thought: A critical survey*, (1967), 91-92, https://ia801201.us.archive.org/20/items/IndianThought-ACriticalSurvey-English-K.Damodaran/indian-thought-damodaran.pdf

not easily recognizable in a new situation.[44] This process should be understood as Combination as in when we can see the existing explicit knowledge being reconfigured, re-categorized and re-contextualized in the epic along with the production of a new explicit knowledge through the reconstruction of the existing knowledge. The new knowledge produced by integrating, or systemizing multiple bodies of explicit knowledge is either approved systems of thoughts (Āstika) with the support of Vedic darśanas, or the other knowledge systems (Nāstika) which denies the authority of Veda. They might be the reconstruction of the knowledge reflected in the Jātaka tales, or the re-contextualization of the morals found in other common folks. When knowledge is employed in a totally different context it creates a new experience. It is impossible to understand any form of knowledge, without having a clear idea about the spatial and temporal conditions in which it was formed.

The Bhagavadgīta is the most perfect example of how Knowledge discovery is possible through combination. It exists today as the most popular poem having an epistemic authority, as one among the 'Prasthanathraya', three sources of Vedānta schools, in the Hindu darśanas. It shows us that by integrating different currents of thought (An innovative thought does not seem to be presented anywhere in this poem), all the paths that seem different go to the same destination. There, new knowledge is created by presenting different thoughts that were initially competing with each other in completely different contexts and shows that their purpose is the same:

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[44] I. Nonaka, and H. Takeuchi says, ''Reconfiguration of existing information through sorting, adding, combining, and categorizing of explicit knowledge (as conducted in computer databases) can lead to new knowledge.'' See, *The knowledge creating company: How Japanese companies create the dynamics of innovation*, (New York: Oxford University Press, 1995), 67.

> By its official designation, the Gīta is called an Upaniṣad, since it derives its main inspiration from that remarkable group of scriptures, the Upaniṣads… The different elements which, at the period of the composition of Gīta, were competing with each other within the Hindu system, are brought together and integrated into a comprehensive synthesis, free and large, subtle and profound. The teacher refines and reconciles the different currents of thought, the Vedic cult of sacrifice, the Upaniṣad teaching of the transcendent Brahman, the Bhāgavata theism and tender piety, the Sāṁkhya dualism and the Yoga meditation. He draws all these living elements of Hindu life and thought into an organic unity. He adopts the method, not of denial but of penetration and shows how these different lines of thought converge towards the same end.[45]

The concept of socialization has been used here as a process that synthesizes the tacit knowledge between individuals through joint activities, rather than written or verbal instructions. Therefore, the Mahābhārata is a good example of Knowledge discovery through socialization. It becomes clear while analyzing this situation on the basis of the origin and developments of the epic, and also when analyzing this process inside the text of Mahābhārata. Both these situations can be observed in the following ways:

- Look at the origin of Mahābhārata; it is not through some verbal or written instructions that this poem has taken its form. There is a completely liberal and discursive tradition behind it. A generation, enthralled in hero-worship, adopted and propagated a poem that was composed as a description of the valiant deeds of the Kuru dynasty. Mahābhārata transmitted through the ballads of the bards,

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[45] See, S. Radhakrishnan, *The Bhagavadgīta* (New Delhi: HarperCollins, 1993), 12-14.

orally, from ear to ear, across nations. Sūtas and Māgadhas socialized Mahābhārata as something which is accessible for all; an alternative to the mantra literature of Brāhmins. They were the propagators of socialism. Therefore, Mahābhārata became accessible for women and Śūdras. It always existed outside the cāturvarṇya; clinging itself to a secularist tradition. The poem, which was accessible to all classes of the society, soon became popular. In these dynamic and liberal developments in the history of evolution of Mahābhārata, tacit knowledge is synthesized through joint activities among individuals and it produces another form of knowledge. Thus, the knowledge formed through the synthesis of tacit knowledge (Socialization) changes to explicit form (Externalization) and then leads to Combination (synthesis of explicit knowledge). In other words, the ideas that once existed in the narrator's mind as a synthesis of tacit knowledge are later externalized at various levels and exist as their synthesis (Combination). The Bhagavadgīta, which exists as a synthesis of explicit knowledge, undergoes internalization at many levels and is led to socialization today. The Bhagavadgīta was then narrated in different ways (Externalization), or continues to be narrated in that way even today.

- How is the subprocess known as socialization reflected in the text of Mahābhārata? It is an essential feature of this epic poem that no story in the Mahābhārata can proceed without someone to ask the question. A method employed by the poets to present any story in the epic is to tell a third party that the story has been told to them by someone. In this manner, one can witness an art of telling and listening; of joint activities in the epic from beginning to end. The

narrative technique of Mahābhārata, which was explained in the second stage of the analysis, where a story presented in a concise manner is elaborated by the narrator upon the inquisitive request of the listener, can be connected with this situation. Thus, this act of synthesizing the tacit knowledge inside the individuals through joint activities, not by written and verbal instructions, can be found throughout the epic; in its narrative structure.

4.2.2 Knowledge capture

Knowledge capture is ''the process of retrieving either explicit or tacit knowledge that resides within people, artifacts, or organizational entities.''[46] The Knowledge capture process benefits most directly from two KM subprocesses, i.e. externalization and internalization:[47]

Externalization involves converting tacit knowledge into explicit forms such as words, concepts, visuals, or figurative language (e.g., metaphors, analogies, and narratives; Nonaka and Takeuchi 1995). It helps translate individuals' tacit knowledge into explicit forms that can be more easily understood by the rest of their group. This is a difficult process because tacit knowledge is often difficult to articulate. Nonaka (1994) suggested that externalization may be accomplished through the use of metaphor-that is, understanding and experiencing one kind of thing in terms of another. An example of externalization is a consultant team writing a document that describes the lessons the team has learned about the client organization, client executives, and approaches that work in such an

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46 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 61.

47 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 61.

assignment. This captures the tacit knowledge acquired by the team members.

Internalization is the conversion of explicit knowledge into tacit knowledge. It represents the traditional notion of learning. The explicit knowledge may be embodied in action and practice so that the individual acquiring the knowledge can re-experience what others have gone through. Alternatively, individuals could acquire tacit knowledge in virtual situations, either vicariously by reading manuals or others' stories or experientially through simulations or experiments (Nonaka and Takeuchi 1995). An example of internalization is a new software consultant reading a book on innovative software development and learning from it. This learning helps the consultant, and his/her organization, capture the knowledge contained in the book.

The evolution of Mahābhārata becomes relevant, here too. The epic was developed by combining the different systems of knowledge that existed in the society at the time of its formation on different levels. We can extract each and every knowledge system that originated and dominated in the Indian context during BCE 600 to AD 500, from the ideas contained in the Mahābhārata. The principle of modern KM, known as the 'capture existing knowledge' can be found here. When each idea captured in Mahābhārata is understood as an artifact; artifact may be knowledge such as theories, thoughts, research, reports, plans and designs etc, the explanation that Fernandez and Sabherwal gave for Knowledge capture can be compared with the evolution of Mahābhārata. The artifacts imbibed in such a way gets reflected in different places and at several levels in the narrative of the epic through each epic character; either as those who tell a story or ones who listens to it. Each epic character becomes a medium for the propagation of knowledge, here. Since, Knowledge capture process becomes possible

through the subprocesses of KM such as externalization and internalization, these subprocesses can be understood by basing it on the narrative element 'person', and explained along with the elements 'perspective' and 'mode'.

Externalization happens when knowledge, in its tacit form, is converted into explicit knowledge. Tacit knowledge gets converted, here, into words, concepts, visuals, or figurative language (metaphors, analogies and narratives). Internalization is made possible when knowledge, in its explicit form, is converted into tacit knowledge. The binary oppositions; narrator and audient of the narrative element-'person' in the narrative of the epic represent the processes of externalization and internalization respectively. Every narrator converts their tacit knowledge into explicit form, i.e. they externalize it. Audiences, initially, internalize the knowledge and further externalize their internalized (tacit) knowledge once they take the role of narrator. This becomes clearer with the explanation given below.

All those poets who added ideas into the epic, over several years, were making use of it: as a stage to express their inherent knowledge, a place to preserve the thoughts that they subscribed to, and as a platform for intellectual discourse. In here, the tacit knowledge in them changes into explicit form, or externalization takes place. Even though Vyāsa is the chief narrator, this process of externalization progresses by imbibing several narrators from Ugrasravass through Vaiśaṁpāyana. A reader entering the epic will first get acquainted with an unknown narrator. If so, the epic Mahābhārata is all out an externalization of that unknown narrator. Ugrasravass, the Sūta, seats himself in the actual narrative position in the story. It is mainly from four sources that Ugrasravass heard the story of the epic: firstly, from Vaiśaṁpāyana, the disciple of Vyāsa, at the Sarpasatra of Janamejaya; secondly, from Lomaharsha, father of Ugrasravass; thirdly, from

tell tales and fourthly, through self study. It is impossible for Ugrasravass to repeat the story of Mahābhārata, acknowledged by him to have been received from these four sources, without any change. Internalizing happens from those four sources and this internalization undergoes externalization after it turns explicit. For example, Ugrasravass doesn't repeat the story itself without any change in words as he had heard from Vaiśaṁpāyana, instead, he internalizes the tacit knowledge which Vaiśaṁpāyana expressed in explicit form and narrates it to the Śaunaka sages at Naimiṣāraṇya after making several changes of his own. This narration must be understood, here, as externalization. As for Vaiśaṁpāyana, he hears the epic story from his teacher, Vyāsa. It is also impossible for Vaiśaṁpāyana to repeat the words of Vyasa without making changes. Vyāsa shared his knowledge, which was in tacit form, to Vaiśaṁpāyana through stories; in other words converted it into explicit mode. It is after internalizing this explicit knowledge, in his own ways, that Vaiśaṁpāyana narrates the epic to Janamejaya at the Sarpasatra.

The narrative element 'perspective' underlines the never-ending possibilities of internalization and externalization. Knowledge is perceived in different ways and gets propagated at different levels here. Knowledge gets completely changed into an open mode and it marks the spread of diverse knowledge. It becomes impossible to differentiate the perspective of the epic into material, ethical and metaphysical alone, when a single form of knowledge gets externalized in different ways. The epic doesn't have a bend to any particular view of life and it doesn't give a closure perspective at any stage. The epic in itself is neutral. The perspectives that follow questions and destabilize the existing ones. Hence, every internalization and externalization keeps on creating different possibilities. It is this process or subprocesses

that has arranged Mahābhārata into its present structure and made it timeless and universal.

The epic poem, which actually Vyāsa shared with his five disciples including Vaiśaṁpāyana, might have propagated not only through Vaiśaṁpāyana but also through the other four. These five disciples might have amplified the poem, using their own perspectives, in different ways. The version of Jaimini, one of Vyāsa's disciples, is different from that of Vaiśaṁpāyana; which we are familiar with, as it is understood as to give prominence to the Kauravas. This makes it clear that no one perceives or repeats the story that they have heard in the same manner. The poem which Ugrasravass recited for the Śaunaka sages could be perceived and re-recited in a different way by anyone who was there to listen to Ugrasravass. Even the Śaunaka sages can perform this act. We can even place that unknown narrator, the one who tells us of the arrival of the Ugrasravass to the Naimiṣāraṇya, in that position. This diverse and extensive process of internalization and externalization can thus be followed by anyone who knows the story. Mahābhārata has furnished itself in its present form by spreading through several narrators starting from Vyāsa to Vaiśaṁpāyana, Vaiśaṁpāyana to Ugrasravass, Ugrasravass to Śaunaka sages and from Śaunaka sages to several other unknown narrators (This particular research proposal can also be understood as a kind of externalization). If Vyāsa had recited 8800 ślokas, Vaiśaṁpāyana extended it to almost 24,000 ślokas. It evolved into 'Śatasahasrīsaṁhita', containing, approximately, one lakh ślokas, when it came down to Ugrasravass. The epic itself has recorded these three stages.[48] Perspectives change with people and new ideas are born with

[48] It is doubtful that whether Vaiśaṁpāyana and Ugraśravas were contemporaries. There can be a gap of a long period between Vaiśaṁpāyana to

change in perspectives. Another form of knowledge is created when existing knowledge forms are reformed and combined with a new one.

In teller and reflector modes, the narration of teller characters is the externalization of inherent knowledge; the reflector characters show how internalization is processed through reflective narrative transmission. The poets show how the processing of explicit knowledge (externalization) and tacit knowledge (internalization) is done by presenting the epic characters in teller and reflective modes.

4.2.3 Knowledge Sharing

What is Knowledge sharing? It ''is the process through which explicit or tacit knowledge is communicated to other individuals.''[49] The Knowledge capture process benefits most directly from two KM subprocesses, i.e. exchange and socialization. Socialization, where the knowledge is transferred in tacit form, is explained in detail in the context of KM discovery, here we need to understand what exchange is:

Exchange, in contrast to socialization, focuses on the sharing of explicit knowledge. It is used to communicate or transfer explicit knowledge among individuals, groups and organizations (Grant 1996).[50] In its basic nature, the process of exchange of explicit knowledge does not differ from the process through which information is communicated. An example of

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Ugraśravas. The observation of C.V Vaidya mentioned in the review chapter in relation to this should be noted. Mahābhārata records them as contemporaries even when their contemporary existence can be annulled with the use of internal evidences.

49 See, Fernandez and Sabherwal. *Knowledge Management: Systems and Processes*, 61-62.

50 See, R.M. Grant, ''Toward a knowledge-based theory of the firm.'' *Strategic Management Journal*, 17, (1996), 109–122. Accessed July 28, 2021, https://doi.org/10.1002/smj.4250171110

exchange is a product design manual being transferred by on employee to another, who can then use the explicit knowledge contained in the manual. Exchanging a document could also be used to transfer information.[51]

For knowledge sharing, Fernandez and Sabherwal put forwarded three important clarifications:[52]

1. Knowledge sharing means effective transfer, so that the recipient of knowledge can understand it well enough to act on it (Jensen and Meckling 1996)[53]

2. What is shared is knowledge rather than recommendations based on the knowledge; the former involves the recipient acquiring the shared knowledge as well as being able to take action based on it, whereas the latter (which is direction) simply involves utilization of knowledge without the recipient internalizing the shared knowledge.

3. Knowledge sharing may take place across individuals as well as across groups, departments, or organizations (Alavi and Leidner 2001)[54]

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51 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 62.

52 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 61.

53 M.C. Jensen and W.H. Meckling, Specific and general knowledge, and organizational structure. In *Knowledge management and organizational design*, ed. P.S. Myers, (Newton, MA: Butterworth-Heinemann, 1996), 17–18.

54 See, M. Alavi, and D. Leidner, ''Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues.'' *MIS Quarterly*, 25(1), (2001), 107–136. Accessed August 10, 2021. https://doi:10.2307/3250961.

How do these technical aspects of Knowledge sharing connect with the epic? The first stage of this analysis clearly presents that the epic has long been a center for the preservation and dissemination of knowledge. It has been used as a platform for many poets of different eras to share their knowledge. This epic, which transcends the boundaries of gender, caste, and religion, was celebrated by the societies of all eras. This socialized nature of the epic became the reason for the knowledge contained in it to be transferred from one person to another without obstruction in the form of stories, poems, novels, paintings, sculptures, films, performing arts, beliefs, rituals, etc. The ideas in the epic can satisfy both a village storyteller and an experienced statesman. In brief, epic continues to serve as a medium for Knowledge sharing, as an ever-evolving center for educating tradition and culture.

