

Chapter 9

On Abuse of Time-Metaphors

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Abstract Given that ‘time’ is a pertinent theme for initiating a fresh conversation in a multi-cultural and multi-disciplinary context, this paper warns against the abuse of such time-metaphors as ‘cyclic’ and ‘linear’. It points out how exactly in cultural discourses the misleading usages actually create havoc. Focusing on diverse models of time in major traditions that can be found in the history of Indian and Western philosophy, it shows that uninformed and simplistic usages of these time-metaphors give rise to misunderstandings in the domains of meeting of cultures and encounter of world-religions. It also draws attention to the scientific discourse, where these metaphors are equally in vogue but not always precise, encouraging the participants of scientific, philosophical, and religious traditions to exercise caution.

Keywords Time-metaphors · Cyclic · Linear

1 Introduction

Let me begin by thanking the organizers for inviting me to this conference where almost all the speakers are from the field of natural sciences. Given that over the years I have been involved with the deliberations regarding the theme of time that are documented in the history of Indian and Western philosophy, I indeed welcome this opportunity in order to draw your attention to the use and abuse of time-metaphors that are rampant in the literature, both in humanities and natural sciences. Indeed, there is a need for a greater conceptual clarification of time-metaphors that are inextricably intertwined with the question of ‘direction of time’—the theme of this conference.

A perusal of the global history of ideas makes it apparent that reflections on time has a longer record than most other themes that have been topics of continued intellectual scrutiny across the boundaries of cultures. In fact, a conceptual preoccupation with this theme of time can be traced back within the frame of both Indian and Western thought to a period when a clear-cut disciplinary boundary between

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scientific, philosophical, and religious thinking was yet to be drawn. Those who are acquainted with this record are aware of the fact that concern for time has played an important role not only in the study of nature entailing physical processes but also as well in the attempts to explore a range of issues including the large theme of consciousness that play a decisive role in the study of cultures. In his impressive anthology on time, Charles Sherover rightly observes that “whether we are thinking of the nature of Nature or the nature of the self, we cannot escape thinking of the nature of time” [1].

Evidently I cannot here go into the details of the network of ideas that could be pertinently addressed demonstrating how in the philosophical literature the category of time is treated as ontologically real or as merely a conceptual construction or as inseparably intertwined with space and matter etc. and then analyze the large question concerning ‘direction of time’. I only intend within the short compass of this paper to focus on such metaphorical designations as ‘cyclic’ and ‘linear’ time, precisely in order to caution against ambiguous and misleading usages of these metaphors. These expressions which are used profusely in the literature cutting across the boundaries of disciplines have had tremendous negative impact in the context of meeting of cultures and encounter of world-religions—a fact which may come to you as a surprise. We will see, in what follows, how this practice, which I call ‘abuse of time-metaphors’, has actually given rise to stereotypes and clichés that block an authentic understanding of the cognitive record and conceptual experience of time in cross-cultural contexts.

2 Time in Different Cultures

As a general background it may be recapitulated that at a rather early date in history the philosophical and religious traditions stemming from diverse cultures have been concerned with the enigmatic problem of time and have also anticipated many of the crucial issues which, since then, have remained topics for debates and discussions. A search to find answers to such questions as: whether time is a category independent of physical processes or not, whether it is observer-dependent or not, or how it is to be envisaged with regard to the notion of causality, or even how to formulate notions of timelessness and eternity—have given rise to a large number of views about time. Consequently the richness and enormity of the material that is available to us on this topic is simply overwhelming.

Given that in the global context one comes across a wide variety of views on time documented in the texts of highly articulate traditions of thought, references here are exclusively to views and conceptualizations from the Indo-European literature on the subject. As mentioned before, I am specifically seeking to draw attention to certain metaphorical designations of conceptual interpretations of time that are ambiguous or even directly misleading in a cross-cultural context. It is precisely because the differences in time-experience of diverse traditions are described by the use of such metaphorical expressions as ‘cyclic and linear time’, which one needs to examine how these metaphors have been used as well as abused. Since, as has

been observed earlier, the theme of time is vital not only for the study of nature but also that of cultures, it needs to be specially noticed that the metaphors of cyclicity and linearity are utilized not only in natural and human sciences but also in the discourses of religious traditions. However, prior to focusing on certain misleading usages of time-metaphors and discussing why caution must be exercised in this respect, a few general observations may be made regarding the contending models of time in major traditions of thought.

