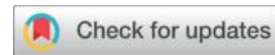


Sports Rituals, Collective Memory and Urban Narratives: Historical Construction and Communication Effects of Emotional Communities in Marathon Events



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Abstract

Background: The proliferation of urban marathons has transformed these athletic competitions into sophisticated platforms for cultural construction and collective identity formation. While existing literature examines sports mega-events' economic and tourism impacts, limited research explores how marathons function as ritual communication mechanisms that generate emotional communities and shape urban narratives through embodied collective experiences. **Methods:** This study employed a mixed-methods comparative analysis of three major marathons (Boston, London, Tokyo) from 1980-2024. Data collection integrated historical archive analysis, 72 semi-structured interviews with key stakeholders, participant observation during race weekends, and media discourse analysis. Thematic analysis, narrative analysis, and cross-case comparison revealed patterns of ritualization, memory formation, and narrative construction across cultural contexts. **Results:** Marathon events unfold through three interdependent channels. (1) recurring rituals—timed gunshots, marked km stones, exuberant street bands—awaken a short-lived collective high scholars dub effervescence. (2) scraps from the race—caps, metal tags, selfie feeds—move from pocket and desktop into memory's spine via family tales and forum threads. (3) cities draft two tales at once, anointed logos beside improvised stories told under shop awnings, then battle to foreground whichever grows that season's tourism ledger. Because every link repeats the others, fresh rites plant

new recollections that reshape the anecdotes, which in turn lure fresh feet onto the route.

Conclusions: Marathons are contemporary systems of rituals that create affective communities beyond individual sporting success. The addition of digital technologies complements rather than reduces material co-presence by allowing new types of distributed ritualization while maintaining the emotive fervor that fuels urban cultural production.

Keywords: sports rituals; collective memory; urban narratives; emotional communities; marathon events

1. Introduction

The modern arena of urban planning has witnessed an increased frequency of marathon events, which have transformed these sporting events into complex platforms for the development of culture and communal identity in cities all over the globe. The integration of unique features that are inherent to cities—like historical sites, regional beliefs, and dynamic environments—in deeply influences the way people experience the brand identity of the event; these urban features greatly augment the branded experience of marathons by creating stronger cultural as well as emotive bonds between the runners and the destination city [1]. This phenomenon is not limited to the domain of sporting competition either, as marathons have become important events within each destination city in turn, greatly enhancing the brand equity of the destination city through collective inputs of multiple segments of society [2]. Additionally, these events make it possible for cities to be connected with recreational spaces and activities based on culture and tourism by providing travel-weary people with a respite in an otherwise routine scheduling concern [3].

Merging mass sporting events with the evolution of urban culture represents an important domain of research with regard to the ways that cities use physical activities to create collective identity and to promote social cohesion in an increasingly polarized municipal setting. The media representation of mega sporting events demonstrates the way that domestic media outlets create positive narratives based on ideas of national pride, cultural identity, Olympic ideals, new technology, and responses to prevalent societal concerns [4], suggesting that these events function as powerful mechanisms for articulating and disseminating urban cultural values. The strategic use of sports mega-events has become a key part of state strategies to achieve multiple foreign policy goals, with thousands of instances of micro sport diplomacy taking place through sports exchanges and inter-cultural meetings [5], thereby positioning marathons as instruments of both local identity construction and global cultural exchange.

The resurgence of ritualized communication practices within contemporary urban contexts provides a theoretical lens through which to examine the transformative power of marathon events in constructing emotional communities and collective memories. Collective rituals serve crucial functions in stabilizing risky collective action by creating shared experiences that generate collective emotions and strengthen social bonds [6], while marathon events exemplify this process through their distinctive features such as human-centeredness, ambient settings, civic engagement, and grand rituals that provide experiential, immersive, and continuous opportunities for self-development. The ritualistic dimensions of urban marathons thus emerge as fundamental mechanisms through which cities negotiate their cultural identities, mobilize collective participation,

and construct enduring narratives that resonate across diverse urban populations in an era characterized by rapid globalization and technological transformation.

This study addresses three interconnected research questions exploring the relationships between marathon events and urban cultural construction:

Research Question 1: How do marathon events construct emotional communities through ritualized practices? This examines the mechanisms through which collective participation in sporting rituals generates shared emotional experiences and social bonds among diverse urban populations.

Research Question 2: How is collective memory generated and transmitted in marathon events? This investigates how recurring athletic competitions create, preserve, and disseminate shared narratives across temporal and generational boundaries.

Research Question 3: How are urban narratives communicated and reinforced through marathon events? This explores how cities strategically deploy sporting spectacles to articulate and amplify particular urban identities and cultural values.

The conceptual significance of this research lies in its ability to expand the paradigm of the theory of ritual communication in terms of research that tests established models in new sporting contexts in order to reveal previously unknown aspects of ritualized action in modern inner cities. This research broadens available theoretic literature on the conjunction of embodied experience-kinaesthesia with processes of symbol interaction in the construction of collective meaning. In practical terms, this research has important implications for policy-makers, events managers, and planners of cities with an interest in using sporting events as drivers of cultural enrichment in that it provides evidence-based solutions for creating social integration and interactive stories which will engage global citizens as well as resident citizens of inner-city regions.

2. Theoretical Foundation and Analytical Framework

2.1 Ritual Communication and Sports Events

Theoretical constructs of ritual communication have heavily contributed to contemporary understandings of the role of sport events as actors in creating social cohesion and collective identifications. Durkheim's basic concept of collective effervescence explains an elevated level of psychological stimulation and interrelatedness between people that is produced in collective activities, in this case sporting rituals that create psychosocial impacts with regard to scrutiny level [7]. Developing from this Durkheimian theory, Carey's theory of communication as ritual has further broadened the discussion by proposing that communication is the vehicle through which social changes are triggered and achieved by common experience, engagement, connectedness, and community formation in order to emphasize the unifying potential of communication in uniting communities through different temporal frames rather than merely distributing information between different contexts [8]. The application of these conceptual models in the situation of sporting events has been promoted by Dayan and Katz's theory of media events. From an initial limited perspective

that concentrated on the broadcasting of sporting events, the theory has developed to recognize these events as continuous flows of media events, thus opening up considerable possibilities for broadcasting corporations to tap into contemporary media environments[9]. Recent empirical research validates these theoretical frameworks, as physiological data from sports fans demonstrates that levels of shared excitement or collective effervescence peak during pre-game fan rituals, exceeding the emotional synchrony of the game itself except when the home team scores .