How the subprocess of Knowledge sharing; exchange is reflected inside the text of Mahābhārata? Knowledge finds its place in the epic in the way it is exchanged from one person to another. This could be understood by referring to the narrative of the most prominent parts of the epic; Bhagavadgīta, Śāntiparva, and Viduravākya. Two persons are prominent in each of these sections; when Kṛṣṇa shares his knowledge to Arjuna through Bhagavadgīta, Bhīṣma shares his knowledge to Yudhiṣtira, one from the next generation, in Śāntiparva. In the case of Viduravākya, Vidura converses with Dhritarāṣtra. When a person shares knowledge to his contemporary, or friend, another person makes knowledge sharing possible across the next generation; and as for Vidura, he makes this possible for his brother and his family. The narration of Viduravākya, Bhagavadgīta and Śāntiparva can be understood as the metaphorical representation of knowledge exchange towards family, society and the next generation, respectively. It

is socialization, if knowledge is shared from one person to another by means of joint activities without obstruction. The process of knowledge sharing between persons should be understood as exchange, here. The narrative logic of the epic stands atop the social values such as search, understand and share. It is this narrative technique that helps to find knowledge sharing along with its subprocesses in the epic. It can also be understood by analyzing the various possibilities of the living tradition of the epic that extends beyond textual trimmings. Hence, three major clarifications concerning the knowledge sharing; as observed by Fernandez and Sabherwal and mentioned above, can be rewritten as given below by keeping it alongside the narration of the epic:

1. Narration (knowledge sharing) means effective transfer, so that the audient of the particular narrative can understand it well enough to act on it

2. What is shared through narration is knowledge rather than a content for passive listening as an audient; the former involves the audient (recipient) acquiring the shared knowledge as well as being able to take action based on it (the audient may become a narrator, or converts the knowledge to another mode), whereas the latter (which is direction, discussed in the next section; it merely a recommendation, reference, guidance, comments or remarks to the particular narrative or a narrator) simply involves in the narration (utilization of knowledge) without the audient (recipient) internalizing the shared knowledge.

3. Narration (knowledge sharing) may take place across individuals as well as across groups, departments, or organizations

4.2.4 Knowledge application

How is knowledge application possible in our epic? Isn't every narrator doing an application of the available knowledge? ''Knowledge application is the process through which knowledge is utilized within the organization to make decisions and perform tasks, thereby contributing to organizational performance. The process of Knowledge application depends on the available knowledge, and knowledge itself depends on the processes of knowledge discovery, capture, and sharing (as shown in figure 4.4).''[55] The Knowledge application process ''benefits from two processes-direction and routines-that do not involve the actual transfer or exchange of knowledge between the concerned individuals but only the transfer of the recommendations that is applicable in a specific context (Grant 1996).''[56] These two KM processes become part of the knowledge utilization without internalizing the knowledge underlying these processes:

Direction refers to the process through which the individual possessing the knowledge directs the action of another individual without transferring to that individual the knowledge underlying the direction. Direction involves the transfer of instructions or decisions and not the transfer of the knowledge required to make those decisions, and hence it has been labeled as knowledge substitution (Conner and Prahalad 1996)… Routines involve the utilization of knowledge embedded in procedures, rules, and norms that guide future behavior. Routines economize on communication more than directions as they are embedded in procedures or

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55 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 62-63.

56 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 63.

technologies. However, they take time to develop, relying on ''constant repetition'' (Grant 1996).[57]

Knowledge application happens when knowledge discovery, knowledge capture, knowledge sharing are found in the narrative along with their subprocesses of combination and socialization, externalization and internalization, socialization and exchange respectively. How knowledge application happens along with its subprocesses; direction and routines needs to be understood by connecting it with the narrative of the epic. Fernandez and Sabherwal point out traditional hierarchical relationships in organizations, help desks, and support centers as the illustrative KM mechanisms of direction and organizational policies, work practices and standards for routines respectively. Every narrator in the epic converts the knowledge that they possess as narratives. And it is certain instructions transferred, traditionally, between one narrator to another that guides a narrative. These convictions; which could also be understood as suggestions and recommendations that take a narrative forward can be understood as directions. Routines are formed when knowledge is approached by means of certain procedures, rules or norms that could be followed in the future. The epic maintains a particular pattern throughout the narrative even when the epic exists as the creation of several narrators over several eras. The directions which every narrator, who entered the epic over the several years with diverse interests contradicting one another, followed consciously gave a narrative unity to the epic even with all the contradictions. The few important directions in the narrative of the epic, which evolved as routines and exists to this day in modern circumstances, are listed below:

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57 See, Fernandez and Sabherwal, *Knowledge Management: Systems and Processes*, 63-64.

- Expand to maximum, a given story, by imbibing the several existing knowledge systems according to the circumstances. This has similarities with the process which the contemporary knowledge repositories use to expand its collections.
- A person each to ask questions and to give answers. A narrative style that makes the epic impossible in the absence of characters who ask questions. Information needs to be shareable. It is through such discursive situations that tacit knowledge and explicit knowledge get externalized and internalized respectively.
- The testimony of the narrator makes the narration authentic. Particular knowledge ensuring its authenticity through citation could be understood as the modern evolutionary of this.
- The narrator is made to elaborate the story, which was first presented in a concise form, upon the request of the listener. It is one of the modern characteristics of knowledge that it should be compressible and expandable at the same time.
- The collective representation of several narrative styles can be seen throughout the epic. This could be related with the modern multidisciplinary approach of knowledge. Several knowledge systems, which are formed during a particular period, get evolved together in the same way; a few novel ideas get formed when different knowledge evolves together.
- A narrative style that disperses time and space makes the epic universal and eternal. It is a prominent thought, even in the modern period, that knowledge should transcend time which is universal.

The process of generating properties related to the KM in the epic is completed here. The following is an overview of the subcategories and

related categories generated in the core category of 'Knowledge architecture and Management'.

- Knowledge Architecture and Management: it consists of four subcategories; Knowledge Discovery, Knowledge Capture, Knowledge Sharing, and Knowledge Application. Each subcategory is further classified into two related categories: Knowledge Discovery; Combination and Socialization, Knowledge Capture; Externalization and Internalization, Knowledge Sharing; Socialization and Exchange. And Knowledge Application; Direction and Routines. These subcategories and further classifications are formed on the basis of the components of modern KM processes identified by Irma Becerra Fernandez and Rajiv Sabherwal.

4.2.5 Findings and Conclusion

What assumption can we make of it? Doesn't the modern KM processes reflect in a different way in the epic along with its subprocesses such as Combination and Socialization (Knowledge discovery), Externalization and Internalization (Knowledge capture), Socialization and Exchange (Knowledge sharing) and Direction and Routines (Knowledge application)? Aren't these evidences enough to understand the epic as a KM system? Mahābhārata worked as a preservation modality, as an epic poem in the epistemic premises of ancient India. But even while existing as a preservation modality, several other preservation modalities got immersed in it at the same time. A microcosm in the form of an epic, gives the experience of a macrocosm by imbibing several oral narrative modalities of knowledge.

Oral narratives were not only art forms but a way for an illiterate society to preserve knowledge in order to survive. Several oral narratives such as Gādhas (Songs of praise), Caritas (poetic description of the events in a person's life), Nāraśaṃsis (the descriptions praising the valiant deeds of

man; they are mostly associated with the Yajña tradition), Vamśāvalis (the chronological descriptions of the members of a clan), Anyāpadeśas (allegorical epigram) and Smrtis (Vedic rites in the form of instructions and injunctions) which were in use during the early eras could be traced in the narrative of Mahābhārata. These narrative forms described the cultural history of ancient India in the best possible way. Anyāpadeśa stories searched for better human values through metaphors. Stories were one of the most effective preserving modalities of the day. The various stories that were popular at that time can be seen in the epic on many levels. Kāvyas grew into Mahākāvyas (epics) by imbibing every dominant knowledge system. The epic poets have kept aside a huge share of the Vanaparva to explain the epic of Rāmāyana; another epic is placed inside an epic. Proverbs were then the capsules that imbibed knowledge in the most abridged manner. Customs and beliefs, along with performing arts were the greatest preservation centers of knowledge. Epic turns into proverbs, performing arts, customs and beliefs when it traverses beyond the textual trimmings; it disseminates itself into several rural representations, tribal beliefs and modes of Hindu worship. All these oral forms are to be understood today as the earliest centers used to preserve and disseminate the knowledge produced by an ancient society, or as the different ways of looking up at a knowledge system or literary thought. The different knowledge systems were composed into couplets and mantras in certain rhythms so that they could be easily recollected from memory. The primordial form of KM can be seen in this tradition of preserving knowledge in the form of memories. It was these centers that formed the underpinnings of later KM and its processes. Thus, the narrative structure of the Mahābhārata (cultural transmission) maintains the epic both as a microcosm and macrocosm. The epic has turned into a KM system by capturing every dominant knowledge system that was available during that era and converting all of those

preserving modalities and dissemination methods into narrative styles. We can now try to come to a conclusion, based on the model given below, by validating the evidence of the derived subcategories and their related categories from the core category of 'Knowledge architecture and Management' discussed in this second stage of the analysis:

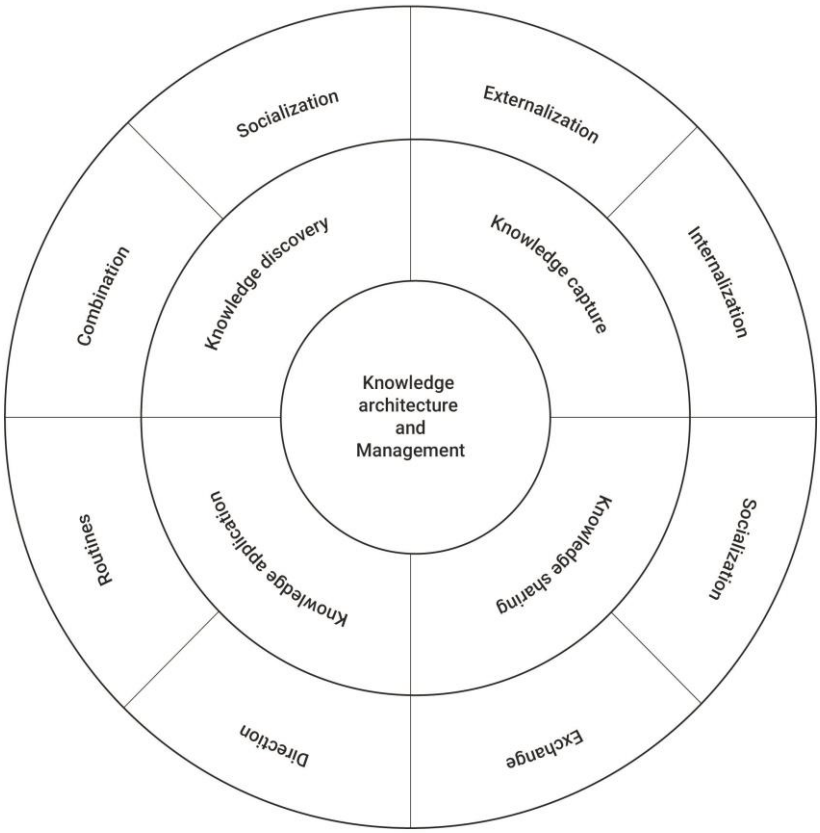

Figure 4.5: Conceptual model of Knowledge architecture and Management in the Mahābhārata

- Modern KM processes such as Knowledge discovery, Knowledge capture, Knowledge Sharing, and Knowledge application are reflected in another form in the epic along with their subprocesses Combination and Socialization (Knowledge discovery),

Externalization and Internalization (Knowledge capture), Socialization and Exchange (Knowledge sharing), and Direction and Routines (Knowledge application)

- Mahābhārata is technically an ancient KM system, as KM processes can be seen evidently, in another way, in the epic with its subprocesses

- Each subprocess in the set of seven KM subprocesses operates in the epic in a free and open-source mode. Knowledge production (Knowledge discovery), preservation (Knowledge capture), and dissemination (Knowledge sharing and Knowledge application) are made possible by these KM subprocesses, making the epic a free and open-source KM system.

- Fernandez and Sabherwal's model, which represents the present day practices of KM, is based on the explicit and tacit bifurcation of knowledge, whereby sub-categorizing knowledge as static and authoritarian entities in different compartments. Knowledge is thus processed in a linear fashion as a commodity and confined within the structure of corporate governance in an organization.

- Knowledge architecturing process in the Mahābhārata is in a non-linear fashion as knowledge is treated as open-ended, dynamic and evolving entities. With its explicit and tacit reciprocity, the Mahābhārata transcends the bifurcated conception of knowledge and asserts its dynamic nature and liberal developments. The narrative strategy that sees the same character becoming the audient and later repositioning himself as the narrator is an example of reciprocity of explicit and tacit knowledge in the Mahābhārata. The audient then becomes the narrator as he was a good listener to

that particular story in the first place. An externalized knowledge is internalized through assimilation, and then that internalized form of knowledge undergoes externalization (dissemination); the reciprocal transmission process thus continues (See figure 4.3). It becomes clear while analyzing this reciprocity on the basis of the origin and developments of the epic, and also when analyzing this situation inside the context of Mahābhārata. As a result, Knowledge is not a static entity but constantly improvised and open-ended.

In the light of the findings given above, what conclusion can we arrive at? It has to be acknowledged that the KM system adapted here is confined within the structure of corporate governance in an organization. Examples used to explain each KM process with its subprocesses reveal those limitations. However, the set of seven KM subprocesses that we found from the narrative of the Mahābhārata, overcomes all those limitations. Therefore, the Knowledge architecture and management model that developed from this analysis puts forward an open and consistently liberal approach that demands an overhauling of the present day KM practices. The liberal epistemic approach frees knowledge from all its technical barriers and knowledge switches to free and open access mode in every sense. Thus, all authoritarian stances on knowledge is forced to fall away. As those who are part of the production of knowledge retreat in every sense, the knowledge becomes more dynamic and leads to the free and open interventions of new thinkers. There, knowledge is completely liberated, transcending all boundaries, and all power structures on knowledge disappear. This liberal approach is possible not only in knowledge production but also in its preservation and dissemination. And hence, the Open knowledge architecture and Management that developed from the narrative of the epic comes to its perfect shape. Therefore, the epic can be considered as a 'KM

system' conceived in the ancient times as a primordial form or foundation of Information Science and KM, which has evolved ever since and is still evolving, and can serve as an ideal paradigm for KM. Thus, the second theoretical sampling is justified here.

How can we set an ideal paradigm for KM based on the evidence developed in the analysis so far? The analyst addresses this question in the next and final stage by combining the theories formed from the first two stages of the analysis and by constructing a general theory.

4. 3 Constructing Theory from the Evidence

The first two objectives put forward by the researcher, approaching the epic as a dynamic living library, have been justified by using tentative theoretical sampling in the first two stages of the analysis, respectively. At the first stage, it has become clear that the epic poets have efficiently clothed the technicalities of KM with literary beauty and elegance. As a result, the analyst formulated a narrative theory. In the second stage, the analyst is able to consider the Mahābhārata as a KM system conceived in the ancient times as a primordial form or foundation of Information Science and KM, which has evolved ever since and is still evolving, and can serve as an ideal paradigm for KM. In this way, a KM theory is formulated. Among these two theories, the narrative theory is called 'Stalagmite Narrative Transmission' and the KM theory is named 'Open Knowledge Architecture and Management'. Thus, the research confronts the question of what these theories contribute to KM in Information Science. How to construct a general theory that can restructure the present day KM systems and processes? In this third and final stage of the analysis, the analyst examines whether it is possible to set an ideal paradigm for the existing practices of KM based on

the evidence derived from these theories. The last and third objective of the study is thus considered.