A survey of the history of Indian and Western philosophy lays bare before a reader a great variety of views on time. Time being a fundamental concern, any effort to adequately comprehend these views show that this theme needs to be studied not only in isolation but in relation to other major concepts such as space, matter, motion etc. A reading of philosophical records unfailingly makes it evident that in any given conceptual system, specific views on time have important bearing on such concepts as those of being, non-being, causality, change and becoming and even that of consciousness. It can be seen that an analysis of time-experience entails conceptualizations not only of measurement of time but also of the three time-phases—past, present, and future.

However, the primary philosophical controversies that need to be looked at center around the basic positions that are taken regarding the idea of time itself. It is in this process of theory-making that thinkers have wondered about whether time is real or appearance, static or dynamic, discrete or a continuum. They further asked: Is time a distinct entity apart from processes, changes, and events? If it is, what makes time-divisions possible? Does time ‘flow’ (as in Newton’s rendering) or is that merely a metaphor for describing conventional usage? Is time a mental construal? Can it be that the subjective experience of change is simply identical with the process of concrete becoming (à la Sankhya) which does not require the postulation of a category called time? More radically put, is there an objective category of time or is it a subjective construction or even illusory? Is time a relational concept (Leibniz)? There are plenty of examples of such views in Western and Indian philosophy either in support of or in opposition to any of these alternatives that are posed here. It is in connection with these various efforts at theory-making, one comes to employ notions of recurrence, unrepeatability, reversibility, and irreversibility. The implications of these notions are to be evaluated in conceptual settings that operate with different sets of philosophical interpretations of time.

In order to perceive the diversity in interpretations, let us take note of a few views that have emerged in different cultural contexts. The ideas of absolute time and relative time, for example, are present in philosophical as well as in scientific discourses. Recall Newton’s view that dominated Western thought until the relativistic notion appeared on the conceptual scene. Newton, influenced by his predecessor Galileo’s finding on motion, claimed that, to put it in his own words:

Absolute, true and mathematical time, of itself, and from its own nature, flows equably without regard to anything external, and by another name is called duration; relative, apparent, and common time is some sensible and external measure of duration by means of motion, which is commonly used instead of true time; such as an hour, a day, a month, or a year. [2]

The old Vaisesika school of India advocated the view of absolute time (mahakala) which is said to be unitary (eka), all-pervasive (vibhu) and indivisible (akhanda). They claimed that the so-called time divisions, thereby the three time-phases, are made with reference to any standard motion, such as the solar motion, which was regarded as merely a conventional practice. Time per se (mahakala), they said, knows of no beginning or end or even of any movement. They argued that all that is contingent is in time, time does not rest in anything else (anasrita). Likewise all that changes is in time, time itself does not change or flow (niskriya). With regard to the latter observation, the position is at variance with that of Newton's reading that time "flows equably". The Vaisesika philosophers insisted that a philosophical analysis of the experiences of priority and posteriority, simultaneity and succession, quickness and slowness point to the ontological reality of time, without which these events are neither possible nor conceivable. Their ontology operated with the idea that without time we will be confronted with a static universe where no event can at all take place.

However, this notion of absolute time had to face the challenge of not only the Buddhist and the Jaina philosophers (who otherwise propounded views of 'discrete time' that come in radically different versions), it was also under attack from the quarters of other schools belonging to the Upanisadic tradition itself. I mention some examples below in order to show the complexities in the conceptual scenario and the eventual futility of describing all the views from the Indian sources under the single caption of 'cyclic time'.