The ritualistic characteristics of sports events manifest through multiple dimensions: the construction of sacred time and space transforms stadiums into quasi-religious venues; symbolic systems including team colors, chants, and gestures create shared meaning; and collective participation generates what Gabriel et al. [10] identify as essential elements for reinforcing community bonds through synchronized activities that rejuvenate participants and help them return to daily life with renewed strength and meaning. This operational understanding of sports rituals encompasses the transformation of profane athletic competitions into sacred communal experiences through repeated, symbolically charged collective practices.

2.2 Social Construction of Collective Memory

The theoretical genealogy of collective memory originates with Halbwachs' foundational insight that memory is never purely individual but emerges within social frameworks, distinguishing between collective memory as shared participation and social frameworks as cognitive and normative structures of various social systems [11]. Building upon this foundation, Nora's conceptualization of "lieux de mémoire" has transcended its original French context to become a universal framework for understanding how memory crystallizes and secretes itself through the interplay of memory and history in sites that can be material, symbolic, or functional. Assmann's theoretical refinement distinguishes between communicative memory, limited to recent past and personal experiences spanning 80-110 years, and cultural memory, which refers to objectified and institutionalized memories that can be stored, transferred and reincorporated throughout generations through symbolic heritage embodied in texts, rites, monuments, and celebrations [12]. The specificity of sports memory manifests through distinctive characteristics that differentiate it from other forms of collective remembrance, particularly through its intensely embodied nature whereby physical experiences and bodily responses create rich emotional and aesthetic memories often excluded from traditional memory research [13], while the assumption that attending sporting events creates shared memories challenges traditional understandings of how collective emotions bind communities together through synchronized experiences. This operational framework positions collective memory in marathon events as a multidimensional construct encompassing embodied practices, emotional intensities, and mediatized diffusion patterns that transform individual experiences into enduring cultural narratives.

2.3 Urban Narratives and Emotional Communities

Urban narratives emerge as dynamic textual and symbolic systems through which cities construct meaning and identity, engaging with what sociocultural imaginaries conveyed through narrative forms where structure and social life are strongly supported by science and technology [14]. The theoretical understanding of urban spaces as text reveals how cities operate as crucial imagination

infrastructure by providing a physical and symbolic arena where people can envision and enact social change, with narrative identity formation occurring through the interplay between place-based experiences and collective storytelling practices that bridge individual memory with communal meaning-making processes. Place attachment develops through relational approaches whereby community participation allows place attachment and place identity to transform while remaining authentic to the narrative of place [15], creating enduring connections between residents and their urban environments that transcend mere physical proximity. The conceptualization of emotional communities extends Anderson's imagined communities framework into affective dimensions, where imagined communities of fandom function as sites of meaning and community within the alienating and individualist context of late capitalism [16], while Ahmed's affective economies illuminate how emotions circulate between bodies and spaces, creating sticky associations that bind communities together through shared emotional investments rather than residing within individual psychological states, thus establishing collective identities through the continuous circulation and accumulation of affect across urban social networks.

2.4 Integrated Theoretical Framework

The operationalization of core concepts within this integrated theoretical framework necessitates precise definitional boundaries that capture the multidimensional nature of marathon events as sites of cultural production. Sports rituals encompass the structured, repetitive practices that transform athletic competitions into sacred communal experiences through temporal periodicity, spatial sanctification, and embodied participation, drawing on theoretical frameworks that explore how sports act as ideological state apparatuses shaping and being shaped by prevailing economic and social structures. Collective memory operates through hierarchical levels—from individual embodied experiences to institutionalized cultural narratives—utilizing diverse carriers including material artifacts, digital repositories, and performative traditions, with transmissive rituals using behavior-focused narratives within sentimental spaces to prompt direct action through emotional engagement, leveraging collective memory to spur resistance and change [17]. Urban narratives manifest through multiple agents including governmental institutions, media organizations, and grassroots communities, employing varied channels from official branding campaigns to social media discourse, as demonstrated by conceptual frameworks identifying multiple dimensions by which community engagement interventions differ through diverse combinations of intervention purpose, theory and implementation [18]. Emotional communities emerge through interaction ritual chains that generate emotional energy, creating meaning transfer models where basic emotional and functional meanings drive the generation of wellbeing through self-participation, self-display, self-concept, and self-renewal [19], as shown in Table 1.

Table 1: Operationalization Framework for Core Concepts

Conceptual Dimension	Constitutive Elements	Operational Indicators	Measurement Boundaries
Sports Rituals	•Temporal periodicity	•Ritual frequency (annual cycles)	• Formal/informal practices • Individual/collective engagement

Conceptual Dimension	Constitutive Elements	Operational Indicators	Measurement Boundaries
Collective Memory	• Spatial sanctification	• Participation (mass/elite)	scale • Traditional/innovative elements
	• Embodied practices	• Symbol (visual/auditory)	• Local/global orientations
	Symbolic systems	• Collective effervescence levels	
	• Experiential layers	• Memory persistence (years retained)	• Communicative/cultural memory
Urban Narratives	Temporal accumulation	• Narrative consistency	• Personal/institutional carriers
	• Social frameworks	Intergenerational transmission	• Dynamic/static preservation
	• Cultural crystallization	• Media documentation density	• Embodied/mediatized forms
	• Narrative agents	• Stakeholder diversity	• Official/vernacular stories
Emotional Communities	Thematic content	• Message coherence	• Place-based/cosmopolitan themes
	Communication channels	Channel multiplicity	• Digital/physical platforms
	• Audience reception	Engagement metrics	• Active/passive consumption
	• Affective foundations	• Identity	• Emotional intensity
Emotional Communities	boundaries	• Temporary/permanent bonds	• Inclusive/exclusive membership
	• Social measures	• Membership	• Virtual/physical gatherings
	networks	• fluidity	• Network density
Emotional Communities	Sustainability mechanisms	• Temporal durability	Strong/weak tie formations

The theoretical model illustrating the dynamic interaction mechanism among ritual, memory, and narrative demonstrates how marathon events function as catalytic sites for urban cultural production (Figure 1). This cyclical process initiates when ritualized practices generate intense collective experiences through synchronized bodily movements and shared emotional states, creating what research on interaction rituals identifies as crucial micro-sociological mechanisms providing both the glue holding social groups together and the energy fueling collective action [20]. These ritual experiences subsequently sediment into collective memories through repeated enactment across temporal cycles, with memory accumulation facilitating narrative construction as communities select, interpret, and amplify particular experiential elements into coherent stories about urban identity and values. The dissemination of these narratives through multiple channels—from official city branding to grassroots social media—generates emotional identification among diverse urban populations, reinforcing participation in subsequent ritual cycles and creating a self-perpetuating system of cultural reproduction.