4.3.1 Stalagmite Narrative Transmission

The growth and development of stalagmites and stalactites were understood in detail in the last stage of analysis. As the stalagmites and stalactites grow from both directions and fuse together to feed each other, not only the stalagmites and stalactites but also their minerals undergo chemical changes and are enriched over time. In the same way in the Mahābhārata, when the narrator and the audient are enriched by each other through narration and counter narration, not only the narrator and the audient are enriched, but also the epic itself. While the stalagmite layers document climate changes since the Paleozoic age to the present, the Mahābhārata archives the different knowledge of the time it was formed. In that case, it has to be understood that Mahābhārata exist as a preservation modality for knowledge transmission like stalagmites. Hence, Knowledge, knower and knowee, the essential elements in knowledge transmission, are important in understanding the knowledge transmission in the Mahābhārata. In the Mahābhārata, when the knower and the knowee enrich each other through sharing and perceiving, not only the knower and the knowee, but the knowledge itself, which is constantly subjected to different critical discourses, is enriched.

4.3.2 Open Knowledge Architecture and Management

KM processes such as Knowledge discovery, Knowledge capture, Knowledge Sharing, and Knowledge application are reflected in the epic in another form along with their subprocesses, including Combination and Socialization (Knowledge discovery), Externalization and Internalization (Knowledge capture), Socialization and Exchange (Knowledge sharing), and Direction and

Routines (Knowledge application). Therefore, we can say without any hesitation that Mahābhārata is not only an ancient art of KM but also a KM system itself. The ancient model of the KM system is characterized by the fact that knowledge is not limited to being processed within the structure of an organization, as it is in Fernandez and Sabherwal's model. Not only Fernandez and Sabherwal's KM model, but all KM practices seen today in general are confined within the structure of corporate governance in an organization. The epic model has to be understood as chaotic in nature, being very fluid and dynamic, and cannot be contained within a specific organized structure. The liberal epistemic approach that derives from the epic frees knowledge from all its technical barriers and knowledge switches to free and open access mode in every sense. Thus, all authority on knowledge is forced to fall away. As those who are part of the production of knowledge retreat in every sense the knowledge becomes more dynamic and exposed to new interventions. Here, knowledge is completely liberated, transcending all boundaries, and all power structures on knowledge disappear. An alternative approach to the corporatization of knowledge is thus envisaged. Accordingly, the Open Knowledge Architecture and Management model is formed.

4.3.3 Formulation of Grounded Theory

How can we develop a KM model capable of reframing existing KM practices by incorporating the Stalagmite Narrative Transmission process into the Open Knowledge Architecture and Management? The analyst tries to respond to this question by presenting the stalagmite architecture of KM in the narrative of the Mahābhārata. A free and open Knowledge Architecture and Management system develops here, where not only the knower and the knowee but also the knowledge that is constantly subject to the process of stalagmization is nurtured through sharing and perceiving. A KM model, the

Stalagmite Architecture of KM, is thus formed, where all authority over knowledge disappears, and is constantly subject to free and open interventions, serving beyond all technical barriers (See figure 4.6). The KM model, which is confined within an organization structure, is thus reconstructed.

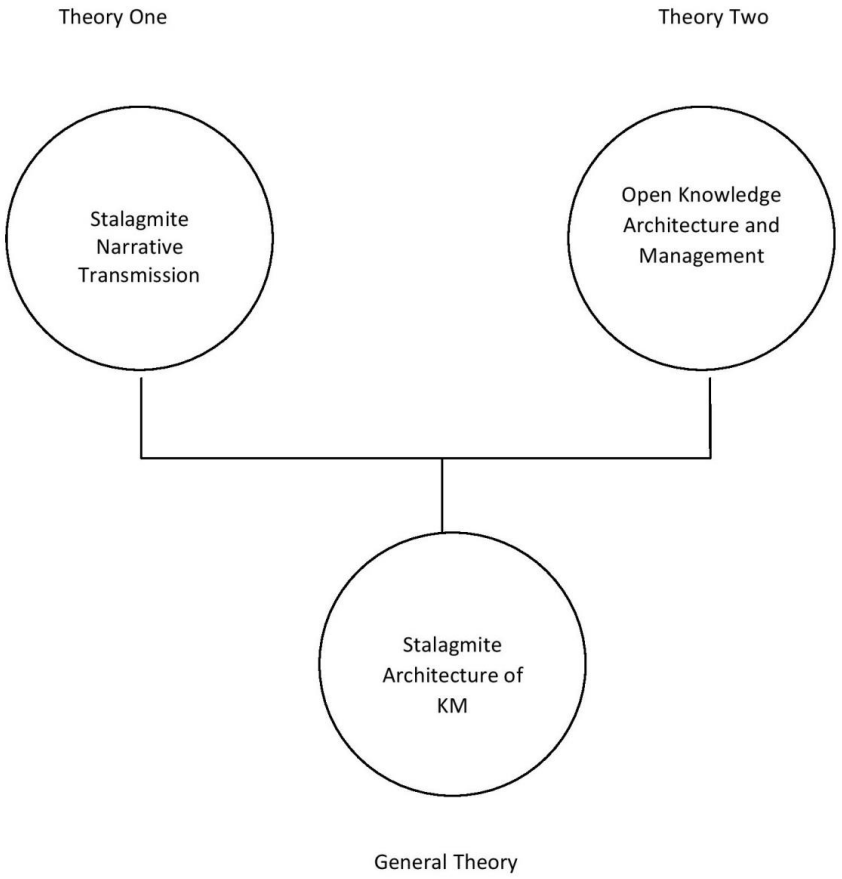

Figure 4.6: Formulation of Grounded Theory

4.3.3.1 Stalagmite Architecture of KM

How can knowledge become free by transcending the traditional notions of KM practices? This question can be answered by applying stalagmite architectural theory to the different modes of knowledge conversion in a KM

system. Stalagmite Architecture of KM suggested three main kinds of KM processes that rely on KM; Knowledge discovery, Knowledge capture and Knowledge sharing. These three KM processes are based on Fernandez and Sabherwal. The three KM processes are supported by a set of five KM subprocesses; combination and socialization, externalization and internalization, and exchange and socialization. One of these subprocesses-socialization-supports two KM processes-discovery and sharing. In the five KM subprocesses, four processes (externalization, combination internalization, and socialization) are based on Ikujiro Nonaka and Hirotaka Takeuchi (figure 4.7).[58] According to Nonaka and Takeuchi, two forms of interactions-between tacit knowledge and explicit knowledge-bring about four major processes in knowledge conversion: 1) from tacit to explicit (externalization); 2) from explicit to explicit (combination); 3) from explicit to tacit (internalization); and 4) from tacit to tacit (socialization).[59] The other one (exchange) is based on Janine Nahapiet and Sumantra Ghoshal.[60] The stalagmite architectural model explains how to set an alternative model to the corporatization of knowledge, in terms of openness, sharing and transparency, by making structural changes in KM processes. A non-linear and dynamic KM system develops when the stalagmization takes place in the processes of KM.

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58 Ikujiro Nonaka and Hirotaka Takeuchi, *The knowledge-creating company: How Japanese companies create the dynamics of innovation* (New York: Oxford UP, 1995), 62.

59 Nonaka and Takeuchi, *The knowledge-creating company*, ix.

60 Nahapiet and Ghoshal, ''Social capital, intellectual capital, and the organizational advantage,'' 242-266.

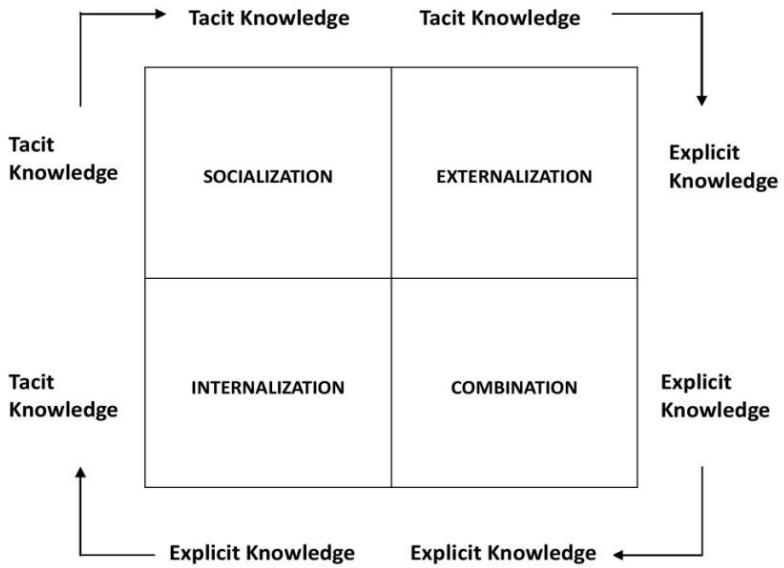

Figure 4.7: Four modes of knowledge conversion (Nonaka and Takeuchi, 1995)

The Stalagmite Architecture of KM is illustrated below (figure 4.8). The figure explains the different dynamics of knowledge transmission in great detail.

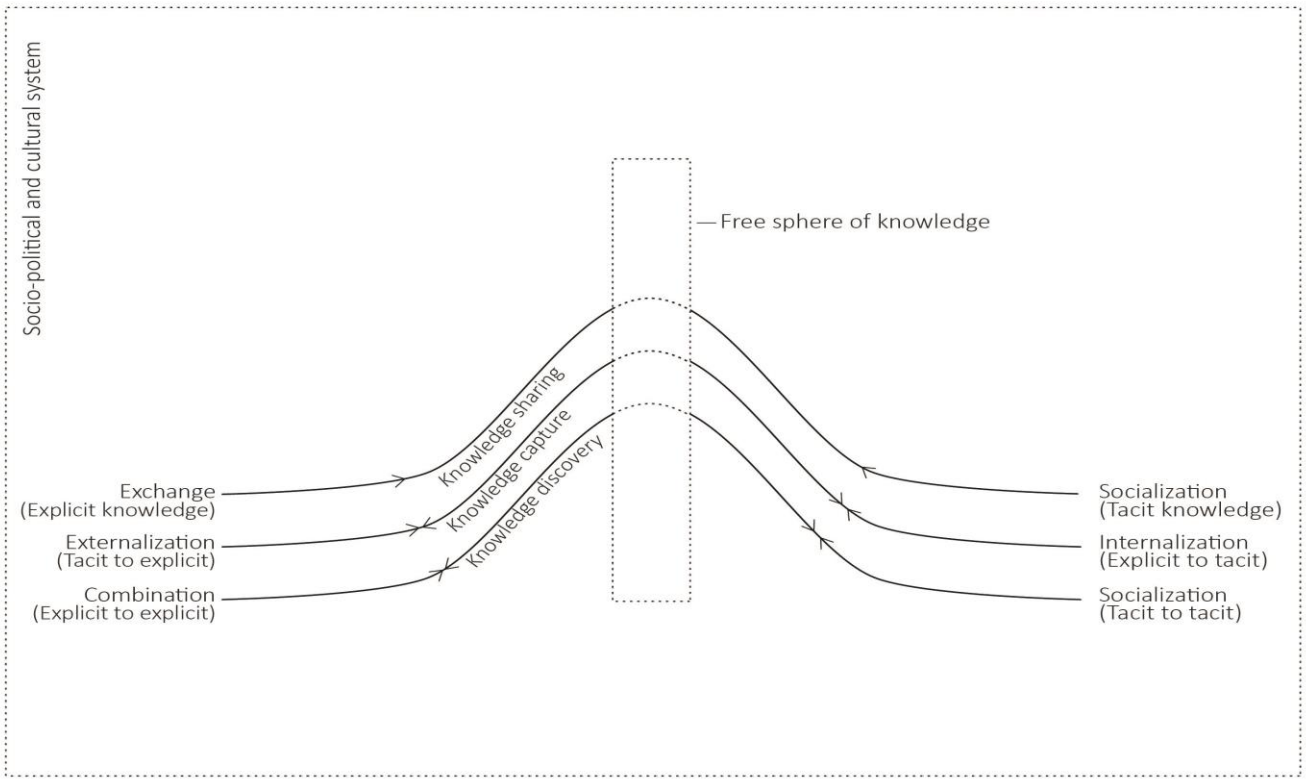

Figure 4.8: Stalagmite Architecture of KM

4.3.3.1.1 Knowledge Discovery: Beyond Direct and Indirect Ways of Transmission

The KM process of knowledge discovery relies on two subprocesses, Combination and Socialization. According to the knowledge conversion theory, as shown in figure 4.7, Combination is the direct transmission (explicit to explicit) of knowledge, while Socialization is the indirect transmission (tacit to tacit). However, transmission of knowledge in the Stalagmite Architecture of KM does not rely entirely on this bifurcated conceptualization of knowledge. By explaining the direct and indirect transmission of knowledge, the analyst explains how this bifurcated view of knowledge disappears during the process of Knowledge discovery in the stalagmite architecture of KM and how knowledge is transmitted reciprocally. It is here that we confront the question of what knowing is.

4.3.3.1.1.1 Redefining Combination as Dialectical Process

The new explicit knowledge created by reconfiguring, recategorizing and recontextualizing existing explicit knowledge, known as combination, reaches a consistently liberal state in the Stalagmite Architecture of KM. When a piece of knowledge reaches the knowee completely freely without any other barriers, when the source code of knowledge can be reconfigured, recategorized and recontextualized by anyone, a healthy interface is formed between the knowledge and the knowee. This creates a new explicit knowledge. Knowledge is transmitted there in a direct way in the process of forming new explicit knowledge by combining different forms of explicit knowledge from different sources. Therefore, in direct transmission of knowledge, the knowledge flows from one explicit form to another.

Karl Marx and Friedrich Engels developed dialectical materialism, a theory or set of theories, by adapting Hegelian dialectics into arguments

regarding traditional materialism. The dialectical materialism formed as a result of synthesizing existing explicit knowledge is something new that is acquired through the process of dialectics (Combination). The Hegelian view holds that thinkers often were able to explain what made societies different over time, but they were unable to explain why they changed. Hence, Hegel was looking for a solution to this problem in dialectics. Hegelian dialectics were presented in three dialectical stages of development: the thesis, which gave rise to its proposition; the antithesis, which contradicted or negated the proposition; and the synthesis, which resolved the conflict between the two and formed a new proposition.[61] Thus, the thesis, antithesis and synthesis (Abstract-Negative-Concrete), the three stages of Hegelian dialectics, in a way, are also comparable to the KM process of Combination.