Sankhya, held to be the oldest of all schools of Indian philosophy, had found it futile to postulate a notion of absolute time in its cosmological speculations that entailed notions of repeated creation and dissolution. However, it championed metaphysical dualism and saw all these processes as an interplay of two ultimate principles—Purusa and Prakrti, the former as constant and conscious and the latter as ever-changing and insentient Nature. The school accepted the ontological reality of change, entailing the notions of past, present, and future, upholding that such temporal usages can be explained with reference to the different stages of the unfoldment or evolution of Nature. They claimed that there is no need for the notion of an empty time as a separate category. According to Sankhya, nature is dynamic to its core, space-time-matter are combined in the same principle. The later advocates of Sankhya polemised against the Vaisesika philosophers by noting that the view of absolute, unitary time was not of much help as the Vaisesika philosophers themselves could not account for the experience of past, present, and future without a qualifying adjunct such as the solar motion. In other words, if the view of absolute time cannot account for such conventional temporal usages, then why not accept solar motion (that is, any standard motion) to be sufficient for that purpose and accept that time is an aspect of the causal process, as Sankhya advocated. The Yoga school, which joins Sankhya in its rejection of any notion of an absolute, unitary time, also accounts for the three time-phases as the potential/not-yet (future), the manifest/actual (present) and the sub-latent/no-longer (past) stages of the process that causally unfolds in nature. However, the Yoga school puts forward a discrete view. Since no two moments can be said to exist simultaneously, they maintained

that such notions as collection of moments or an objective series is a mental structuring, a subjective construction, devoid of any reality. A still more radical stand that was held within the Upanisadic tradition itself is that by the school of Advaita Vedanta. This school advocated that the problem of change qua time was a problem of appearance, while projecting the notion of a timeless reality as ontological—an idea not unknown in soteriologies across cultures [3].

In all these systems, it is worth noting, causality is emphasized as a fundamental concept. There are several theories of causality, interpreting ideas of sequence, antecedence, and consequence entailing various speculations on the theme of time which has relevance for a comprehensive discussion on the issue of ‘direction of time’.

3 Time Metaphors

Let us now turn to the question of time-metaphors. Note that the two dominant poles of human experience concerning recurrence as well as unrepeatability of events have often been expressed through these imageries of cycles and lines/arrows across cultures. These are present in the everyday discourse such as in the case of awareness of the recurrence of cycles of seasons or the irreversibility of the process that leads us from birth to death. Leaving aside all the complexities and technicalities that the questions of reversibility and irreversibility of cosmological processes with all their implications pose to enquirers of certain special sciences, let me draw attention at this point to the sort of readings that have been made while depicting diverse cultural experiences of time with the help of such simple metaphorical designations as cyclic and linear time. It is commonplace to say, in a confrontation of the pre-Christian Greek, the Judaeo-Christian and the Indian traditions regarding time, that the Greek/Hellenic and the Indian traditions have cherished a cyclic conception of time whereas the Judaeo-Christian traditions have maintained a linear conception. Precisely because of such widely used designations, the implications of time-metaphors become a pressing issue for anyone involved in cross-cultural studies or concerned with the endeavor toward an authentic encounter of world-religions. A further investigation into this question also shows—which I have discussed elsewhere in greater detail [4]—why there is an urgent need for a proper propagation of the wide range of theoretical moves concerning time in various traditions as well as an exploration of the important bearings of metaphors in connection with time-experience.

Before examining the reach of the appellations of cyclic versus linear time, let us ask, what does the metaphor ‘cyclic’ or ‘linear’ entail about a notion of time? These descriptions, obviously drawn on the analogy of geometrical figures, are intended symbolically to represent poles of time-experience, which entail the notions of recurrence and reversibility as well as unrepeatability and irreversibility. However, it is indeed surprising that granted that in a multi-cultural and inter-religious framework, these designations of ‘cyclic and linear time’ are repeated endlessly, to the extent

that these have virtually become clichés, it is not quite so easy to lay one's hand on a proper formulation of the conceptual contents of these metaphorical usages. Although some loose observations are obtainable regarding their significance, these are not sufficient for a proper evaluation. It has been said, for example, that the 'linear' notion of time in the Biblical context implies that time has a beginning and an end, whereas the cyclic does not grant that. Some consider 'cyclic' time as advocating reversibility, others point out that the order of events as such is irreversible, but any future event is also to be seen as a past event since the beginning and end coincide in a cycle etc. Some even conclude that 'linear' time makes room for progress and history meaningful, freeing it from mechanical recurrences. It is evident that any attempt at a precise formulation would indicate the complexities and difficulties that are involved in such geometrical representations of the understanding of time in different traditions.