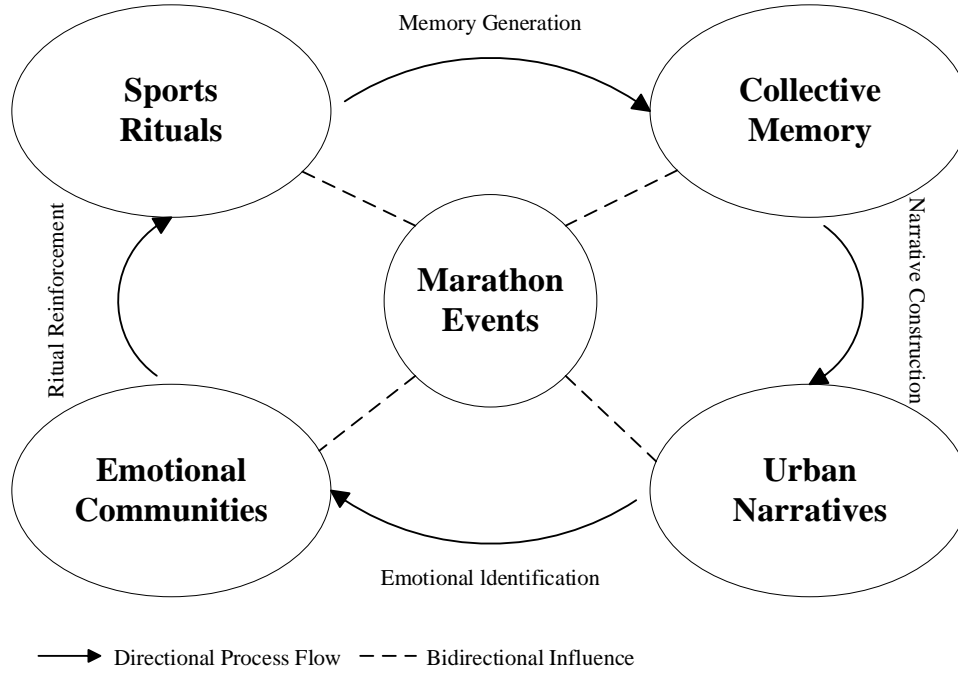


Figure 1: Theoretical Model of Ritual-Memory-Narrative Interaction Mechanism

Three propositions emerge from this theoretical framework regarding the relationships between conceptual dimensions and their empirical manifestations in marathon contexts. The degree of ritualization positively correlates with collective memory intensity, whereby higher ritual symbol density and participation frequency enhance both the emotional strength and temporal persistence of shared memories. The alignment of narratives between different urban actors strengthens emotional ties in the community by bringing official and vernacular narratives into harmony, thus creating coherent meaning systems that facilitate collective identification. The historical context shapes these communication effects by impacting how ritual practices engage with dominant cultural structures and collective memories, which ultimately determines the degree to which new narratives assimilate into or challenge existing urban identities.

3. Methodology

3.1 Research Design

This study follows an integrated methodological design that combines historical comparative analysis, a multiple case study approach, and a mixed methods research paradigm to examine the complex interrelations between sports rituals, collective memory, and urban narratives in marathon events. The historical comparative approach enables the systematic examination of change and continuity over time across different cultural settings, following the evolution of ritualization processes from the 1980s to today and uncovering patterns of change and stability in collective memory construction. The multi-case research design allows for in-depth examination of three high-profile marathons--Boston, London, and Tokyo--sought for their distinct cultural environments, vast historical meaning-making practices, and diverse metropole narrative traditions. The mixed-methods design brings qualitative methods such as archives research, ethnography observation, and

narrative interviewing but with quantitative methods of media content analysis and trend mapping of participation within contact is retained. This mixed-methods strategy skillfully handles the subjective meanings associated with rites experiences from the actors' point of view while analyzing objective developments seen in collective action. The triangulation of methods in the approach promises greater analytical rigor through the combination of methods in order to resolve the complicated nature of marathons with global but as well as local features.

3.2 Case Selection

The case selection utilized in this research follows a purposive sampling plan aimed at ensuring analytical diversity while providing methodological consistency across different contexts. The selection is based on three key criteria: the presence of an institutional history spanning more than twenty years, which allows for longitudinal analysis; cultural and geographical diversity that captures varied methodologies in producing urban rituals; and data richness comprising available archives, media reports, and participant details. The twenty-year period between 1980 and 2024 captures key urban cultural changes in global marathons, from events focused on elite competition to those encouraging mass participation, along with developments in media representation technology and changing trends in urban branding strategies. The Boston Marathon is a representation of the Anglo-American model of individual attainment and historical continuity, while the London Marathon represents the continental model aimed at balancing elite competition with charity fundraising. The Tokyo Marathon represents the East Asian model that attempts to balance technological progress with national heritage. The key metropolitan marathons are paradigmatic cases capturing varied sociocultural milieus that impact the ritualization of sport and its incorporation into discourses of urban identity. As summarized in Table 2, each selected case displays unique features regarding foundational mythologies, development of participation, symbolic elements, and urban integration strategies, thus offering rich comparative material to examine the multifaceted interconnections between sports rituals and collective memory formation in different cultural settings.

