

## Quantum time and nonlinear narratives: Rethinking temporality in Biblical and Sudha Murty's stories

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### Abstract

This research examines the convergence of quantum time theory and nonlinear narrative techniques in the Bible and chosen novels by Sudha Murty. The Bible and the novels offer rich, multitemporal narratives that resist linear temporality. Applying theories of quantum mechanics quantum time and superposition respectively to literary study, this research investigates how biblical and Murty's narrative modes offer several possibilities at once, circular time and fractured temporality. By close readings of hegemonic biblical readings and Murty's novels like Mahashweta and Gently Falls the Bakula, this argument goes on that such fiction resists the traditional chronological order. This blurring of time reanimates the explorations into theme on the ideas of memory, identity, agency and moral complexity and provides fresh insights into gendered lives and cultural change. Overall, the study invokes the heuristic power of quantum theory's use to literary temporality and demands interdisciplinary discussion between science, literature and theology.

**Keywords:** Quantum time, nonlinear narrative, temporality, storytelling, gender, Indian literature, multi temporality

### Introduction

Fiction time in the general run of things traces the linear, cause-and-effect course of good sense. Recent decades advances in quantum theory and quantum mechanics press, though to a rewriting of temporal structure as nonlinear, stratified and co-dependent on human mind. Quantum time, in its indeterminacy, superposition and timelessness, opens metaphorical window onto reconceptualizing classical and contemporary narrative art's temporal orders (Ricoeur, 1984 [12]; Barad, 2007) [1]. Sacred religious scripture Bible is renowned for its multi-level temporalities flashbacks, cycles, prophecies and nesting of multi-level narration to challenge simple linearity (White, 1987) [17]. Similarly, contemporary Indian fiction like Mahashweta and Gently Falls the Bakula by Sudha Murty employs playing around with fractured timelines and plastic generation readings avoiding chronology boundaries (Manju, 2024; Baburaj, 2022). The two narrative traditions situate human events full of memory, fate and ethical concerns inside plastic temporal containers. This essay is a response to the manner in which quantum ideas of time emphasize the nonlinearity of narratives in the two traditions, as a response to agency, memory and identity concerns in cultural change and gendered being (Miller, 2018; Gadamer, 1975) [6]. It is an extension of earlier interdisciplinary research that intertwined physics and the humanities in order to issue an invitation for new readings into literary and sacred texts that are more capable of explaining the functioning of human temporality (Zohar & Marshall, 1990 [19]; Simons, 2016) [14].

### Material and Methods

This study takes an interdisciplinary qualitative approach with literary analysis complemented by theoretical foundations borrowed from quantum physics. Materials are first-hand: selected biblical materials with intricate temporal structuring (e.g., Exodus narratives, books of prophets, Psalms) and novels Mahashweta and Gently Falls the

Bakula by Sudha Murty (Murthy, 2022 [10]; Murthy, 2019) [9]. The texts were selected because analogous texts known to have tiered temporality and multi-dimensional characterizations exist (Neibur, 2001) [11]. The method is close reading and thematic analysis with particular attention to the development of nonlinear time by narrative strategies like flashbacks, prophecy, simultaneity and broken chronology (Ricoeur, 1984 [12]; Talmy, 2000) [15]. The narrative strategies are equated with first-order quantum temporal concepts like superposition states coexisting simultaneously, uncertainty non-determinism and entanglement connection outside of chronological limitation (Bohr, 1935 [2]; Schrodinger, 1935) [13]. Secondary sources take a loan from narrative theory, feminist theory and quantum philosophy to position the readings (Dasgupta, 2024 [5]; Barad, 2007) [1]. The study acknowledges narrative temporality in a sophisticated manner as an interdisciplinary heuristic that is grounded but not demarcated traditionally by physical quantum mechanics in order to facilitate interdisciplinarity (Gergen, 2009 [7]; Critchley, 2007) [4].