4.3.3.1.1.2 Demonstration of Socialization

The indirect way of transmission of knowledge is Socialization. Socialization occurs when knowledge is integrated in tacit form across individuals through joint activities, rather than by means of written or verbal instructions, and new tacit knowledge is created. Knowledge resides in individuals in an amorphous form that cannot be articulated and is transmitted from one implicit form to another. The creation of new tacit knowledge through the mechanism of socialization thus gives emphasis on action and reveals that lived experience is the real source of knowledge. It is notable here that Zen masters use the method of socialization to create new knowledge by sharing learning through action, directly from one mind to another, to share their intuitive understandings and wisdom with Zen practitioners. Zen is a Japanese school of Buddhism that emphasizes awakening the intuitive

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[61] Heinrich Moritz Chalybaus, *Historical development of speculative philosophy, from Kant to Hegel*, trans. Reverend Alfred Edersheim (Edinburgh: T & T Clark, 1854), 366-367.

wisdom to understand the essence of the world, rather than using the mind to comprehend it. Therefore, in order to break the limitation of rational cognition and bring a new perspective, Zen has created riddles, known as 'koans', which contain a paradox that cannot be resolved by the intellectual mind.

The following 'koan' illustrates how lived experience is the real source of knowledge and stresses the need to transcend duality, from the dichotomized material world to the oneness of the absolute world:[62]

> Unmon said: ''I do not ask you about fifteen days ago. But what about fifteen days hence? Come, say a word about this!'' Since none of the monks answered, he answered for them: ''Every day is a good day.''
>
> ''Every day is a good day'' is a simple statement, but very few know its real meaning. The "good day" does not refer to a nice day as compared to a bad day. It means the absolute, not the relative, day. Today is the absolute day, the only day in the eternity of time. Today is never repeated. Every day is fresh and new just as one's life is new each day. Every day is a good day, but the good is not of one's own making. It is good in the original, or absolute, sense-rain or shine, war or peace, sickness or health. The past is only reference; the future is only hope. Today is real.

We can find many examples of tacit knowledge like aesthetic sense, humor sense, swimming, cooking, riding skill of snowboard or motorcycle, but here, the process of creating new tacit knowledge through indirect way of transmission is explained based on the intuitive understanding shared

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62 Venerable Gyomay M. Kubose, *Zen koans* (Chicago: Henry Regnery Company, 1973), 3.

through Zen 'koans'. 'Koans' are helpful for mind murdering and self-transcendence. The lived experience, or tacit knowledge, from the transcended self is then shared by developing new tacit knowledge through a completely different and innovative koan. Hence, it is clear that 'koans' are used as a linguistic medium for sharing non-linguistic knowledge. The Zen tradition, formed by combining Buddhist and Taoist principles, can be understood as a new branch of mysticism developed through the synthesis of the two traditions that emphasize the importance of tacit knowledge through lived experience. Similarly, we can see the Sufi way of life as a perfect blend of Hindu and Islamic traditions.

It has been discussed, so far, how new knowledge is created through direct and indirect ways of transmission. The division between direct and indirect is based on the bifurcated view of knowledge, which divides it into explicit and tacit. However, the Stalagmite Architecture of KM does not consider explicit and tacit knowledge as two ends of different possibilities, but as two sides of the same coin. Therefore, it is then necessary to discuss how the Stalagmite Architecture of KM goes beyond this bifurcated view of knowledge.

4.3.3.1.1.3 Three Myths in KM Literature

The conceptualization of knowledge as explicit and tacit gained widespread recognition through the Hungarian-British polymath Michael Polanyi (1891-1976), who made significant theoretical contributions to the fields of physical chemistry, economics, and philosophy. Polanyi used the bifurcated conceptualization of knowledge in the third paragraph of the first lecture in the Lindsay Memorial Lectures given at the University College of North

Staffordshire in 1958.[63] Explicit knowledge and tacit knowledge were two phrases used in the literature even before Polanyi introduced his epistemology, but unfortunately these were widely circulated in KM literature as purely Polanyian ideas. If so, when was KM connected with Polanyian ideas? It was only in the mid-1990s that KM became widely recognized as an academic subject and as a solution to issues in business organizations.[64] According to Alexander Serenko and Nick Bontis, less than 100 papers were written on the topic until 1995, and then there was rapid growth, with approximately 5000 papers published on KM and Intellectual Capital (IC) between 1995 and 2002.[65] However, when considering this explosion of publication, Kenneth A. Grant points out that one of the most cited references in the KM papers at the time was not the work of anyone published during the period of this explosion, but the work of Polanyi, a thinker from some 50 years ago.[66] 'The Tacit Dimension' (TD), the work of Polanyi, was the fourth most cited work from 1998 to 2002, while Polanyi was the third most cited author.[67] Over the course of 2003 to 2007, 'TD' was the ninth most cited work, while Polanyi was the seventh most cited author.[68] Nonaka is the reason why Polanyi has such a significant impact on

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63 Michael Polanyi, *The study of man: The Lindsay memorial lectures* (Chicago: The University of Chicago Press, 1958) 11-40.

64 Kenneth A. Grant, ''Tacit Knowledge Revisited-We Can Still Learn from Polanyi,'' *Electronic Journal of Knowledge Management*, Vol. 5, Issue 2 (2007), 173-180, https://www.researchgate.net/publication/215439276.

65 Alexander Serenko and Nick Bontis, ''Meta-Review of Knowledge Management and Intellectual Capital Literature: Citation Impact and Research Productivity Rankings,'' *Knowledge and Process Management*, Vol. 11 (3) (July-September, 2004), 185-198.

66 Grant, ''Tacit Knowledge Revisited-We Can Still Learn from Polanyi,'' 173.

67 Zhenzhong Ma and Kuo-Hsun Yu, ''Research Paradigms of Contemporary Knowledge Management Studies: 1998-2007,'' *Journal of Knowledge Management*, Vol. 14, No. 2 (2010), 175-189.

68 Ma and Yu, ''Research Paradigms of Contemporary Knowledge Management Studies: 1998-2007,'' 175-189.

KM literature. Nonaka has consistently referred to Polanyi as the basis for his conceptualization of tacit knowledge. In 1995, Nonaka and Takeuchi, who were attracted to Polanyian ideas, relied on the bifurcated view of knowledge to define four modes of knowledge conversion when formulating Organizational Knowledge Creation (OKC) theory. Subsequently, Nonaka's understanding of tacit knowledge was misidentified with Polanyi's tacit knowing, thus paving the way for widespread misapplication of Polanyi's epistemology in the KM literature.[69] Ever since the OKC theory was presented by Nonaka and Takeuchi, the literature of KM that we see has a tendency to reclassify knowledge only through the bifurcated view of explicit and tacit. As a result, knowledge is packaged and shrunk into a commodity to be marketed according to the interests of corporate organizations. Moreover, it is noteworthy in this context that it was an investigation in the business discipline of how Japanese companies created the dynamics of innovation that led them to create this organizational theory. Thus, through the shallow bifurcation of knowledge, KM has become a discipline to be explored only within the framework of business organization.

Were Nonaka and Takeuchi applying Polanyi's epistemology incorrectly? It is a fact that OKC theory was influenced by the idea of bifurcation of knowledge, but not rooted in Polanyi's epistemology. According to Eric M. Straw, Nonaka and Takeuchi built their conceptualization of personal knowledge in their theory based on three

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[69] Eric M. Straw explains in detail how Polanyi's epistemology has been widely misunderstood and misapplied in the KM literature. He asserts that this misunderstanding is rooted in the misidentification of Nonaka's tacit knowledge with Polanyi's tacit knowing. The reading of this paper which explains that the base of Polanyi's epistemology is not in the bifurcation of knowledge is more helpful to know Polanyian ideas. See, ''Knowledge Management and Polanyi.'' Unpublished paper. Retrieved from http://polanyisociety.org/ Nashotah% 20House/Papers/Straw-original-pdf-KnowlMgmnt%20&Polanyi-5-23-16.pdf

persistent myths in the KM literature, which incidentally led them away from Polanyi's epistemology.[70] The first myth claims that it was Polanyi, who conceptualized knowledge as being explicit and tacit for the first time. But he was not. Straw points out that this misconception establishes a false foundation and direction for understanding and applying Polanyi's epistemology in KM. In addition, the first myth feeds into the second myth, which asserts that Polanyi's epistemology is based on two categories of knowledge: explicit and tacit. It is not. Polanyi's epistemology is the ''act of knowing based on indwelling.''[71] Moreover, Straw says that Polanyi presented this bifurcation of knowledge as a beginning point for those who believed that explicit knowledge was the only kind of knowledge. Finally, the third myth claims that the quote, ''We can know more than we can tell''[72] is the conclusion of Polanyi's epistemology. Unfortunately, it is wrong. It is not really the conclusion of Polanyi's epistemology, Straw says, but simply the beginning point. So they confused the beginning with the end. Thus, according to Straw, Nonaka and Takeuchi failed to engage with Polanyi's epistemological arguments. Similarly, many scholars such as Haridimos Tsoukas (2003),[73] Kenneth A. Grant (2007),[74] Stefan Gueldenberg and Holger Helting (2007),[75] Rodney McAdam, B. Mason and Josephine McCrory

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70 See, Eric M, Straw, ''Knowledge Management and Polanyi.''

71 Michael Polanyi, *The Tacit Dimension* (New York: Doubleday and Company, 1966), 24.

72 Polanyi, *The Tacit Dimension*, 4.

73 Haridimos Tsoukas, ''Do we Really Understand Tacit Knowledge,'' In *The Blackwell Handbook of Organizational Learning and Knowledge Management*, edited by Mark Easterby-Smith and Marjorie A. Lyles (Blackwell, 2003), 410-427, https://www.researchgate.net/publication/2528222.

74 Grant, ''Tacit Knowledge Revisited-We Can Still Learn from Polanyi,'' 173-180

75 Stefan Gueldenberg and Holger Helting, ''Bridging 'The Great Divide': Nonaka's Synthesis of 'Western' and 'Eastern' Knowledge Concepts Reassessed,'' *Organization*, Vol. 14, No. 1 (2007), 101-122.

(2007),[76] Ilkka Virtanen (2010),[77] and Fuat Oguz and Ayse Elif Sengun (2011)[78] have criticized Nonaka and Takeuchi for incorrectly applying Polanyi's epistemology.[79] However, in contrast to the approach of Nonaka and

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[76] Rodney McAdam, B. Mason and Josephine McCrory, ''Exploring the Dichotomies within the Tacit Knowledge Literature: Towards a Process of Tacit Knowing in Organizations,'' *Journal of Knowledge Management*, Vol. 11, No. 2 (2007), 43-59.

[77] Ilkka Virtanen, ''Epistemological Problems Concerning Explication of Tacit Knowledge,'' *Journal of Knowledge Management Practice*, Vol. 11, No. 4 (2010).

[78] Fuat Oguz and Ayse Elif Sengun, ''Mystery of the Unknown: Revisiting Tacit Knowledge in the Organizational Literature,'' *Journal of Knowledge Management*, Vol. 15, No. 3 (2011): 445- 461.

[79] Nonaka (Nonaka & von Krogh, 2009) defended the criticisms by arguing that he did not intend a bifurcated view of personal knowledge. ''Instead, he claimed he intended a knowledge continuum. Nonaka introduced (Nonaka & Toyama, 2003) and then developed (Nonaka & Peltokorpi, 2006) the knowledge continuum, but failed to include it as one of the ''central elements'' (Nonaka, von Krogh, & Voelpel, 2006, 1179) of OKC theory until much later (Nonaka and von Krogh, 2009). Nonaka's (Nonaka and von Krogh, 2009) knowledge continuum consisted of explicit knowledge on one end and tacit knowledge on the other end with dynamic interaction along the full length of the continuum. Nonaka described this continuum as functioning in an analog fashion. The analog attribute permits knowledge to reside anywhere along the continuum. Thus, knowledge has both explicit and tacit characteristics, but more or less of each depending on where it falls on the continuum. Nonaka claimed that the knowledge continuum showed agreement between his work and Polanyi's epistemology, which it does not. Nonaka also claimed that the continuum supported and upheld the distinction between explicit and tacit knowledge in OKC theory.'' See, Eric M, Straw, ''Knowledge Management and Polanyi.'' See also, Ikujiro Nonaka and Georg von Krogh, ''Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory,'' *Organization Science*, Vol. 20, No. 3 (2009), 635-652; Ikujiro Nonaka and Ryoko Toyama, ''The Knowledge-Creating Theory Revisited: Knowledge Creation as a Synthesizing Process,'' *Knowledge Management Research & Practice*, Vol.1, No. 1 (2003), 2-10; Ikujiro Nonaka and Vesa Peltokorpi, ''Objectivity and Subjectivity in Knowledge Management: A Review of 20 Top Articles,'' *Knowledge and Process Management*, Vol. 13, No. 2 (2006), 73- 82; Ikujiro Nonaka, Georg von Krogh and Sven C. Voelpel, ''Organizational Knowledge Creation Theory: Evolutionary Paths and Future Advances,'' *Organization Studies*, Vol.27 (2006), 1179-1208.

Takeuchi, the stalagmite architecturing of KM transcends the direct and indirect ways of knowledge transmission, which rely on the shallow bifurcation of knowledge, due to their mutual reciprocity.

4.3.3.1.1.4 Act of Knowing and Reciprocal Transmission of Knowledge

Does knowledge in any domain ever come to a halt? In fact knowledge never culminates anywhere just as an artistic expression never comes to perfection. And it undergoes constant spontaneous improvisation like an art form. Thus, like the arts, knowledge formation is an ongoing process. If so, in Stalagmite Architecture of KM, we are not dealing with any static and authoritarian entities. Rather, we are dealing with open ended, dynamic and evolving entities. Though knowledge formation is a time bound process marked by the spatio-temporal peculiarities of its genesis and makeup, its refinement over time never stops, and in that respect its growth remains timeless. Since the current KM approach does not address knowledge in this way, an alternative approach is developed here that takes into account the dynamic nature of knowledge from the narrative of the Mahābhārata.

The Mahābhārata is basically a verbatim form of art as the origin and growth of the Mahābhārata can be traced in these ballads of the bards. Despite its later transformation into textual form, the Mahābhārata has continued to evolve on many levels, in different languages because the basic artistic nature and dynamic character of the oral form were never disturbed. Therefore, even though Mahābhārata could be considered as a piece of literature available in textual form today, we ought to treat it as an ever evolving form of art. It is owing to this parallel between an art form and the epic thanks to its liberal development and dynamic growth akin to the

growth of an art form, that it stands apart as a model to bring about essential structural changes in present day KM practices.

When bringing structural changes to KM practices, the researcher has to confront the question of *what is knowing*. In other words, the question of what constitutes the structure of knowing must be addressed in order for the KM theory to have an epistemological and ontological basis. In this context, the researcher's attention turns to the parallels to the Polanyian epistemological approach, which has been misapplied throughout the KM literature for so long, with the process of knowledge formation in the Mahābhārata, which ultimately leads the study to interesting detours. The reciprocal transmission process in the Mahābhārata proceeds in a non-linear fashion, transcending the explicit and tacit bifurcation of knowledge. Similarly, we can see the approach of transcending the bifurcation of knowledge in Polanyi's epistemology. Therefore, the researcher examines the proposed theory derived from the narrative techniques of the Mahābhārata, an exemplar of the Stalagmite Architecture of KM, on the basis of Polanyi's epistemology and envisions a process-oriented KM system that transcends the bifurcated conception of knowledge. If so, we can approach the Stalagmite Architecture of KM from here as a theory in which Polanyian epistemological ideals are accidentally incorporated.