Table 2: Comparative Profile of Selected Marathon Cases

Dimension	Boston Marathon	London Marathon	Tokyo Marathon
Founding Year	1897	1981	2007
Historical Context	Oldest annual marathon; inspired by 1896 Olympics	Post-industrial urban regeneration initiative	Metropolitan consolidation and global city branding
Initial Participants	15 runners	6,255 runners	30,870 runners
2023 Participants	30,000 runners	48,000 runners	38,000 runners
Cultural Narrative	"Patriots' Day tradition"; test of endurance and American spirit	London Marathon for all"; democratization of running	"Tokyo goes global"; harmony of tradition and modernity

Dimension	Boston Marathon	London Marathon	Tokyo Marathon
Ritual Elements	Heartbreak Hill challenge; Wellesley scream tunnel; Patriots' Day linkage	Tower Bridge crossing; charity costumes; patronage	Imperial Palace start; Royal organized cheering squads; precision timing
Urban Integration	Route through historic towns; community spectator traditions	Thames-side landmarks; pub viewing parties; street festivals	Metropolitan government showcase; neighborhood corporate partnerships
Media Evolution	Radio (1920s) → (1960s) → streaming (2000s)	TV BBC coverage inception; charity telethon format	High-tech broadcasting; real-time tracking; social media integration
Symbolic Capital	Athletic excellence; Boston Strong resilience narrative	Inclusive participation; charitable giving culture	Efficiency and hospitality; Japanese omotenashi spirit
Memory Anchors	Historic champions; 2013 bombing and recovery	Landmark moments; costume traditions; fundraising records	Rapid growth story; Olympic bid connection; international recognition

3.3 Data Collection

The data gathering methodology employed multi-source triangulation to comprehensively record the complex dimensions of marathon events as cultural phenomena. Historical archives analysis comprised official race records narrating trends in registration and organizational development changes, government policy reports charting strategic urban planning visions, and archives of newspapers charting shifting media representation over four decades. Semi-structured interviews with 72 key informants comprised experienced directors of races, veteran competitors, and municipal officials offering essential in-depth insight into processes of ritualization and meaning-making procedure. Observations over marathon weekend facilitated ethnography writing of embodied rituals, space changes, and collective emotions through the compilation of field notes, photography, and videography. Discourse analysis of media scrutinized traditional patterns of news coverage as well as new storylines from social media platforms using computational analysis of texts to determine thematic clusters as well as sentiment arcs. The comprehensive data gathering offers an extensive analysis of the ways in which marathon events create collective memory as well as metropolitan narratives through ritualized activity on multiple temporal scales as well as multiple cultural spaces.

3.4 Data Analysis

The data analysis was carried out through a cyclical methodology that combined multiple analytical strategies in order to uncover patterns and significances internal to the materials collected. Thematic analysis systematically uncovered repeated themes across the interview transcripts and observational data, excavating the underlying dimensions of ritual experience and collective memory formation through inductive coding and ongoing comparison. Narrative analysis examined how participants constructed coherent storylines about their marathon experiences, marking out

chronological sequences and causal linkages that illuminated the processes of identity formation. Historical contextualization placed contemporary practices in a broader continuum of sociopolitical change, tying changes in patterns of ritualization to pathways of urban development and cultural change. Cross-case comparative analysis consolidated findings across the three metropolitan contexts, foregrounding common themes such as the democratization of participation, alongside divergent patterns in symbolic representation and emotional expression. The combined analytical framework allowed for theoretical abstraction while sensitivity to contextual specifics, thus producing insights into how marathon events act as vehicles of urban cultural production across a variety of settings.

4. Results

4.1 Ritualization Mechanisms of Marathon Events

4.1.1 Temporal Rituals: Periodicity and Sacred Time

The temporalities of marathon ritualization create distinctive rhythms that inject city life with moments of shared exhilaration that are highly anticipated. The yearly cycles create what runners call "temporal anchors," which provide structures for ordering training regimens, developing social relationships, and narrating personal stories, thus creating meaningful patterns. In Boston, the long commemoration of Patriots' Day since 1897 has incorporated the marathon within larger celebration rituals that reinforce regional identity and historical continuity. One veteran runner captured this sensibility by explaining: "The whole year revolves around that third Monday in April—it's not just a date of the race, it's when Boston is most completely its self" (Interview B-14). The timing of London's marathon in spring is purposely coincided with seasons of charitable giving, while Tokyo's later February date marks a transition from the solitude of winter to spring's renewal in the Japanese cultural imagination.

The preparatory period before a race is characterized by an increasing level of ritualization as the event approaches, thus transforming mundane training activities into sacralized preparatory rituals. Athletes in all three cities report engaging in complex individual rituals, including specific dietary practices, choices of lucky clothing, and regular visualization activities. The marathon exposition, usually held three days before the race, provides a liminal space wherein athletes transition from their daily lives to the temporary status of marathon runner. As shown in Table 3, these preparatory phases show significant cross-cultural similarities amidst superficial differences in specific practices, with all three marathons including multi-day expos, formalized training programs lasting from 16 to 100 days, and ritual events that demarcate the transition into the sacred space of marathon time.

The experience of race day is lived through carefully choreographed temporal sequences that end in moments of communal transcendence. The morning confluence gives rise to what Turner (1969) would describe as "communitas," an ephemeral erasure of social hierarchy produced in the shared anticipation of the collective experience. The opening rituals of each of the three marathons involve similar elements: national anthems, moments of silence, organized countdowns that mark the liminal space between the profane and the sacred. The following hours of running provide a unique

temporal experience in which clock time is both emphatically present through constant pace tracking and irrelevant as runners reach flow states that efface temporal awareness.

Table 3: Comparative Analysis of Temporal Ritual Structures

Temporal Dimension	Boston Marathon	London Marathon	Tokyo Marathon
Annual Positioning	Patriots' Day (3rd Monday, Last Sunday in April) - Fixed civic holiday	Charitable giving season	Last Sunday in February - Seasonal transition
Historical Continuity	127 years (since 1897) - Oldest annual marathon	-43 years (since 1981) - Post-industrial renewal	-17 years (since 2007) - Global city emergence
Preparatory Phase	16-week BAA training program; Pasta dinner tradition	6-month fundraising cycles; Training meetups	100-day charity events; Group training countdown camps
Expo Duration	3 days at Hynes Convention Center	4 days at ExCeL London	3 days at Tokyo Big Sight
Sacred Morning Sequence	5:30 AM buses to Hopkinton; 9:00 AM wheelchair start; 10:00 AM mass start	6:00 AM BBC coverage begins; 9:00 AM elite women; 9:25 AM mass start	7:00 AM security gates open; 9:05 AM mass wheelchair; 9:10 AM elite start
Peak Intensity Moments	Mile 20 "Heartbreak Hill" (2:15-3:30 elapsed)	Mile 12-14 Tower Bridge (1:30-2:00 elapsed)	35km Asakusa district (2:30-3:00 elapsed)
Finish Window	6 hours official limit; Ceremonies until 6 PM	8 hours official limit; celebrations until 8 PM	7 hours official limit; Finish festival until 5 PM
Post-Race Integration	Next-day media coverage; Tuesday recovery parties	Week-long charity celebrations	Three-day media cycle; Corporate celebrations

Table 3 illustrates how each marathon structures these temporal progressions through distinct phases, from pre-dawn preparations through evening celebrations, creating carefully orchestrated emotional arcs that peak at starting lines and finish areas while maintaining sustained intensity throughout the race duration.