These readings do not seem to be of great help. It can indeed be argued that a more precise use of time-metaphors can aid and enhance the process of understanding both nature and cultures. On the other hand, misleading usages of the same can cause grave misunderstandings in the context of meeting of cultures and that of world-religions that have their own distinct conceptual histories, as will be indicated below. This is also why a further investigation into the question is needed in order to explore the important bearings of such metaphors. Time-experience is as such enigmatic, it does not help to further confuse the situation through the use of time-metaphors that leads to setting up traditions as though these are 'diagrammatically opposed'.

A careful scrutiny of these designations led me to the important passage of St. Augustine. In his well-known work, entitled, *The City of God*, Augustine refers to a specific Greek view, which he describes as that of 'circular time'—a view that he challenges. This passage is one of the most interesting of early documents that enables the reader to grasp and eventually analyze the specific implications of what Augustine and those who followed after him understood by that time-metaphor. Referring to a specific model, which of course any informed scholar knows to have been present only as one among various other contending models in ancient Greece, Augustine writes:

... Those others think, the same measures of time and the same events in time are repeated in circular fashion. On the basis of this cyclic theory, it is argued, for example, that just as in a certain age the philosopher Plato taught his students in the city of Athens and in the school called the Academy, so during countless past ages, at very prolonged and definite intervals, the same Plato, the same city and the same school with the same students had existed again and again... [5]

The appellation of 'circular or cyclic time', as is clear from this passage, is to be read as entailing the idea of exact mechanical recurrence of not only cosmological processes but also that of individual destinies. Obviously there cannot be room for any genuine progress, let alone a sense of history or that of salvation in such a world-view. Augustine, quite understandably, repudiates the position while highlighting the Christian contribution to the religious interpretation of time.

The record of this discussion regarding what is entailed in the notion of cyclic time in the Greek context is helpful for investigating the pertinence of the label of cyclic time in the Indian conceptual context. This enables one also to judge whether it makes any sense to ascribe such a view to the Indian conceptual world, given that the import of the label of “circular time”, as Augustine describes, is not only repetition of cosmological processes but a mechanical recurrence of particular phenomena and of specific events, involving human destinies as well.

It is indeed in this process of encountering such interpretations of these metaphors that one cannot but take note of how cycles and arrows/lines gradually cease to be simple time-metaphors projecting notions of reversibility and irreversibility, but come to get associated with such concepts as those of history, of progress and even of salvation. A possible interpretation of direction of time in the context of study of nature thus comes to show a different face in the context of study of cultures through such metaphorical usages.

Let us look closer into the world of Indian thought for obtaining a clearer picture. Note that the idea of creation *ex nihilo* is absent in the Indian traditions whereas the notion of world-cycle is a general feature of Indian conceptual world. This idea is also present in Indian mythology and philosophy, as it has been in ancient Greece. However, the Indian conceptual world has its own distinctness, its own complexities. In the literature of the Puranas for example, one encounters a grandiose conception of the cosmological process where the universe is conceived as undergoing repeated creation and dissolution. The time-span of a world-cycle is calculated in terms of billions of human years, divided, and sub-divided into periods denoted as ‘manvantaras’, ‘mahayugas’, ‘yugas’, etc.