As a result, the Stalagmite Architecture of KM does not approach Combination (explicit to explicit) and Socialization (tacit to tacit), which are subprocesses in the KM process of Knowledge Discovery, as the two ends of a continuum. Rather, as illustrated in figure 4.8, Combination and Socialization reciprocate each other and thereby transcend the bifurcation of knowledge. How does the bifurcation of knowledge disappear? Based on

Polanyi's epistemology, by understanding the act of knowing, this reciprocal transmission that eliminates the bifurcation of knowledge needs to be explained here.

4.3.3.1.1.4.1 Polanyi's Epistemology

What does knowing mean? Polanyi coins the seemingly contradictory term 'Personal Knowledge' to explain the conception of knowing. He thought that in the epistemological notions of modern science; that true knowledge should be impersonal, universally established and objective, the two words 'Personal' and 'Knowledge' seem to contradict each other. And therefore, it is necessary to resolve this contradiction by modifying the conception of knowing.[80] For this, he put forward the argument that in every act of knowing, the passionate contribution of the person who knows what is being known is entered and this coefficient is not a mere imperfection but a vital component of his/her knowledge.[81] If so, Polanyi's epistemology is characterized by an emphasis on the knower rather than what is being known. Thus, in this way, Polanyi modified the conception of knowing to go beyond the disjunction of subjective and objective by questioning the ideal of scientific detachment[82] that rejects passionate and personal human appraisals of theories from science.

Consequently, Polanyi introduces the concept of indwelling to emphasize the importance of the integration of personal human appraisal in the structure of knowing, which is directly opposed to the approach of

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80 Michael Polanyi, *Personal Knowledge: Towards a Post-critical Philosophy* (New York: Harper Torchbook, 1958), xiii.

81 Polanyi, *Personal Knowledge*, xiv.

82 Science shares facts. Hence, the argument that scientific experiments should be dispassionate, objective and completely impersonal is known as scientific detachment.

epistemological objectivism. Indwelling refers to the act of integrating something into our physical-mental self. Therefore, for Polanyi, the ultimate instrument of any of our external knowledge is our body, whether intellectual or practical. He argues that we *rely* on our awareness of contacts of our body with the things outside for *attending* to those throughout our waking moments. Normally, he says, our body is the only thing in the world that we never experience as an object, but we always experience it in relation to the world to which we are attending. By using our own body intelligently, he adds, we feel that it is our own body and not an external thing.[83] In this way, by modifying the conception of knowing through indwelling, he rejects the argument of traditional epistemologists that absolute objectivity is the attainable ideal of knowledge.

In order to explain that indwelling is the basis of the act of knowing, the two instances that Polanyi points out are presented here so as to help understand the concept. Polanyi says:[84]

> Consider the situation where the two persons share the knowledge of the same comprehensive entity-of an entity which one of them produces and the other apprehends. Such is the case when one person has formed a message and the other has received it. But the characteristic features of the situation are seen more clearly if we consider the way one man comes to understand the skillful performance of an-other man. He must try to combine mentally the movements which the performer combines practically and he must combine them in a pattern similar to the performer's pattern of movements. Two kinds of indwelling meet here. The performer co-ordinates his moves by dwelling in them as parts of his body, while

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83 Polanyi, *The Tacit Dimension*, 15-16.

84 Polanyi, *The Tacit Dimension*, 29-30.

> the watcher tries to correlate these moves by seeking to dwell in them from outside. He dwells in these moves by interiorizing them. By such exploratory indwelling the pupil gets the feel of a master's skill and may learn to rival him.

Nor is this structural kinship between subject and object, and the indwelling of one in the other, present only in the study of a bodily performance. Chess players enter into a master's spirit by rehearsing the games he played, to discover what he had in mind.

What can be learned from these two cases of indwelling? In one of them, a person proficiently uses his body and in the other, his mind. Polanyi makes the argument that in these two instances of our access to the particulars of a comprehensive entity we encounter something that contributes to the coherence of unity.[85] In other words, these instances reveal that the subject and the object, which we generally see as two separate entities, are inextricably intertwined. If so, the importance of Polanyi's theory lies in how he views this structural kinship between subject and object. Polanyi engages this problem by explaining the structure of knowing. He thought that an understanding of the structure of knowing could only be on the right track by exploring the distinction between the two types of awareness inherent in any conscious act.

4.3.3.1.1.4.1.1 Structure of Knowing: Subsidiary and Focal Awareness

Polanyi identified the act of knowing based on indwelling as tacit knowing, which can be seen as a major feature of his theory. For Polanyi, ''since all understanding is tacit knowing, all understanding is achieved by indwelling.''[86] According to him, tacit knowing combines three coefficients: 1) the knower, 2) subsidiary particulars and 3) what the subsidiaries bear on

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85 Polanyi, *The Tacit Dimension*, 30.

86 Michael Polanyi, ''Tacit Knowing: Its Bearing on Some Problems in Philosophy,'' *Reviews of Modern Physics*, Vol. 34, no. 4 (1962), 606.

as a focus of attention.[87] In this triadic structure of knowing, each act of knowing is strongly dependent on the knower, the first coefficient, because the personal participation of the knower is required to transform the particulars into a unified entity. This act of unifying, or tacit integration, which transforms particulars into a whole, can be explored by understanding the second and third coefficients. Tacit integration is based on two types of awareness: focal and subsidiary. ''Focal awareness concerns the object of conscious act represented in the mind, for example a perception of an external object or a propositional belief. Subsidiary awareness refers to the basis on which the focal awareness operates. Processes of subsidiary awareness provide the elements that the focal object consists of.''[88] Thus, in the triadic structure of knowing, subsidiary awareness lies in the second coefficient, while focal awareness lies in the third. Polanyi explains:[89]

> When we are relying in our awareness of something (A) for attending to something else (B), we are but subsidiarily aware of A. The thing B to which we are thus focally attending, is then the meaning of A. The focal object B is always identifiable, while things like A, of which we are subsidiarily aware, may be unidentifiable. The two kinds of awareness are mutually exclusive: when we switch our attention to something of which we have hitherto been subsidiarily aware, it loses its previous meaning.

Briefing the structure of tacit knowing in this way, Polanyi says that the two types of awareness are mutually exclusive. The knower can't

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87 Michael Polanyi, *Knowing and Being: Essays by Michael Polanyi*, ed. M. Grene (Chicago: The University of Chicago Press, 1969), 181-182.

88 Ilkka Virtanen, ''Epistemological Problems Concerning Explication of Tacit Knowledge,'' *Journal of Knowledge Management Practice*, Vol.11, No. 4 (2010), http://www.tlainc.com/articl246.htm

89 Polanyi, *Personal Knowledg*e, x.

participate in both awareness at the same time. For example, ''if a pianist shifts his attention from the piece he is playing to the observation of what he is doing with his fingers while playing it, he gets confused and may have to stop.''[90] In fact, it has to be said that the knower cannot attend to things that operate subsidiarily at all. The moment the knower turns his attention to the subsidiary elements, it becomes focal, losing its subsidiary meaning, and acquires its own subsidiary basis.

Although the two awarenesses are mutually exclusive in this way, Polanyi shows how the structure of the two is closely related by referring to the skill of using tools:[91]

> When we use a hammer to drive in a nail, we attend to both nail and hammer, 'but in a different way.' We watch the effect of our strokes on the nail and try to wield the hammer so as to hit the nail most effectively. When we bring down the hammer we do not feel that its handle has struck our palm but that its head has struck the nail. Yet in a sense we are certainly alert to the feelings in our palm and the fingers that hold the hammer. They guide us in handling it effectively, and the degree of attention that we give to the nail is given to the same extend but in a different way to these feelings. The difference may be stated by saying that the latter are not, like the nail, objects of our attention, but instruments of it. They are not watched in themselves; we watch something else while keeping intensely aware of them. I have a 'subsidiary awareness' of the feeling in the palm of my hand which is merged into my 'focal awareness' of my driving in the nail.

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90 Polanyi, *Personal Knowledg*e, 56.

91 Polanyi, *Personal Knowledg*e, 55.

What can be understood here? Polanyi illustrates that subsidiary and focal awareness are structurally bound together by explaining the skill of driving a nail by the strokes of a hammer. It can be understood from this instance that the tacit knowing based on indwelling is operated through the mode of transition from 'knowing how' to 'knowing what,' i.e. in the structure of the idea of 'from-to knowledge.' In the case of our knowledge of physiognomy, we attend *from* the features *to* the face, and we may not be able to articulate the features of the face. It is also conceivable here that blind people feel their way by transposing the shocks transmitted to their hand and the muscles holding the stick into an awareness of the things the point of the stick touches. In this way, Polanyi highlights a number of similar instances to explain his epistemological position rooted in the idea of 'from-to knowledge.' In addition to this, what if we consider the case of our linguistic knowledge? Explaining Polanyi's epistemology, Straw says,[92] ''we attend from the shapes and sounds of an alphabet for attending to words; from words and grammar to the meaning of sentences; from sentences to paragraphs.'' Further, he explains:[93]

> Our focal awareness is on the thing that has our physical-mental focus, such as a word. Our subsidiary awareness is everything we have indwelled that facilitates understanding at the focal level, such as the shapes and sounds of an alphabet. Focal awareness is about knowing a whole. Subsidiary awareness is about the indwelled clues that contribute to knowing that whole. Our integration of the clues is the meaning of the whole. We know a word by attending to that word (focal awareness) and relying on our indwelled knowledge of

92 See, Eric M, Straw, ''Knowledge Management and Polanyi.''

93 See, Eric M, Straw, ''Knowledge Management and Polanyi.''

> the shapes and sounds of an alphabet (subsidiary awareness). In this way, we attend 'from' the alphabet 'to' the word.

So, what can we conclude here? Polanyi's epistemology is the act of knowing based on indwelling as tacit knowing, which is rooted in the triadic structure of knowledge. According to Polanyi, the unspecifiability of skills based on tacit knowledge is closely related to the findings of Gestalt psychology, which relies mainly on perceptual knowledge. Approaching the body as the ultimate instrument, the indwelled knowledge rejects the ideal of modern science that knowledge must be wholly objective and impersonal, and Polanyi's theory emphasizes the knower rather than what is being known. Thus, any conscious act of the knower relays two kinds of awareness: focal and subsidiary. Our focal awareness is always located at a distance from us. But we experience our subsidiary awareness as we experience our body, which ensures the knower's 'personal participation' in any act of understanding. However, Polanyi's approach is not subjective. ''Polanyi's concept of personal knowledge has strongly objective element because it affirms the possibility to establish contact with knower-independent reality.''[94] Furthermore, beyond the functional aspects, the triadic structure of knowledge also has semantic, phenomenal and ontological dimensions. Eva-Maria Jung says:[95]

> For Polanyi the mentioned triadic structure of knowledge does not only comprise functional aspects, but also has profound implications

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94 M. Mitchell, *Michael Polanyi*, (Wilmington: ISI Books, 2006), cited in Ilkka Virtanen, ''Epistemological Problems Concerning Explication of Tacit Knowledge,'' *Journal of Knowledge Management Practice*.

95 Eva-Maria Jung, ''Knowledge, Practice, and the Problem of Relativism-Reconsidering Michael Polanyi's 'Personal Knowledge','' *The Problem of Relativism in the Sociology of (Scientific) Knowledge*, Eds. Richard Schantz and Markus Seidel (Berlin, Boston: De Gruyter, 2011), 220-221, https://doi.org/10.1515/9783110325904.215

> for semantic, phenomenal and ontological dimensions. First, from-to knowledge is said to be sense-giving, since the focal target brings out the meaning of the subsidiaries. Second, tacit knowing yields a phenomenological transformation because-once being integrated into a whole-things 'feel and look different' to us from the way they did before. Finally, the tacit dimension of knowledge even embodies an ontological claim, namely, that the result of the act of knowing ''is an aspect of reality which, as such, may yet reveal its truth in an inexhaustible range of unknown and perhaps still unthinkable ways.''[96]

4.3.3.1.1.4.2 Transcending the Tacit-Explicit Distinction

As mentioned earlier, Polanyi used the categories of explicit and tacit in the first lecture of the Lindsay Memorial Lectures in 1958, titled ''Understanding ourselves.'' Polanyi said:[97] ''in my view, in the fact that human knowledge is of two kinds. What is usually described as knowledge, as set out in written words or maps, or mathematical formulae, is only one kind of knowledge; while unformulated knowledge, such as we have of something we are in the act of doing, is another form of knowledge. If we call the first kind explicit knowledge, and the second, tacit knowledge…'' However, before Polanyi used this bifurcated category of knowledge, many other thinkers in different disciplines had used it. Straw points out many examples of the use of the phrase 'explicit knowledge' in various disciplines such as Science (McKay, 1932), Psychology (Ichheiser, 1943), Sociology (Schutz, 1944), Philosophy (Carnap, 1946), and Mathematics (Koopmans & Reiersol, 1950).[98] Moreover, he says that Khun (1950), a contemporary of Polanyi who engaged in

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96 Polanyi, *Knowing and Being*, 141.

97 Michael Polanyi, *The study of man: The Lindsay memorial lectures,* 11-40.

98 See, Eric M, Straw, ''Knowledge Management and Polanyi.''

philosophy of science, is another notable example here. He also highlights examples of the phrase 'tacit knowledge' which was used earlier in certain fields such as Advertising (Acheson, 1917), Education (Jones, 1919), Politics (Spurr, 1920), Astronomy (Myers, 1931), and Psychology (Brussel, 1945). However, Polanyi is not stuck in this shallow bifurcation of knowledge. He transcends the bifurcated conceptualization by structurally analyzing the two types of awareness involved in any act of knowing. Thus, for Polanyi, the bifurcation of knowledge was simply the starting point of his epistemology based on indwelling.

It is noteworthy here how Polanyi approaches the distinction between tacit and explicit knowledge based on our focal and subsidiary awareness. Polanyi States:[99] ''things of which we are focally aware can be explicitly identified; but no knowledge can be made 'wholly explicit.' For one thing, the meaning of language, when in use, lies in its tacit component; for another, to use language involves actions of our body of which we have only a subsidiary awareness. Hence, tacit knowing is more fundamental than explicit knowing: *we can know more than we can tell and we can tell nothing without relying on our awareness of things we may not be able to tell*.'' Thus, for Polanyi, all understanding is tacit knowing; he identified the act of knowing based on indwelling as tacit knowing. If so, what is to be understood here? Tacit and explicit bifurcation does not exist in reality. Even in terms of the language we use to communicate, whether verbal or nonverbal, said bifurcation becomes impossible. Language always represents second-hand reality, since we experience reality directly through indwelling. Therefore, tacit and explicit bifurcation is not possible even in knowledge that represents second hand reality. So the question remains why do we have to rely on this bifurcation of knowledge? We have already understood

[99] Polanyi, *Personal Knowledg*e, x.

that our focal and subsidiary awareness are mutually exclusive. A knower can never participate in both awareness at the same time. More specifically, knower does not attend subsidiary awareness at all. Remember the example of the Pianist we discussed earlier. The moment the knower turns his attention to the subsidiary elements, the subsidiary elements become focal, losing their subsidiary meaning, and acquire their own subsidiary basis. Therefore, we can never attend an explicit object with our subsidiary awareness. Although knowledge does not exist as 'wholly explicit', we perceive it as an entity apart from ourselves. This leads to bifurcation. As a result, the tacit and explicit distinction exists in the repertoire of language even if it is not a reality.

In addition, it is noteworthy how this bifurcated conceptualization works differently in structural and transactional approaches to knowledge. According to Polanyi's theory, the structural dimension of any knowledge, even in Linguistics, completely rejects the tacit and explicit bifurcation. Meanwhile, the transactional dimension of knowledge, in knowledge sharing, sustains this bifurcated conceptualization in the discourse of language.