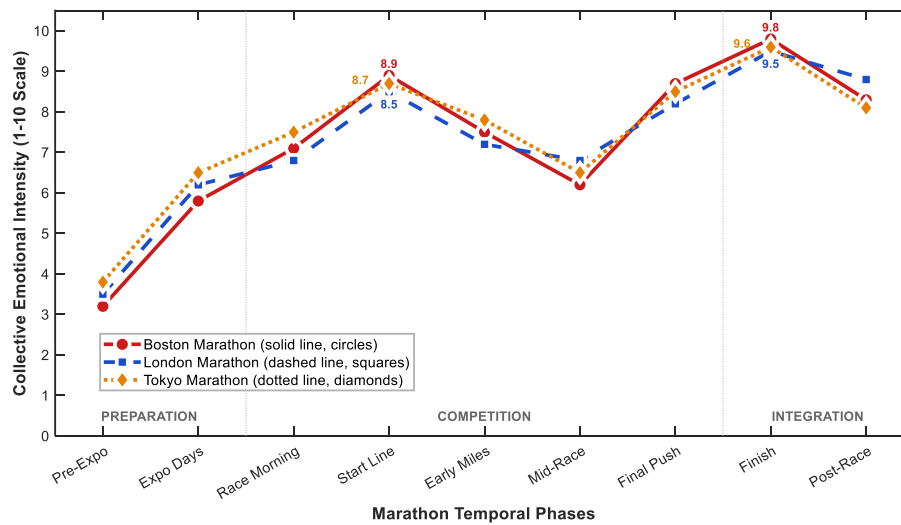


Figure 2: Temporal Rhythm of Emotional Intensity Across Marathon Phases

As shown in Figure 2, emotional intensity follows remarkably similar patterns across all three marathons, with peak experiences occurring at the starting line and finish, while mid-race periods show decreased intensity before the final surge. This temporal arc reflects the universal structure of ritual experience moving through separation, liminality, and reintegration phases.

4.1.2 Spatial Rituals: Route Design and Urban Landscape

Marathon routes transform the cityscape into sacred pathways that briefly redefine the meaning and accessibility of urban places. The selection and sequencing of landmarks create what one London organizer called "a moving postcard of the city's soul" (Interview L-08), knowingly foregrounding iconic landmarks while producing dramatic visual storylines. The point-to-point course of the Boston marathon, stretching from the rural town of Hopkinton to the urban hub of Back Bay, is symbolic of a journey from rural innocence to urban triumph, passing through eight historic towns, each adding distinctive crowd dynamics. London's circular course, starting and finishing in Greenwich, is a pilgrimage that takes in the royal parks, the Thames banks, and the financial district, thus materially linking social worlds. Tokyo's marathon course is focused on the Imperial Palace and further extends through heterogeneous neighborhoods, from the traditional atmosphere of Asakusa to the ultramodern environment of Odaiba, thus mirroring the city's dual identity.

Spectator gathering points undergo sacralization through repeated annual use and accumulated memories of dramatic racing moments. Wellesley College at Boston's halfway point has evolved into the "scream tunnel" where students create a wall of sound that runners anticipate throughout their training. Tower Bridge serves as London's emotional apex where crowd density and architectural grandeur combine to produce what participants describe as transcendent experiences: "Coming onto Tower Bridge with those crowds and that view—it's like the whole city is lifting you up" (Interview L-22). Tokyo's Asakusa district mobilizes traditional drumming groups and neighborhood associations to create culturally specific forms of encouragement that participants interpret as connecting them to deeper Japanese traditions.

The finish line emerges as the ultimate sacred space where individual achievement and collective celebration converge. Physical demarcation through elaborate gantries, timing clocks, and sponsor branding creates clearly defined thresholds between the liminal state of racing and the reintegration into normal social roles. Post-finish areas function as decompression zones where emotional release occurs through designed sequences of medal presentation, recovery services, and reunion areas. Table 4 details the spatial characteristics of these ritual geographies across the three cases . As shown in Table 4, the spatial characteristics of these ritual geographies vary significantly across the three cases, from Boston's linear journey through historic towns to London's circular route showcasing royal and commercial landmarks, and Tokyo's dual loops emphasizing the contrast between traditional and modern Japan.

Table 4: Sacred Spatial Configurations in Marathon Routes

Spatial Element	Boston Marathon	London Marathon	Tokyo Marathon
Route Topology	Point-to-point linear journey (26.2 miles)	Circular loop with Thames crossings (26.2 miles)	Double loop around Imperial Palace (42.195 km)
Elevation Profile	Net downhill (-459 ft) with 4 Newton hills	Relatively flat (+/- 40 ft variations)	Minimal elevation change (+/- 35 ft)
Key Sacred Spaces	• Hopkinton start (elevation 490 ft) • Wellesley scream fire station (mile 17) • Heartbreak Hill summit (mile 17) • Citgo sign (mile 25) • Boylston finish straight	• Greenwich Park assembly • Cutty Sark (mile 6) • Tower Bridge approach (mile 12) • Canary Wharf towers (mile 17) • Parliament/Big Ben vista (mile 24) • Mall finish straight	• Imperial Palace start • Tokyo Tower view (10 km) • Asakusa temples (25 km) • Tokyo Skytree Bridge (35 km) • Tokyo Station finish
Crowd Density Patterns	Continuous suburban crowds; Peak at: Wellesley, Newton, Kenmore	Urban canyon effects; Peak at: Tower Bridge, Isle of Dogs, Westminster	Organized cheering squads; Peak at: Nihonbashi, Asakusa, Ginza
Symbolic Landmarks	Historical (Freedom Trail connection); Educational (universities); Revolutionary War sites	Royal (palaces/parks); Commercial (Canary Wharf); Political (Parliament)	Imperial (palace grounds); Traditional (temples); Modern (skyscrapers)
Spatial Barriers	Town boundaries; Railroad crossings; Highway overpasses	Thames River (4 crossings); Park boundaries; Security zones	Major intersections; Railway crossings; Waterfront sections
Acoustic Environments	Suburban quiet → College screams → Urban roar	Continuous soundscape; Bridge echoes; Tunnel amplification	Organized taiko drums; Synchronized chants; Corporate cheering zones