### Results

#### Nonlinear Temporality in Biblical Narratives

Biblical discourse structures time cyclically and multidirectionally. The Exodus narrative, to take a case, recycles themes of freedom and covenant in recurring patterns of oppression and redemption (Genesis-Deuteronomy) (White, 1987) [17]. Prophetic books reduce past, present and future to one vision in which time is a "now" crowded with all sorts of possibilities (Ricoeur, 1984) [12]. Psalms express a prayerful understanding of time that weaves complaint, thanksgiving and hope of the future together at the same time (Gadamer, 1975) [6]. The nonlinearity of temporality is echoed by the denial of distinct chronological limits by quantum time (Barad, 2007 [1]; Miller, 2018).

### Temporal Layering in Sudha Murty's Novels

Murty also uses a lot of flash-forwarding and multigenerational flashbacks in his stories. Through the fragmentation of time, Mahashweta uses the conflicts and memories of society to interweave the past and present of the protagonist, Anupama (Manju, 2024; Baburaj, 2022). Apart from rigid linearity, the nonsequential novel form illustrates the dynamic that occurs in identity over time. By placing cultural evolution and human experiences side by side over a couple of decades, *Softly Falls the Bakula* deviates from chronology-based storytelling (Baburaj, 2022; Manju, 2024). As a test case for enhanced theme resonance, elastic time is thus an image of a superposition-type effect with interfusion of multiple temporalities (Simons, 2016) [14].

### Agency and Temporality

Nonlinear time complicates agency in both texts. Female characters who live in such multitemporal narratives live through roles constrained by historical, social and religious contexts simultaneously (Dasgupta, 2024) [5]. The uncertainty principle metaphorically relates to their lived unpredictability and contested freedom (Bohr, 1935) [2]. Entangled past trauma, current conflict and future desire render linear agency inadequate, emphasizing relational temporality (Barad, 2007 [1]; Critchley, 2007) [4].

### Narrative Techniques and Quantum Time

Techniques such as prophecy, cyclical return, layered memory and generational storytelling evoke quantum concepts like superposition and entanglement by disrupting linear narrative flow. These strategies fracture conventional temporality, suggesting that multiple moments, perspectives and possibilities can coexist within the same textual space. Through such ruptures, the narrative resists deterministic progression and instead opens itself to shifting, overlapping and indeterminate states, much like quantum phenomena. Readers are invited to experience time not as a fixed sequence but as a fluid, non-linear constellation of connections, resonances and recursions that parallel quantum temporalities (Schrödinger, 1935; Miller, 2018) [8].

### Discussion

This research highlights the productive interplay between quantum Theory and narrative studies in understanding textual temporality. The Bible's prophetic oscillations and Sudha Murty's fragmented timelines enact forms of storytelling that mirror the indeterminacy and multiplicity inherent in quantum time. Such narratives trouble linear historicity and prompt reconsideration of temporality as multiplicitous and entangled with human agency and memory (White, 1987 [17]; Gadamer, 1975). The feminist dimensions of this reading are significant. Women's narratives in both texts confront patriarchal structures that seek to cage female agency within fixed temporal orders (e.g., birth/marriage/death cycles) (Dasgupta, 2024 [5]; Baburaj, 2022). Quantum time metaphors of simultaneity and uncertainty offer openings to represent women's complex, nonlinear experiences of selfhood, suffering and empowerment beyond chronological oppression (Barad, 2007). This interdisciplinary approach enriches biblical and literary scholarship by proposing new ways to conceptualize narrative Time as fluid and dynamic, expanding interpretive horizons (Critchley, 2007 [4]; Simons, 2016) [14]. It also invites reflection on how storytelling itself resonates with evolving

human understandings of time emerging from science, culture and philosophy (Zohar & Marshall, 1990 [19]; Gergen, 2009) [7].

### Conclusion

Analyzing biblical text and Sudha Murty through the lens of quantum time reveals the multilayered nonlinearity of time each embodies. This research shows that fluidity of time is fundamental in understanding identity, memory and agency in storytelling (Ricoeur, 1984) [12]. Quantum time provides a useful tool to reconceptualize narrative forms that do not subscribe to deterministically linear approaches to history and personal life, expanding the scope of the literary and theological imagination (Barad, 2007 [1]; Miller, 2018) [8]. Future research might focus on other cross-cultural and interdisciplinary collaborations on quantum temporality and narrative that deepen the appreciation of literature as a medium for grappling with the intricacies of human experience (Zohar & Marshall, 1990 [19]; Critchley, 2007) [4].

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