When we understand the act of knowing based on Polanyi's epistemology, we see that the mutual reciprocity of knowledge in the stalagmite architectural theory of KM transcends the explicit and tacit distinction. Then, in the Stalagmite Architecture of KM (figure 4.8), the form of Combination that we see at one end in the Knowledge Discovery layer is 'explicit to explicit' only in its transactional dimension; structurally no explicit knowledge can exist without the tacit component. If so, tacit knowing works more fundamentally than explicit knowing while forming a new knowledge by combining two explicit forms of knowledge. Moreover, the form of Socialization at the other end of the layer is structurally 'tacit to tacit', but in

the transactional stage, through the reciprocal transmission of knowledge, explicit components are combined into Socialization and a new knowledge is produced thereby.

4.3.3.1.2 Knowledge Capture: Beyond Indirect to Direct and Direct to Indirect Ways of Transmission

Knowledge capture is defined as the process of retrieving tacit or explicit knowledge residing in people, artifacts, or organizational entities. The Knowledge Capture process benefits most directly from two subprocesses of KM, i.e. externalization and internalization. Externalization involves the transformation of tacit knowledge into explicit forms, while internalization transforms the explicit knowledge into tacit forms. Thus, the indirect to direct way of transmission of knowledge takes place through externalization, while the direct to indirect transmission of knowledge takes place through internalization.

Here, the analyst explains the externalization based on articulating skills in Martial arts and the internalization by pointing out the impact of the Operation note prepared by the surgeons after the surgery. Martial arts, also known as martial sciences, are a codified knowledge system developed for physical, mental and spiritual growth of an individual, as well as for self defense. The attempt to express internalized skills by a martial artist through an indwelled experience should be understood here as an externalization of an internalized knowledge. For example, the martial arts philosophy known as the 'Tao of Jeet Kune Do' is an externalized form of knowledge acquired by martial artist Bruce Lee from his long-term indwelling experience, i.e. internalization. The 'Tao of Jeet Kune Do', compiled posthumously from Bruce Lee's personal notes, is now available in book form. In this book, Lee depicts the science and philosophy behind fighting through hundreds of his own illustrations. On the other hand, the Operation note often called the

''op note,'' prepared by a surgeon immediately after the operation, includes operative diagnosis, intra-operative findings, postoperative care instructions, and is also a study material for aspiring surgeons to learn essential surgical procedures. Operation note is the documentation of externalized knowledge regarding a medical student who specializes in surgery. Thus, by internalizing the externalized knowledge, a surgeon accumulates the knowledge to practice in the operation theatre in the future. This kind of an impact can be made even if it is a textbook expertly compiled with surgical guidance instead of Operation notes. 'Alexander's Care of the Patient in Surgery', authored by Jane C. Rothrock and published by Elsevier-Health Sciences Division, is a surgery book that describes essential surgical anatomy procedures and methods through more than 400 surgical interventions.

Although the first of the two examples above represents the externalization of knowledge, the form of knowledge externalized as the 'Tao of Jeet Kune Do' may lead to internalized knowledge in a martial arts student, later. But the 'Operation note' that can become the cause of the internalized knowledge for aspiring surgeons is also externalized knowledge of an experienced surgeon. In this way, another example of externalization of internalized knowledge and internalization of externalized knowledge can be pointed out from another field. Joseph V. Mascelli, who was an American film director and cinematographer, has shared his film making knowledge in detail in a book called 'The Five C's of Cinematography: Motion Picture Filming Techniques Simplified'. This work, which describes the technical aspects of Camera Angles, Continuity (to hold the viewers' attention throughout in the film), Cutting, Close-ups and Composition (create the most appropriate mood to tell the story through the composition of lighting, colors and spacing) in detail, is still a reference text for aspiring filmmakers. What we have before us today in book form is the externalized form of the knowledge that Mascelli internalized from his long-term film making

experience. However, when aspiring filmmakers develop their technical knowledge in film making by referring to Mascelli's text, the externalized knowledge is internalized there.

Of the first two examples given above, the first illustrates indirect to direct transmission of knowledge and the second illustrates direct to indirect transmission of knowledge. Let us see how the Stalagmite Architecture of KM goes beyond indirect to direct and direct to indirect transmissions by transcending the explicit and tacit bifurcation of knowledge. Through Combination and Socialization, which are subprocesses in Knowledge Discovery, we have understood what are the direct (explicit to explicit) and indirect (tacit to tacit) transmissions of knowledge, respectively. In the Stalagmite Architecture of KM we have seen how knowledge is transmitted by transcending this direct and indirect structure of bifurcation. In the same way, in the Stalagmite Architecture of KM, through Knowledge Capture, we can see that indirect to direct and direct to indirect transmissions of knowledge are mutually reciprocated and go beyond their prefixed structural notions. In the stalagmite theory based on Polanyi's epistemology, any understanding is tacit knowing based on indwelling. No form of knowledge can exist without tacit components. Thus, it is possible to transcend the explicit and tacit bifurcation of knowledge through the reciprocity of externalized and internalized knowledge and thereby retrieve the knowledge residing in people, artifacts, or organizational entities through Knowledge Capture.

4.3.3.1.3 Knowledge Sharing: Direct and Indirect Ways of Transmission

The layer of Knowledge Sharing is different from the other two layers; as it holds tacit and explicit bifurcation. Knowledge sharing is a discourse of language, where the transactional dimension of knowledge is emphasized over the structural dimension. Therefore, only a peripheral engagement with

knowledge takes place through language as it represents second hand reality. We know the things we can tell or express by observing them. We know things that we cannot tell and express by indwelling them. If so, the knowledge we get through observation is direct transmission of knowledge, and that we get by indwelling is indirect transmission. Thus, the Stalagmite architecture of KM marks explicit knowledge transmission as Exchange and tacit knowledge transmission as Socialization from the bifurcated view point of knowledge.

4.3.3.1.4 Free Sphere of Knowledge

How do we explain the free sphere of knowledge in the Stalagmite architecture of KM? The free sphere of knowledge is an abstract reality formed between the subprocesses of Knowledge Discovery, i.e. Combination and Socialization and Knowledge Capture, i.e. Externalization and Internalization, when they reciprocate each other in the Stalagmite architecture. The free sphere is created not only in knowledge discovery and capture but also in the process of Knowledge Sharing where tacit and explicit bifurcation exists.

The concept of stalagmite sphere of knowledge, also known as the free sphere of knowledge, which has been vital in shaping the normative structure of management in Stalagmite Architecture of KM, can be understood based on four dimensions:

- Open knowledge architecture: the free sphere referred to here is a dynamic living space that is consistently liberal and free. First of all, it requires those who are part of the production of knowledge to retreat in every sense from their authoritative position on knowledge, making it more dynamic, and leading to free and open interventions of new thinkers. Therefore, the free sphere allows one

to reconfigure, recategorize, and recontextualize the source code of knowledge without any other disruptions. Thus, a free and open knowledge architecture and management system develops here, where not only the knower and the knowee but also the knowledge, that constantly undergoes the process of stalagmization, is nurtured through its sharing and perceiving.

- Disinterestedness: in a way, 'disinterestedness', which is one of the Mertonian ideals,[100] is relied upon here as a dimension for setting the ethos of KM. It creates an alternative way than that of corporatization of knowledge, and is directly opposed to the ideals of IPR. It has already been discussed that ''the acceleration in university patenting, the metrics culture in general and the corporatization of higher education is deeply problematic.''[101] Therefore, in order to overcome such worrying tendencies, it is necessary to ensure transparency along with the sharing of knowledge. Ultimately, the free sphere of knowledge emphasizes that knowledge belongs to the people, and researchers should be accountable to the people; there is no personal gain, only personal integrity.
- Expandable and compressible dynamics: if we explain these dynamics using an interesting analogy, the free sphere is like water; which has no form of its own, but that of whatever in which it is contained. Therefore, we cannot present the structure of the free

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100 Robert K. Merton encapsulated the ethos of science in four dimensions, which he called 'imperatives': universalism, communism, disinterestedness and organized skepticism.

101 Eva Hemmungs Wirten, ''The Patent and the Paper: a Few Thoughts on Late Modern Science and Intellectual Property,'' *Culture Unbound*, Vol. 7, (Linkoping: Linkoping University Electronic Press, 2015), 607. https://doi.org/10.3384/ cu.2000.1525.1573600

sphere in a particular form. Since the sphere is very fluid and dynamic, like water, it is both expandable and compressible at the same time. In the Stalagmite architecture, however, the ratio of the free sphere is determined by the socio-political and cultural system prevalent at any particular time. The more liberal and democratic the socio-political and cultural system is, the more expandable the free sphere is. Similarly, the more rigid and autocratic the system is, the more compressed the sphere is. For example, in an autocratic system, knowledge will be narrated only according to the vested interests of those who are in power; where the free sphere is shaped in a particular manner. However, in a consistently liberal system, the ratio of a person's inner freedom is also expanded according to the expandable ratio of the free sphere. Thus, in accordance with inner freedom, the inner sensibility ratio increases and leads to a higher level of self consciousness.

- Unconditional positive regard: The concept of Unconditional positive regard, a client-centered therapy, developed by Stanley Standal and expanded by humanistic psychologist Carl Rogers, is adaptable here.[102] In the free sphere of KM, the knower expresses empathy, support, and acceptance unconditionally, regardless of what the knowee says or does. Thus, there is a warm relationship between the knower and the knowee and the approach to knowledge becomes broad and open in every sense.

We have now passed the third and final stage of the analysis based on the third objective. The researcher examined the correlation between the evidence developed in the first two stages of the analysis and constructed a

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[102] Carl R. Rogers, *Client-centered Therapy*, 3rd edition (Boston: Houghton Mifflin, 1956).

General Theory based on Polanyi's epistemology that restructured the existing KM practices. Thereby, the question of why Mahābhārata is answered.

4.4 Conclusion

Based on Polanyi's epistemology, the analyst has been able to develop a new approach to KM through stalagmite architectural theory that emphasizes the tacit and personal components of cognition. Thus, a process oriented KM system based on indwelled knowledge is envisioned here, completely rejecting the structure of existing practices of KM that place tacit and explicit knowledge as two distinct possibilities of knowledge at two ends of a continuum.

Epistemology has come a long way since the days of Rene Descartes (1596-1650). Polanyi's non-explicable and tacit epistemic practices towards knowledge have gained more acceptance and have evolved into a dominant epistemological tradition today. The main feature of the stalagmite architectural theory constructed here is that it applied, for the first time, an epistemic tradition that transcends the bifurcation of knowledge in the practices of KM. Furthermore, by creating an alternative paradigm to the corporatization of knowledge and the metric culture, it is able to form a consistently liberal and dynamic free sphere in KM processes, thereby bringing KM practices outside the structure of corporate organization. Thus, the stalagmite architectural theory becomes a KM theory that can be applied not only to LIS, but in any other field.

5

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSIONS

Old traditions and thoughts never become totally inapplicable to new situations, and modern practices are never so new that they retain not a grain of the old.
-Iravati Karve

Looking back at what we did in this research, we can see that it has brought in a new dimension to KM practices by modifying its existing structure- a task accomplished by undertaking an extrapolative study of Mahābhārata as a work of art rather than mere literature. Starting with the question of whether art has epistemic value, the research has addressed the same and responded creatively by culminating the thesis with a KM theory, thereby revealing how knowledge is embodied in art. It could still be wondered how a work of art could serve as the basis for the development of a KM theory. In setting such a unique philosophy for KM practice, it is not possible to proceed without reflecting again on this fundamental question and once again justifying the thesis' response to the same. The path chosen for the response has been that of exploring the ontological relationship between art and knowledge and thereby establishing the epistemic validity of art on a par with its aesthetic appeal and authority. Let me conclude the thesis with a swift re-treading of that explorative path.

5.1. Validity in Art: Polanyi's Perspective

The life of art in society, according to Polanyi, is a creation of the artist's imagination renewed by the imagination of those who receive it.[1] An artist

[1] Michael Polanyi and Harry Prosch, *Meaning* (Chicago: University of Chicago Press, 1975), 95.

mainly relies on his imaginative perception to explore the unknown. He argues that, in a way, this is similar to science and technical invention, where scientists and inventors rely on their imaginative perception to solve a problem. Polanyi points out that a scientific inquiry consists of three parts: first, finding a problem, second, inquiry into the problem, and finally, solving the problem through successful search. According to him, all three parts are set in progress by two mental powers: intuition and imagination. A scientific inquiry receives guidance from largely spontaneous and effortless integrative power, i.e. intuition. All the labor and painstaking efforts involved in a creative process are considered thrusts of the imagination. If the thrust is successful, the vagueness of the problem is reduced and firmer guidance is offered for the next step towards a final solution. Therefore, according to Polanyi, intuition predominates at the beginning of an inquiry and imagination enters into the sensing of a problem by keeping intuition alert.[2]

Technical inventions also progress through these three stages. Polanyi says: one first sees a problem, then foresees its feasibility and worthwhileness, thrusts the imagination in a direction that promises success, and finally finds a solution that seems satisfactory. However, the content of invention differs from science as the aim of scientific inquiry is always indeterminate, whereas that of technical invention is relatively fixed. Therefore, the test of an apparent solution in technology is more practical than scientific discovery.[3]

A work of art comes into existence on the creation of an object of imagination through the integration of certain incompatibles.[4] In Polanyi's

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2 Polanyi and Prosch, *Meaning*, 96.

3 Polanyi and Prosch, *Meaning*, 97.

4 Polanyi and Prosch, *Meaning*, 98.

view, an artwork consists of two types of incompatibles: artificial patterns, i.e. ''frames'' and contents in prose, i.e. ''stories''.[5] The *from-to structure* of the meaning in the act of knowing, which establishes a semantic relation by integrating subsidiaries into a focus, works here as well. We attend *to* a focal object *from* indwelled clues provided by subsidiary elements that bear on the focus.

A story comes into existence by establishing a semantic relation through the integration of incompatibles; the artist attends *to* the content in the prose *from* constructing an artificial pattern. As in the arts, from-to integration can be seen in scientific discoveries and technical inventions. While the quest for scientific discovery integrates fragmentary clues into a coherent meaning that is initially unknown, technical invention, on the contrary, aims at a product that fulfills a definite function at the beginning and seeks ways to contrive it. So the essential feature of the artist's quests, says Polanyi, is closer to the scientist than the inventor, because to produce a work of art is a creative pursuit that has never been seen before but is vaguely grasped only by the power of anticipation. In brief, Polanyi points out that while a scientific problem consists of subsidiaries that anticipate an unknown focus, a technical problem consists of desirable focus that anticipates subsidiaries that are intended to be implemented.[6]

One thing is clear, imagination has an essential role to play in scientific discovery and technical invention as it is for art. Even after a solution is found, the imagination still works at the other end of the scientific quest. Polanyi observes that the solved problem is always fraught with anticipations of further manifestations that can only be entertained through imagination. But he thinks that the solution of a technical problem does not have as wide an indeterminate implication as for scientific quest, but they are sufficient to

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5 Polanyi and Prosch, *Meaning*, 98.

6 Polanyi and Prosch, *Meaning*, 98.

engage the imagination substantially.[7] Thus, while acknowledging the epistemic value of art, we have to understand and approach every piece of knowledge as a work of art itself.