As illustrated in Figure 3, the spatial distribution of ritual intensity reveals distinctive patterns across the three marathon routes, with each city demonstrating unique rhythms of sacred space creation. The visualization shows how ritual intensity fluctuates along the 42.195-kilometer journey, with universal peaks at start and finish points while exhibiting culturally specific variations in between. Boston's profile shows pronounced peaks at Wellesley College (19.3 km) and Heartbreak Hill (33.8 km), reflecting the route's integration with collegiate traditions and topographical challenges. London's intensity distribution features its highest mid-race peak at Tower Bridge (19.3 km), where the convergence of iconic architecture and crowd density creates what many participants describe as the race's emotional pinnacle. Tokyo's pattern demonstrates more evenly distributed intensity with notable elevations at Asakusa (25 km), where traditional cultural elements generate distinctive forms of collective effervescence.

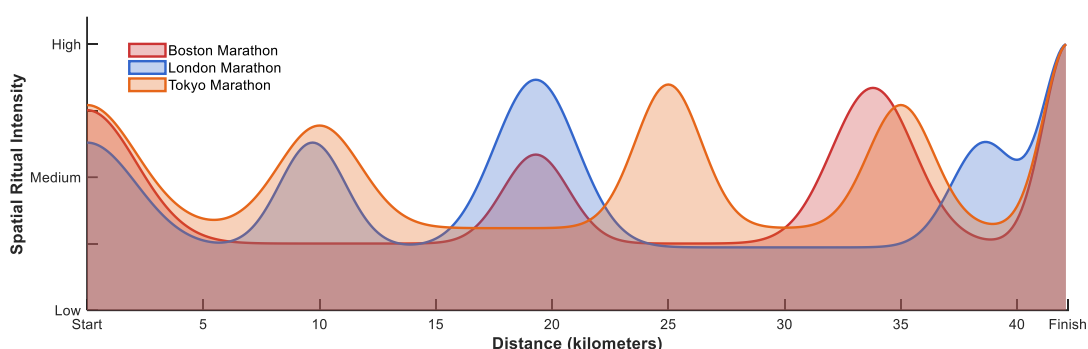


Figure 3: Sacred Space Distribution Along Marathon Routes

The pattern of area visualization signifies the way these sacred spaces meet and overlap with each other to create an accretive effect that renders the whole of the marathon course an unbroken ritualistic environment. Clearness of the converging spaces shows the possibility of multiple different space sacralization methods existing and playing with each other in the global community of marathons. The prevalence of constant maximum intensity in the starting and end points in all three cities shows that threshold experience is quintessentially important in the case of ritual engagement while the variability of trends in the mid-race sections shows that the locality-specific principles of design and the nature of the city determine the peculiar geography of collective feeling. This space analysis clearly establishes that marathon routes play not just the role of sporting courses but those of carefully engineered pilgrimages through the holy spaces of cities, where running as an embodied activity is precisely interwoven with the symbolic crossing of culturally honored territories.

4.1.3 Bodily Rituals: Collective Participation and Experience

The embodied nature of marathon ritualization is found in its coordinated actions, collective experience of adversity, and collective achievements that create fleeting communities of practice. The staging of the starting corrals consecrates the space, with runners positioning themselves based on predicted speed, thus creating small sub-units that move through the metropolitan landscape in choreographed waves. The countdown before the start serves to build what those in all three cities describe as an electrifying atmosphere, in which individual nervousness is translated to collective

energy: "When that gun goes off, you're no longer you—you're part of this big organism moving through the city" (Interview T-18). This integration of individual selves with collective flow is the most tangible manifestation of *communitas*.

Running becomes a dynamic meditation, wherein repetitive physical actions invoke altered states of consciousness. Participants often report feelings of temporal distortion, heightened sensory perception, and a greater sense of continuity with past and present runners. The common language, with terms like "hitting the wall," "finding a second wind," and "leaving it all out there," provides linguistic indicators of a shared experience that transcends cultural boundaries. The paradox of physical pain works to strengthen communal bonds, as the shared recognition of pain creates empathetic bonds between individuals who are otherwise strangers. Aid stations become ritual centers wherein the acts of caregiving by volunteers—handing out cups, providing words of encouragement, and offering orange slices—become sacramental acts reaffirming the reciprocal relationships between runners and their cityscape.

Finish line celebration marks the peak of the physical ritual, where exhaustion is reframed as euphoria through carefully choreographed sets of material culture. The awarding of medals clearly demarcates the boundary between runner and finisher, with the physical weight of the medal serving as tangible proof of having survived the ordeal. Recovery zones after the race follow unplanned rituals marked by congratulations, group photo opportunities, and outpourings of emotion in the form of tears and hugs. Gradual return from the finish line to the cadences of normal urban life requires careful management of this reintegration, with many participants reporting difficulty in adapting to the post-marathon lifestyle. The extreme intensity of embodied experience generates what Turner called "ritual addiction," compelling individuals to repeated participation in seeking to relive the transformative moments.

These three dimensions of ritualization—temporal, spatial, and bodily—operate synergistically to transform marathon events from athletic competitions into profound generators of collective meaning and urban identity. The careful orchestration of sacred time, ceremonial space, and synchronized bodies creates liminal experiences that participants across all three cities describe as life-changing, suggesting universal human needs for collective transcendence expressed through culturally specific ritual forms.



Figure 4: Visual Documentation of Marathon Ritual Processes

Figure 4 presents ethnographic documentation of key ritual moments across the three marathon cases. (a) Elite runners lead the mass field through Tokyo's modern urban canyon, demonstrating

the hierarchical procession that marks the transition from individual bodies to collective movement. (b) The iconic Tower Bridge crossing during the London Marathon, where Union Jack flags and dense crowds create what participants describe as the race's emotional apex—a perfect example of how architectural grandeur and nationalist symbols combine to produce collective effervescence. (c) The famous "Kiss Me" signs at Wellesley College during the Boston Marathon, illustrating how spectator-runner interactions become ritualized through decades of repetition, transforming a suburban stretch into sacred space through embodied exchange. (d) Post-race medal display in Boston captures the moment of reintegration, where physical exhaustion transforms into triumph through the material culture of achievement, marking the successful passage through ordeal.