However, it is important to notice that the world-cycles in the Indian context can be compared to one another only in terms of generic similarity just as one day resembles another, but the idea of exact repetition involving the return of the particulars does not occur in the texts. The Greek model of ‘circular time’, referred to by Augustine, is wholly deterministic. It is supportive of the notion of pre-destination which nullifies the power of efficacy of human actions and consequently renders a fatalistic picture of the human situation. This is not the case in the Indian renditions. It is important to note that the idea of *mukti* or salvation, which comes in many versions, as well as the idea of karma, emphasizing efficacy of human actions, are pan-Indian concepts which leave no room for an interpretation as projected by that specific Greek model of ‘circular time’. Granted that there are some common ideas present in the ancient conceptual worlds of the Greeks and the Indians such as those of world-cycles, transmigration, developed in strict adherence with the principle of *ex nihilo nihil fit*, there are some distinct features of each that must not be lost sight of. However, a lack of awareness regarding the spectrum of views on time that developed in Indian thought combined with the presence of certain similar ideas that are also found in ancient Greece, misled even some of the significant western culture historians (as Toynbee), theologians (as Tillich) in the West in their rendition of Indian conception of time. In this connection, it is also particularly important to make a clear conceptual distinction between the idea of ‘cyclic time’ and that of ‘cosmological cycles’.

Recall that a review of the history of Indian philosophy shows that while sharing the idea of repeated creation and dissolution in their cosmological speculations, a number of schools actually held sharply divergent views with regard to time, some of which have been discussed above. Indeed, a global history of ideas discloses that no major philosophical tradition has an unanimous view of time. A cursory glance at the history of Western philosophy discloses to a curious reader a wide range of views, such as the notion of absolute time, time as a relational concept, time as process etc. Similarly, there are a number of contending views about time documented in the history of Indian thought. The Upanisadic, the Buddhist, and the Jaina traditions all know of internal divergences in that respect. The contrast of ideas is indeed awe-inspiring—at one end of the scale there is a unitary view of time whereas at the other end a pluralistic view. Some have maintained the objective, independent reality of time, while others have counteracted this stand urging that even to assert the reality of change does not necessarily require the postulation of time as an independent ontological category; still others have maintained time to be phenomenal, having no ontological status. One even encounters, as in the Buddhist tradition, the startling assertion that being and time (the moment and the momentary) coalesce ontologically and their separation is nothing more than an arbitrary linguistic convention. History of philosophy in India and in the West has equally witnessed schools of thought that supported a view of ultimate reality as free of all change and becoming at the ontological level. This is exemplified in the Eleatic school of Parmenides as well as in Advaita Vedanta. However, there are others who strongly objected to that idea, such as the Buddhists as well as Heraclitus and his followers, insisting that there is nothing whatsoever which is exempt from change.

However, such well-known culture historians as Arnold Toynbee, for example, seem to be totally unaware of the diversity of views regarding time and the implications of the notion of ‘cosmological cycles’ in the Indian context [6].

Toynbee characterizes the cyclic image of Hellenic and Indic civilization as ‘a counsel of despair for humanity’ and remarks in his *A Study of History*, ‘This philosophy of sheer recurrence, which intrigued, without ever quite captivating the Hellenic genius, came to dominate contemporary Indic minds’.

How a built-in theoretical bias as one’s starting point, which often is due to a lack of information, blocks cross-cultural and inter-religious communication is demonstrated when Toynbee further asks:

Are these ‘vain repetitions’ of the Gentiles really the law of the universe and, therefore, incidentally the law of the histories of civilizations? If we find that the answer is in the affirmative, we can hardly escape the conclusion that we are the perpetual victims of an everlasting cosmic practical joke, which condemns us to endure our sufferings and to overcome our difficulties and to purify ourselves of our sins—only to know in advance that the automatic and inevitable lapse of a certain meaningless measure of time cannot fail to stultify all our human exertions by reproducing the same situation again and again ad infinitum just as if we have never exerted ourselves at all.

All these clearly show that instead of continuing with stereotypes and clichés that any given tradition upholds concerning the ‘otherness’ of other traditions, it is now

crucial that we create opportunities which allow us, as this conference has done, to obtain deeper insights into the historic consciousness of major thought-traditions. Time is not only a multi-dimensional issue, it is of great significance for the self-understanding of cultures in which religions play a major role.