5.2 Mahābhārata as a Work of Art

What is the life of art in society? As it is known, art intervenes in society as the creation of the artist's imagination as renewed by the imagination of those who receive it. If so, what keeps a work of art timeless is its potential to be constantly renewed by the imagination of whoever receives it.

The Mahābhārata is basically a verbatim form of art as the origin and growth of the Mahābhārata can be traced in the ballads of the bards. Despite its later transformation into textual form, the Mahābhārata has continued to evolve on many levels, in different languages because the basic artistic nature and dynamic character of the oral form were never disturbed. Therefore, even though Mahābhārata could be considered as a piece of literature available in textual form today, we ought to treat it as an ever evolving form of art. It is owing to this parallel between an art form and the epic thanks to its liberal development and dynamic growth akin to the growth of an art form, that it stands apart as a model to bring about essential structural changes in present day KM practices.

There have been very few works in the history of literature that could claim this ability to engage the society like the Mahābhārata. Whether an experienced statesman or an illiterate villager, everyone finds the possibilities to renew the Mahābhārata according to their imagination, both narratively and conceptually. In this way, its ability to be renewed by the imagination of whoever receives it has made the Mahābhārata an art form that has evolved with history by interacting with different contexts over time. The process of renewal through the imagination of the receivers,

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7 Polanyi and Prosch, *Meaning*, 97.

which began as early as 600 BCE, has made this epic an open text in every sense. Therefore, this open architectural approach led by imagination has made the Mahābhārata an epitome of the Indian epistemological tradition rather than just an epic poem. By incorporating the different knowledge systems that existed in the society at the time of its development, it has accrued archival value. In this unique epic, art has become the archive marking its ability to incorporate knowledge into itself.

The narrative transmission history of the Mahābhārata proves how liberal this open architectural approach has been, with the narrator's imagination being constantly renewed by the audient's imagination, and the narration itself being enriched over time. Then, we have also to understand that there is a unique knowledge architecturing and management system in the narrative of the Mahābhārata with the peculiarity that therein not only the knower and the knowee are enriched through mutual interaction, but also the knowledge itself.

Thus, the consistently liberal and open knowledge architecturing in the narrative of the Mahābhārata, which cannot be claimed by any other artistic works in the history of arts and literature, especially its ability to relentlessly create new patterns in the imagination of those who receive it, has led to the realization that this could be a template setting out an ideal for KM philosophy and its practice.

5.3 KM Philosophy and Practice

By revealing the social, epistemological, ontological and phenomenological aspects of knowledge architecture and management, and by applying the stalagmite architectural theory derivable from the Mahābhārata narrative as the general principle of knowledge transmission, a new philosophy is developed by questioning the existing practices of KM.

The socio-political and cultural dimensions of the assimilation of knowledge in the Mahābhārata considered as an art form that has evolved with history and is still evolving intervening in various contexts of history, have become crucial in developing this theory. Reconstructing the existing structure of KM which is based on the explicit and tacit bifurcation of knowledge, the theory exposes the intertwinement between art and knowledge and emphasizes the influence of socio-cultural factors on the formation of knowledge.

That being so, according to the theory, the spaces for knowledge formation, i.e. the free sphere of knowledge, controlled by the social system of each era reveal the relationship of KM with socio-cultural aspects. Furthermore, this theory that approaches the act of knowing based on Polanyi's epistemology assures the epistemological and ontological position of KM. Accordingly, when any understanding is based on indwelling as tacit knowing, the subject and object distinction is transcended and the tacit and personal components of cognition are emphasized. Therefore, the result of the act of knowing may share an aspect of reality by revealing the truth in unknown and still unthinkable ways. Moreover, the phenomenological aspect of knowledge is revealed when the knowledge is integrated into the being of the knower through indwelling and the knower experiences the knowledge differently from how it was until then. When the KM theory has such an epistemological, ontological and phenomenological dimension, the knower has more importance than what is being known. Thus, a theory with such essential structural characteristics incorporates the stalagmite architecturing principle and a paradigm is set for the philosophy of KM derived from the kinship between art and knowledge.

5.3.1 Stalagmite Architecture of KM

Stalagmite Architecture of KM suggests three main processes that constitute KM; namely, Knowledge discovery, Knowledge capture and Knowledge

sharing. These three KM processes are supported by a set of five KM subprocesses: Combination and Socialization (Knowledge discovery), Externalization and Internalization (Knowledge capture), and Exchange and Socialization (Knowledge sharing). One of these subprocesses, i.e. Socialization, supports two main KM processes, viz. Knowledge discovery and sharing.

According to Nonaka and Takeuchi, who played a major role in shaping the prevalent structure of KM, two forms of interactions- between tacit knowledge and explicit knowledge- bring about four major processes in knowledge conversion: 1) from tacit to explicit (Externalization); 2) from explicit to explicit (Combination); 3) from explicit to tacit (Internalization); and 4) from tacit to tacit (Socialization). However, the processes and subprocesses in the Stalagmite Architecturing of KM are not based on the explicit and tacit bifurcation of knowledge as suggested by the knowledge conversion theory. While KM subprocesses reciprocate each other by transcending the explicit and tacit bifurcation in Knowledge discovery and capture, the bifurcation of knowledge remains in Knowledge sharing.

5.3.1.1 Act of Knowing

The Stalagmite Architecture of KM approaches the act of knowing based on Polanyian ideals, according to which any understanding is tacit knowing based on our indwelled knowledge and no form of knowledge can exist without tacit components. Hence, the act of knowing can be understood by explaining the structure of tacit knowing, thereby explaining how knowledge transmission transcends the explicit-tacit bifurcation of knowledge. According to Polanyi, tacit knowing combines three coefficients: the knower, subsidiary particulars and what the subsidiaries bear on as a focus of

attention.[8] In this triadic structure, each act of knowing is strongly dependent on the knower, the first coefficient, because the personal participation of the knower is required to transform the particulars into a unified entity. The act of unifying, or tacit integration, which transforms particulars into a whole can be explored by understanding two types of awareness: focal and subsidiary. Focal awareness is about the object of conscious act represented in the mind. In other words, it is our focal awareness that creates in us a perception of an external object or a propositional belief. Subsidiary awareness is the basis on which focal awareness operates. Processes of subsidiary awareness provide indwelled clues that the focal object consists of. We attend *to* a focal object *from* indwelled clues provided by subsidiary elements that bear on a focus. Thus, in the triadic structure of knowing, subsidiary awareness lies in the second coefficient, while focal awareness lies in the third. The *from-to structure* of the meaning in the act of knowing works here, which establishes a semantic relation by integrating subsidiaries into a focus.

5.3.1.2 Knowledge Discovery and Capture: Reciprocal Transmission of Knowledge

The Stalagmite Architecture of KM does not approach Combination (explicit to explicit) and Socialization (tacit to tacit), which are subprocesses in the KM process of Knowledge Discovery, as two ends of a continuum. Rather, Combination and Socialization reciprocate each other and thereby transcend the bifurcation of knowledge. In the same way, Externalization (tacit to explicit) and Internalization (explicit to tacit), which are subprocesses in the KM process of Knowledge Capture, are reciprocated with each other and go beyond their prefixed structural notions. How does the bifurcation of knowledge disappear? Based on Polanyi's epistemology, by understanding

[8] Michael Polanyi, *Knowing and Being: Essays by Michael Polanyi*, ed. M. Grene (Chicago: The University of Chicago Press, 1969), 181-182.

the structural dimension of knowledge, this reciprocal transmission that eliminates the bifurcation of knowledge needs to be explained here.

5.3.1.2.1 Structural Dimension of Knowledge

According to Polanyi, we can explicitly identify what we are focally aware of, but no form of knowledge remains 'wholly explicit'. Polanyi points out that, for one thing, the meaning of language lies in its tacit component; for another, we can only rely on a subsidiary awareness of ourselves to use language involving actions of our body. Hence, Polanyi says, our tacit knowing is more fundamental than explicit knowing. In brief, one can know more than one can tell, and one can tell nothing without relying on one's awareness of what one cannot tell.[9] Thus, we have to understand that no knowledge can exist without tacit components, and thereby realize that the explicit and tacit distinction does not exist in reality.

Of course, for Polanyi, even in terms of the language we use to communicate, whether verbal or nonverbal, explicit and tacit bifurcation becomes impossible. We know a word because we attend to that word, which is our focal awareness, by relying on our subsidiary awareness of the shapes and sounds of an alphabet.[10] The from-to structure of the meaning in the act of knowing works here in attending to the word, which establishes a semantic relation by integrating subsidiaries into a focus. The language refers to second-hand reality, since we experience reality directly through our indwelled knowledge. Therefore, tacit and explicit bifurcation is not possible even in knowledge that represents second hand reality. So the question that remains is why do we have to rely on this bifurcation of

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9 Michael Polanyi, *Personal Knowledge: Towards a Post-critical Philosophy* (New York: Harper Torchbook, 1958), x.

10 Eric M. Straw, ''Knowledge Management and Polanyi.'' Unpublished paper. Retrieved from http://polanyisociety.org/Nashotah%20House/Papers/Straw-original-pdf-KnowlMgmnt%20&Polanyi-5-23-16.pdf

knowledge? We have already understood that our focal and subsidiary awareness are mutually exclusive. A knower can never participate in both awareness at the same time. More specifically, knower does not attend subsidiary awareness at all. The moment the knower turns his attention to the subsidiary elements, the subsidiary elements become focal, lose their subsidiary meaning, and acquire their own subsidiary basis.[11] Therefore, we can never attend to an explicit object with our subsidiary awareness. Although knowledge does not exist as 'wholly explicit', we perceive it as an entity apart from ourselves. This leads to bifurcation. As a result, the tacit and explicit distinction exists in the repertoire of language even if it is not a reality.

It is noteworthy how this bifurcated conceptualization works differently in structural and transactional approaches to knowledge. According to Polanyi's theory, the structural dimension of any knowledge, even in Linguistics, completely rejects the tacit and explicit bifurcation. Meanwhile, the transactional dimension of knowledge in Knowledge sharing sustains this bifurcated conceptualization in the discourse of language.

Thus, in the Stalagmite Architecture of KM, the form of Combination that we see at one end in the Knowledge discovery layer is 'explicit to explicit' only in its transactional dimension; structurally no explicit knowledge can exist without the tacit component. If so, tacit knowing works more fundamentally than explicit knowing while forming a new knowledge by combining two explicit forms of knowledge. Moreover, the form of Socialization at the other end of the layer is structurally 'tacit to tacit', but during transactions, through the reciprocal transmission of knowledge, explicit components are combined into Socialization and a new knowledge is produced thereby. In the same way, Externalization and Internalization,

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11 Polanyi, *Personal Knowledg*e, 56.

which are subprocesses in the KM process of Knowledge Capture, are reciprocated with each other and go beyond their tacit to explicit and explicit to tacit structural notions, respectively. Consequently, the knowledge residing in people or artifacts or organizational entities is retrieved through the process of Knowledge capture.

5.3.1.3 Knowledge Sharing: Transactional Dimension of Knowledge

The process of Knowledge sharing is different from the other two KM processes; it holds tacit and explicit bifurcation. Knowledge sharing is a discourse of language, where the transactional dimension of knowledge is emphasized over the structural dimension. Therefore, only a peripheral engagement with knowledge takes place through language as it represents second hand reality. We know the things we can tell or express by observing them. We know things that we cannot tell and express by indwelling them. If so, the knowledge we get through observation is direct transmission of knowledge, and that we get by indwelling is indirect transmission. Thus, the Stalagmite Architecture of KM marks explicit knowledge transmission as Exchange and tacit knowledge transmission as Socialization from the bifurcated view point of knowledge.

5.3.1.4 Beyond Epistemological Dualism

Epistemology has come a long way since the days of Rene Descartes. The Cartesian epistemological view of subject-object dichotomy rooted in his 'substance dualism', which presents mind and body as two different substances, has lost its relevance today. Stalagmite Architecture of KM approaches knowledge by placing it in an epistemological tradition that eliminates the distance between the knower and the known by rejecting the Cartesian epistemological legacy.

Martin Heidegger, the famous existentialist philosopher, rejects the epistemological notion that distinguishes knowledge into subject and object;

one which makes a distinction between knower and what is known. For Descartes, the external world of things is distinct from the first true being, the subject.[12] Therefore, being the center, the first priority is always the subject. However, Heidegger, on the other hand, tried to establish that the subject does not have existence distinct from the external world and introduced the concept of ''dasein,'' which is essentially a being-in-the-world, and thus resolved the problem of subject-object dichotomy. ''Being-in, as the most essential and existential characteristics of 'dasein,' signifies the expression of such terms as ''dwelling,'' ''being familiar with,'' and ''being present to''.''[13] Hence, there is no subject distinct from the external world of things. Not only Heidegger but also thinkers like Polanyi and Maurice Merleau-Ponty reject the Cartesian epistemology based on dualism, thus starting a new epistemological tradition that transcends the epistemic gap between the knower and the known.

When Polanyi conceives the act of knowing based on indwelling as tacit knowing, we understand that all knowledge has its tacit component that gives meaning to that knowledge, and therefore a knowledge does not exist as 'wholly explicit'. Hence, Polanyi argues that *indwelling* is Heidegger's *being-in-the-world*, because all understanding is based on dwelling in the particulars of what we comprehend.[14] Consequently, indwelling is our involvement in the existence of what we comprehend, i.e. being-in-the-world. Furthermore, indwelling is also a tool to know the comprehensive entities around the world. Merleau-Ponty's epistemic theory also holds the view that the subject-object dichotomy does not exist because an organic

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12 A. Kadir Cucen, *Heidegger's reading of Descartes' dualism: The relation of subject and object* (The Paideia Archive: Twentieth World Congress of Philosophy, 1998), https://www.bu.edu/wcp/Papers/Cont/ContCuce.htm#:~:text=Heidegger%20reverses%20the%20%22cogito%20Sum,%2Din%2Dthe%2Dworld.

13 Kadir Cucen, *Heidegger's reading of Descartes' dualism*

14 Polanyi, *Personal Knowledg*e, x.

unity which doesn't allow a cognitive distance between mind and body or body and the world is constituted between the knower and what he knows. By rejecting the mind-body as well as body-world dualism in this way, Merleau-Ponty resolves this epistemological problem by establishing that the world and others are inextricably linked to the body-subject.[15] Thus, we arrive at the point that the knower is an indispensable part of knowledge and thereby at the fact that no knowledge can exist by rejecting passionate and personal participation of the knower from knowledge.

What do we understand here? And what do recent epistemic trends tell us? Recent epistemological developments questioning Cartesian dualism are closely aligned with new research areas in science, particularly in physics. The realization that anything in the universe exists in relation to another, however distant, has uprooted all notions of separation. One of the most recent ideas in modern physics known as quantum entanglement, demonstrated in an experiment by Alain Aspect, John F. Clauser, and Anton Zeilinger, which won the Nobel Prize in 2022, supports this argument. Quantum entanglement is a phenomenon that proves that any two subatomic particles are linked together even if separated by billions of light-years and thereby establishing that no particle can exist independently. Consequently, given the scientific temperament of the present age, notions of separation such as subject and object, matter and energy, body and mind, being and thought, knower and known, and explicit and tacit become virtually irrelevant in all other discourses as well thereby paving the way for a non-dual epistemological approach that unifies everything.