4.2 Generation and Transmission of Collective Memory

The construction of collective memory within marathon culture operates through complex mechanisms of historical reconstruction, wherein founding narratives become crystallized through repeated tellings and material manifestations. Marathon events systematically reconstruct their historical narratives by elevating specific moments—such as the Boston Marathon's resilience following the 2013 bombing or Tokyo Marathon's evolution into a World Marathon Major—into mythological status, while simultaneously creating pantheons of heroic figures whose achievements transcend mere athletic performance to embody broader cultural values of perseverance, community solidarity, and human potential.

The diversification of memory carriers demonstrates how collective remembrance adapts to contemporary technological and social contexts while maintaining connections to traditional forms of commemoration. Physical artifacts such as finisher medals serve as tangible repositories of memory, with design elements incorporating cultural symbols, commemorative dates, and distinctive aesthetic features that encode both individual achievement and collective participation in historical continuity (as shown in Table 5 and Figure 5). Digital platforms extend these memory functions through comprehensive databases, photographic archives, and social media narratives that create multilayered documentary records, while embodied memories persist through runners' corporeal experiences, personal narratives shared within running communities, and the ritualistic retelling of race-day stories that transform individual experiences into collective mythology.

Table 5: Evolution of Marathon Medal Design as Memory Carriers

Marathon Event	Year	Design Elements	Cultural Symbols	Memory Function
Boston Marathon	2019-2025	Unicorn motif, city skyline	BAA unicorn logo, Copley Square imagery	Historical continuity, institutional identity
Tokyo Marathon	2017-2025	Geometric patterns, multilingual text	Cherry blossoms, Mt. Fuji silhouettes	Cultural heritage, international recognition
TCS NYC Marathon	2022-2024	Borough bridges, finish line imagery	Statue of Liberty, NYC skyline	Urban identity, journey narrative

Marathon Event	Year	Design Elements	Cultural Symbols	Memory Function
London Marathon	Multiple years	Thames imagery, royal emblems	Tower Bridge, crown symbols	National pride, charitable mission
Berlin Marathon	Contemporary	Brandenburg wall segments	Gate, Historical landmarks, unity symbols	Political transformation, athletic achievement

Intergenerational transmission mechanisms ensure the perpetuation of marathon culture through institutionalized practices that transcend individual participation. Family participation traditions manifest in multi-generational racing dynasties and the inheritance of bib numbers or qualifying times, creating lineages of involvement that embed marathon participation within familial identity structures. The cultivation of volunteer networks establishes parallel traditions of service that maintain event infrastructure while transmitting cultural values across generations, supplemented by educational initiatives that explicitly frame marathon participation within broader narratives of civic engagement, health promotion, and community building. These material manifestations of memory, particularly evident in the evolution of medal designs from Tokyo Marathon's incorporation of traditional Japanese motifs (Figure 5a) to Boston Marathon's consistent use of the unicorn symbol across decades (Figure 5b), demonstrate how racing organizations consciously construct visual narratives that link contemporary participants to historical traditions.

(a)The evolution of MEDALS in the Tokyo Marathon



(b)The Boston Marathon medal series





Figure 5: Examples of Marathon Finisher Medals as Material Memory Carriers

4.3 Construction Strategies of Urban Narratives

The construction of urban narratives through marathon events reveals complex negotiations between official municipal branding initiatives and organic grassroots storytelling, creating dialogical spaces where top-down promotional strategies intersect with bottom-up meaning-making processes. Municipal governments deploy sophisticated branding apparatuses that position marathons as emblematic of urban dynamism and global connectivity, exemplified by Tokyo's strategic framing of its marathon as a symbol of metropolitan efficiency and international hospitality, while London authorities emphasize charitable giving and inclusive participation as core urban values, and Boston's official discourse centers on historical continuity and resilient community spirit. These institutionalized narratives encounter, complement, and occasionally conflict with vernacular

stories emerging from participant communities, volunteer networks, and neighborhood associations who infuse official frameworks with personal testimonies, localized meanings, and alternative interpretations that resist singular narrative impositions, generating polyphonic urban stories that accommodate multiple perspectives while maintaining sufficient coherence for collective identification (as shown in Table 6).

The mediatization of marathon stories operates in increasingly elaborate multi-platform environments where the agenda-setting power of traditional broadcast media is synergistically blended with the participative abilities of social media to create transmedia narrative ecologies. The TV broadcasts provide master narrative templates through carefully produced images sequences, expert reporting, and narrative conflicts that foreground elite competition along with selective uptake of human interest stories that create what media scholars call "preferred readings" supportive of both commercial and civic goals. At the same time, social media allow different narrative trajectories in which runners create live audio-documentation, cross-post personal experience narratives, and create collective memory through hashtags, geo-tagged posts, and viral events that sometimes challenge dominant master narratives—as in the way the organic "Boston Strong" phenomenon arose out of the 2013 bombing to become codified in official city branding. The convergence of these diverse media outlets creates elaborate narrative threads where the authoritative narrative of professional journalists is inescapably intertwined with citizen-generated narratives so that hybrid narrative formats are produced which reflect contemporary media convergence while benefiting personal stories through algorithmic delivery systems along with engagement metrics.

The tension between global uniformity demands and the need for situated uniqueness is realized in the strategic formation of narratives that balance global recognition with authenticity. It is in this dynamic that the inevitable contradictions that beset cities as they play out roles that are both unique places while integral components of global systems become apparent. Globalizing pressures from international regulatory regimes, corporate patrons, and elite running circuits impose standardized operational practices, brand appearances, and performance metrics that threaten unique qualities of place in favor of those that are more amenable to global recognition. Cities in turn deploy narrative strategies that evoke notable local specificity—e.g., Boston's invocation of Revolutionary history, London's overlay of royal ceremonial practices, Tokyo's celebration of neighborhood festivals—and reinterpret these site-specific qualities in cosmopolitan terms that engage global consumers of stories and media texts. The process of glocalization thus introduces creative tension that gives rise to new narrative formations in that marathons become spaces for performing locality while sustaining global affiliation. The result is narratives that engage place-based publics as well as transnational running communities in conjunction with one another using highly self-aware narrative repertoires that balance the tension between authenticity and broad-based appeal.