Records show that effort is made to defend and to maintain a cohesive understanding of religious interpretation of time in diverse traditions in different cultural soils. St. Augustine, for example, while being deeply engaged in reflection on time, came up with a triumphant declaration that he has finally found an answer to the “Why not sooner” question through the comprehension that God does not create in time but is Himself its source, its creator.

Again, Leibniz, while forwarding a relational concept of time, claimed that he was providing not only an alternative to the Newtonian concept of absolute time but was also answering the “Why not sooner” question. If one asks such a question, Leibniz wrote,

We should reply that his inference would be true if time were something apart from temporal things, for it would be impossible that there should be reasons why things should have been applied to certain instants rather than to others, when their succession remained the same. But this itself proves that instants apart from things are nothing, and that they only consist in the successive order of things.

This is also why today when certain physicists and cosmologists speak of such ideas as ‘commencement of time’ or even of an ‘absolute beginning’ of the universe in support of a specific religious tradition and try to circulate these ideas in the forums of ‘science-religion dialogue’, some effort seems necessary to articulate clearly the conceptual implications of such positions in a manner that, philosophically speaking, do not appear as questionable in a multi-religious context.

A conceptual transparency needs to be achieved through an open discussion in a multi-disciplinary framework so that a proper diffusion of ideas can rectify the distortions and help appreciate the insights into this large and abstruse question of time [7]. A fuller exploration of the implications of major metaphors in scientific discourses is also to be welcome for achieving clarity and precision about these issues.

One could perhaps mention in this connection that in the current attempts to construe physical theories, it should be made clear whether irreversibility of time and irreversibility of processes are held to be identical or different. The usages of the metaphor of arrow (recall on the very first day of the conference it was mentioned that in a given scheme one could classify seven ways of using it) and even of the word ‘time’ in different contexts of discussions leave one wondering about whether the referents of these words have the same conceptual content in each case. It is not always clear whether time is meant as a distinct principle or as inseparable from processes—both views are documented in the history of philosophy. It will be philosophically more interesting if physicists could interpret a remark such as that of Wheeler that the ‘concept of time is a human invention’ (Wheeler) or the implications of the discussions in physical sciences where the unidirectionality of time

has been perceived to be an assumption which underlies classical and relativistic physics as Schrodinger noted. In his work, entitled, *Mind and Matter*, he observed that “The theory of relativity . . . however revolutionary leaves untouched the unidirectional flow of time which it presupposes while the statistical theory constructs it from the order of the events”.

As long as attempts to account for the irreversibility of time continue to be a topic for an ongoing enquiry by physicists, an analysis of the idea concerning the ‘direction of time’, as conveyed by the metaphor of ‘arrow’, is also called for. The differences among the leading physicists such as Wheeler, Prigogine, and Penrose show the great difficulties involved in the search for an understanding of an underlying physical reality which may explain the so-called ‘arrow of time’.

Cycles and arrows are major metaphors which form part and parcel of not only everyday discourse in various contexts, they appear and reappear—sometimes assuming technical significance—as in the frame of specific disciplines such as physics, cosmology etc. All these usages are modes of representations of the two fundamental poles of human experience viz. recurrence and irreversibility. It is short-sightedness to think that any cultural tradition makes exclusive use of one metaphor at the expense of the other. Stephen Jay Gould recognizes that. While acknowledging the arrow as the major metaphor of the Western culture, he reclaims the place of time’s cycles and quotes from the Book of the Ecclesiastes in order to confirm that time’s cycles is an idea that has a religious foundation. Cycles and arrows, he says, are “so central to intellectual (and practical) life that western people who hope to understand history must wrestle intimately with both” [7].

I am persuaded to think that greater academic involvement with the question of time, cutting across the boundaries of disciplines and cultures, will lead to a deeper understanding of this multi-layered theme. Time indeed is one among the most pertinent topics for initiating a fresh conversation among the participants of scientific, philosophical, and religious traditions.

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