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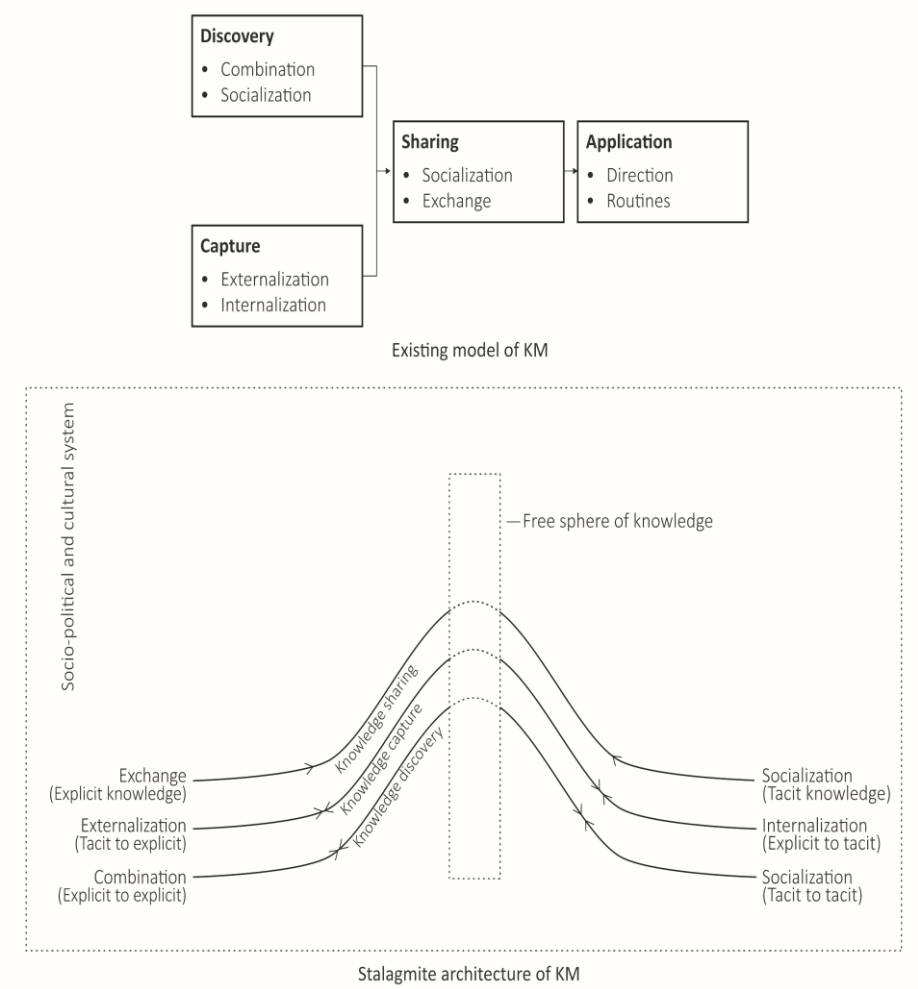
15 Mari Sorri, *The Knower and the Known in Merleau-Ponty's Epistemology* (1985), Open Access Master's Theses, Paper 1541, 90-91, https://digitalcommons.uri.edu/theses/1541



Fernandez and Sabherwal's model (see first above), which represents the present day practices of KM, is based on the explicit and tacit bifurcation of knowledge, whereby sub-categorizing knowledge as static and authoritarian entities in different compartments. Knowledge is thus processed in a linear fashion as a commodity and confined within the structure of corporate governance in an organization. But as an alternative to the bifurcated KM system, the Stalagmite Architecture of KM approaches knowledge as dynamic and evolving entities and envisions a process-oriented KM system relying on 'indwelled knowledge' based on Polanyi's epistemology. Indwelling refers to the act of integrating something into our embodied self. Therefore, for Polanyi, the ultimate instrument of any of our external knowledge is our body, whether intellectual or practical. Consequently, the problem of the subject-object dichotomy that has maintained the epistemic gap between the knower and the known is resolved and the explicit-tacit distinction of knowledge that has served as the basis of existing KM practices for so long becomes irrelevant.

Figure 5.1: Existing Model of KM Vs Stalagmite Architecture of KM

5.3.1.5 Stalagmite Sphere of Knowledge

The concept of stalagmite sphere of knowledge, also known as the free sphere of knowledge, which has been vital in shaping the normative structure of management in Stalagmite Architecture of KM, can be understood based on four dimensions:

- Open knowledge architecture: the free sphere is a dynamic living space that is consistently liberal and free. Here, those who are part of the production of knowledge retreat in every sense from their authoritative position on knowledge, making it more dynamic and leading to free and open interventions for new thinkers. Thus, a free and open knowledge architecture and management system develops, where not only the knower and the knowee but also the knowledge is nurtured through its sharing and perceiving by constantly undergoing the process of stalagmization.

- Disinterestedness: disinterestedness creates an alternative way than that of corporatization of knowledge, which is directly opposed to the ideals of IPR. Hence, it is necessary to ensure transparency along with knowledge sharing. Ultimately, the stalagmite sphere of knowledge emphasizes that knowledge belongs to the people, and researchers should be accountable to the people; there is no personal gain, only personal integrity.

- Expandable and compressible dynamics: the stalagmite sphere of knowledge is both expandable and compressible at the same time without having a specific structure. However, the ratio of the free sphere is determined by the socio-political and cultural system prevalent at any particular time. The more liberal and democratic the socio-political and cultural system is, the more expandable the

free sphere is. Similarly, the more rigid and autocratic the system is, the more compressed the sphere is. For example, in an autocratic system, knowledge will be narrated only according to the vested interests of those who are in power; where the free sphere is shaped in a particular manner. However, in a consistently liberal system, the ratio of a person's inner freedom is also expanded according to the expandable ratio of the free sphere. This increases the inner sensibility ratio and leads to a higher level of self consciousness.

- Unconditional positive regard: in the stalagmite sphere of KM, the knower expresses empathy, support, and acceptance unconditionally, regardless of what the knowee says or does. Thus, there is a warm relationship between the knower and the knowee and the approach to knowledge becomes broad and open in every sense.

5.4 Suggestions and Recommendations

The study based on Mahabharata explores the ontological relationship between art and knowledge and acknowledges the epistemic value of art by developing a new theory of KM as an alternative to the existing practices of KM. In addition to emphasizing the epistemic value of art, in this approach, it has been argued that the essential structural features of the quest for scientific discoveries and technical inventions are similar to those of the quest of artists through their imagination. And based on Polanyi's epistemology, it has been proved that every instance of knowledge is an expression of art itself. Therefore, the proposed KM theory having been developed in such an integral way, based on the inner dynamics of artistic expression, the researcher has been able to ensure the validity of the same beyond doubt.

If we look at the history of KM literature, we can see that Polanyi has been mentioned in KM related papers on several levels. However, Polanyi's epistemology has not been integrally incorporated anywhere in a KM system to modify the existing practices over time. Although there has been an argument to the effect that Nonaka and Takeuchi formulated their Organizational Knowledge Creation (OKC) theory by incorporating Polanyi's epistemology, the fact remains that it has rather been a misapplication of Polanyian ideals inasmuch as the scope of such application has been limited to that of an epistemological dualism ill-derived from them.

Subsequently, through repeated use, this misconception of the Polanyian concept of tacit knowledge by Nonaka, gradually took over the place of the original idea, thereby paving way to widespread misapplication of Polanyi's epistemology in the KM literature. Therefore, it is an important consequence of this research that a KM theory is formulated through the proper application of Polanyi's epistemology for the first time in the history of KM literature. What does that mean?

Developing a KM theory incorporating Polanyi's epistemology means that we are practicing KM by reconstructing the system in accordance with the recent epistemological trends. As a result, the researcher has been able to bring KM practices outside the structure of corporate organization.

What we can see in KM practices today is an organizational management system that categorizes knowledge into two possibilities, explicit and tacit, and thereby sub-categorizing knowledge in many further modes and turning it into a commodity to be marketed (See figure 5.1). Even Fernandez and Sabherwal's model, which we have adapted to understand the existing practices of KM by combining all the dominant ideas in the existing literature, approaches knowledge from this bifurcated conception. Ever since the OKC theory presented by Nonaka and Takeuchi, the literature

of KM that we see has a tendency to approach knowledge only through the bifurcated view of explicit and tacit. In such an approach based on epistemological dualism, knowledge has been limited to a product to be quantified and understood, and consequently a metric culture has emerged in line with the interests of the corporate organization. So, in this context, we should understand the stalagmite architectural theory of KM developed by this research based on Polanyi's epistemology as an alternative to such corporatization of knowledge.

In light of Polanyi's epistemology, it is important to consider what paradigm the theory developed through this research sets for the existing KM practices. The relevance of stalagmite theory in KM is that by approaching the act of knowing based on indwelling as tacit knowing, it has been made possible to transcend the epistemological bifurcation and thereby bring about essential structural changes in present day KM practices. In that case, we have to understand that no form of knowledge can be 'wholly explicit' without the tacit component. Consequently, the problem of subject-object dichotomy that used to maintain the epistemic gap between the knower and the known has also disappeared and the explicit-tacit bifurcation of knowledge has become irrelevant. Thus, as an alternative to the compartmentalized KM system based on the bifurcation of knowledge, this research recommends a process oriented KM system based on indwelled knowledge through the stalagmite architecturing of KM.

In addition, another feature that differentiates the Stalagmite Architecture of KM from existing KM practices is the presence of the free sphere, which should be understood as an abstract reality, created in the process of Knowledge discovery, capture and sharing. The free sphere of knowledge is important in shaping the normative structure of KM, which can be understood based on four dimensions: 1) open knowledge architecture,

2) disinterestedness, 3) expandable and compressible dynamics, and 4) unconditional positive regard. Here, those who are part of the production of knowledge retreat in every sense from their authoritative position on knowledge, making it more dynamic, leading to free and open interventions of new thinkers. A free and open knowledge architecture and management system develops, where not only the knower and the knowee but also the knowledge is nurtured through its sharing and perceiving by constantly undergoing the process of stalagmization. Moreover, the expandable and compressible dynamics of the free sphere controlled by the socio-political and cultural system of the respective times reveal that knowledge formation is possible in parallel with cultural formation. The more liberal and democratic the system is, the more expandable the free sphere is. Similarly, the more rigid and autocratic the system is, the more compressed the sphere is. Furthermore, the theory disagrees with corporate interests that approach knowledge as a means to financial profit or other personal gain, and emphasizes the need for the knower to treat the knowee with unconditional positive regard. Thus, in the Stalagmite Architecture of KM, unconditional reciprocity is possible in the relationship between the knower and the knowee and the approach to knowledge becomes broad and open in every sense.

In brief, in accordance with recent epistemological developments, especially based on Polanyian ideals, the researcher has been able to develop a theory from the narrative of Mahābhārata to bring essential structural changes in existing KM practices through the stalagmite architecturing of KM. Therefore, the researcher has been able to transcend the epistemological bifurcation by structurally explaining the act of knowing, thereby eliminating the epistemic distance between the knower and the known by incorporating the modalities of knowledge sharing through narration with the possibilities of KM. Through engaging with the

Mahābhārata, the stalagmite theoretical approach has been able to present narration as the most suitable method for the transmission of indwelled knowledge. Therefore, a KM theory based on a narrative poem promises to nurture the possibilities of narratology in literature. By setting a KM theory based on Polanyian ideals, it redirects KM to the possibilities to be studied in relation to epistemology. Moreover, the dynamics of the free sphere controlled by the social system of those times reveal knowledge formation as a phenomenon that evolves in accordance with cultural formation, which leads to further exploration of the relationship of KM with the socio-cultural system. Thus, a theory that restructures the existing KM practices is shaped in such a way that it can be applied not only to LIS, but in any field.

5.5 Areas for Further Research

This study has identified several areas of multidisciplinary research that bring together different fields such as KM, Epistemology and Narration in order to expand the possibilities of knowing based on indwelled knowledge. A few such areas that open up avenues for further research include the following:

- One can explore the techniques used for the sharing of tacit knowledge, which is evidently based on indwelled knowledge, in a narration from the perspective of KM. For example, in Rumi's 'Masnavi', we can study how metaphors are used for the sharing of tacit knowledge in Persian poetry. A multidisciplinary research incorporating narration and KM based on Polanyi's epistemology can thus be conducted.

- This research points to the necessity of conducting a study to understand the limitation of epistemological foundation in existing KM practices. More studies are needed in that direction to liberate

knowledge that's been shrinking as a commodity to be marketed based on the epistemological bifurcation advocated by the corporate organization.

- Through the application of Polanyi's epistemology, which is based on tacit dimension of knowledge, the idea of how to use Personal Knowledge Management (PKM) to help the gradual growth of one's self opens up the possibility for a new study.
- A study can be conducted by critically rethinking the ideological basis of existing practices of IPR in the context of open knowledge architecture and management envisioned by the Stalagmite Architecture of KM.

5.6 Conclusions

By setting a paradigm for KM practices through the stalagmite narrative theory developed from the narrative of Mahābhārata, this research helps us to understand that old traditions and thoughts are not totally inapplicable in new situations. In light of this research we can now summarize the entire Mahābhārata tradition as a stalagmite narrative process that has lasted for two and a half millennia and is still continuing at many levels, interfering with many social contexts and assimilating the knowledge of the times. In fact, how can we understand the concept of 'Vyāsa' (the expander) other than this process of stalagmization? As stalagmites and stalactites grow from both directions and fuse together to form 'Cave columns', which then lead to the growth of a series of cave formations, they not only feed on each other over time, but their minerals also undergo chemical changes and are enriched. In the same way, in the Mahābhārata, when the narrator and the audient are enriched by each other through narration and counter-narration, not only the narrator and the audient are enriched, but also the

text or the art form itself, which is constantly subjected to various narrative discourses. Thus, by clearly understanding the process of stalagmization, we come to the point that not only the knower and the knowee but also the knowledge that is constantly undergoing this process is nurtured through the sharing and perceiving of knowledge.

Stalagmization with respect to art is ultimately done through imagination. Hence, as an artistic work, the ability to constantly create new patterns in the imagination of those who receive it makes the Mahābhārata adaptable to any situation. Therefore, based on Polanyi's epistemology, the researcher has been able to develop a new approach to KM through stalagmite theory that emphasizes the tacit and personal components of cognition. Thus, a process oriented KM system based on indwelled knowledge is envisioned here, completely rejecting the structure of existing practices of KM that place tacit and explicit knowledge as two distinct possibilities of knowledge at two ends of a continuum.

Epistemology has come a long way from Cartesian dualism. Polanyi's non-explicable and tacit epistemic practices towards knowledge have gained more acceptance and have evolved into a dominant epistemological tradition today. The main accomplishment of the stalagmite architectural theory constructed here is that through it, it has become possible to apply, for the first time in the history of KM, an epistemic paradigm that transcends the bifurcation of knowledge in the practices of KM. Consequently, the problem of the subject-object dichotomy that maintains the epistemic gap between the knower and the known is resolved and the explicit-tacit distinction of knowledge that has served as the basis of existing KM practices for so long has become irrelevant. Furthermore, by creating an alternative to the corporatization of knowledge and the metric culture, it has succeeded in creating a consistently liberal and dynamic free sphere in

KM processes, thereby bringing KM practices outside the structure of corporate organization. Thus, a free and open knowledge architecture and management theory known as the Stalagmite Architecture of KM is formed in a way that can be applied in any field, not only in the premises of Information Science.

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