Table 6: Comparative Analysis of Urban Narrative Construction Strategies

Narrative Dimension	Boston Marathon	London Marathon	Tokyo Marathon
Official Branding Themes	<ul style="list-style-type: none"> Historical legacy ("oldest annual marathon") Academic excellence (university route) Patriotic tradition (Patriots' Day) Resilience narrative ("Boston Strong") 	<ul style="list-style-type: none"> Charitable purpose ("run for good") Royal patronage (Windsor start) Urban regeneration (Thames path) Inclusive participation ("marathon for all") 	<ul style="list-style-type: none"> Global city status ("Tokyo goes world") Technological innovation (tracking systems) Cultural harmony (tradition meets modernity) Precision and hospitality (omotenashi)
Grassroots Counter-Narratives	<ul style="list-style-type: none"> Neighborhood pride (Wellesley screams) Working-class perseverance Student rebellion traditions Local pub celebrations 	<ul style="list-style-type: none"> Community fundraising stories Costume running subcultures East End working-class identity Anti-commercialization critiques 	<ul style="list-style-type: none"> Volunteer dedication narratives Small business support stories Intergenerational participation Neighborhood festival integration
Media Framing Patterns	<ul style="list-style-type: none"> Elite competition focus (70%) Historical references (20%) Human interest stories (10%) Security/safety emphasis post-2013 	<ul style="list-style-type: none"> Charity achievements (40%) Celebrity participants (30%) Elite performance racing (20%) Royal family connections (10%) 	<ul style="list-style-type: none"> International participation (35%) Japanese elite performance (30%) Cultural showcase (25%) Technology features (10%)
Social Media Dynamics	<ul style="list-style-type: none"> #BostonStrong (2.3M posts) Personal achievement stories Qualifying time discussions Weather complaint threads 	<ul style="list-style-type: none"> #LondonMarathon (1.8M posts) Fundraising campaigns Costume experiences Spectator culture documentation Volunteer spot sharing 	<ul style="list-style-type: none"> #TokyoMarathon (1.2M posts) International runner appreciation Food and culture posts Volunteer appreciation
Global-Local Balance	<ul style="list-style-type: none"> IAAF standards compliance Boston-specific traditions maintained International field recruitment Local runner priority (80% residents) 	<ul style="list-style-type: none"> World Marathon Major status British cultural elements Global charity partnerships Commonwealth connections focus 	<ul style="list-style-type: none"> Abbott WMM integration Japanese cultural showcases Asian runner development International hospitality
Narrative Evolution Period	<ul style="list-style-type: none"> 1897-1970s: Elite amateur ideal 1980s-2000s: Democratization 2013-present: Resilience identity 	<ul style="list-style-type: none"> 1981-1990s: Charity innovation 2000s-2010s: Mass participation phase 2010s-present: Global city sport 	<ul style="list-style-type: none"> 2007-2012: Establishment phase 2013-2019: International growth 2020-present: Digital innovation

4.4 Formation and Maintenance of Emotional Communities

The emotional foundation of marathon communities emerges through the dialectical interplay between individual bodily experiences and collective affective states, wherein shared encounters with physical extremity generate what Collins (2004) terms "emotional energy" that transcends momentary suffering to create enduring bonds of mutual recognition and empathetic understanding. Marathon participants develop intense affective connections through synchronized experiences of pain, exhaustion, and triumph that dissolve conventional social boundaries, creating liminal spaces where strangers become intimates through corporeal communion—a phenomenon particularly evident in the spontaneous support networks forming around struggling runners and the collective euphoria permeating finish areas across all three studied marathons (as illustrated in Figure 6). The fluidity of identity boundaries within marathon communities manifests through continuous negotiations between inclusivity and exclusivity, as diverse participants—elite athletes, charity fundraisers, recreational runners, and bucket-list completers—construct overlapping yet distinct subcommunities that oscillate between temporary assemblages during race weekends and persistent networks sustained through training groups, social media connections, and annual reunion rituals. Digital technologies fundamentally reconfigure the spatial and temporal parameters of emotional community formation, enabling year-round engagement through virtual training platforms, GPS-tracked group runs across continents, and algorithmic curation of shared memories that transform ephemeral racing experiences into permanent digital archives accessible for collective reminiscence and identity reinforcement, thereby extending the affective reach of marathon communities beyond physical co-presence into perpetual virtual connection.

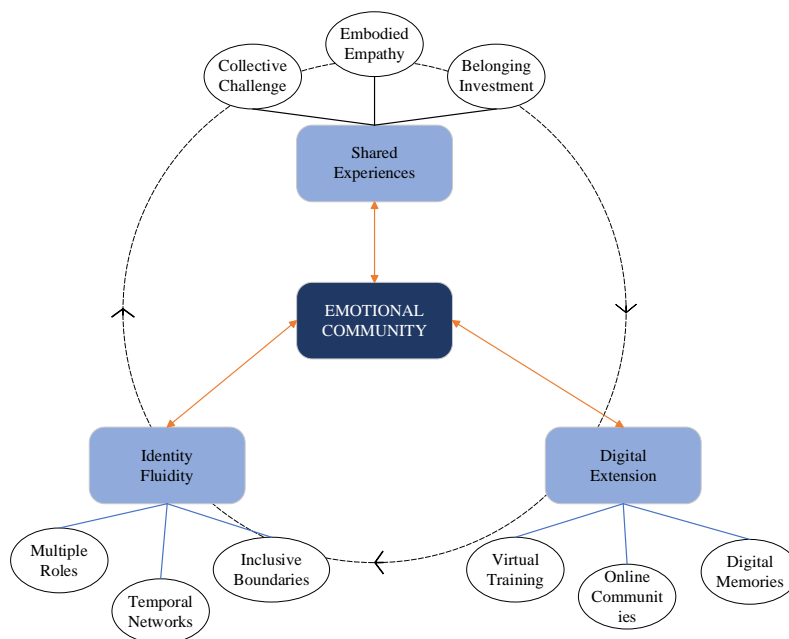


Figure 6: Conceptual Model of Emotional Community Formation in Marathon Events

This figure 6 illustrates the triadic relationship between shared experiences, identity fluidity, and digital extension in the formation and maintenance of emotional communities within marathon contexts. The central node represents the emotional community as an emergent phenomenon arising from the dynamic interaction of three primary dimensions: (1) Shared Experiences encompassing

collective challenges, embodied empathy, and belonging investment; (2) Identity Fluidity characterized by multiple participant roles, temporal network formations, and inclusive boundary negotiations; and (3) Digital Extension manifested through virtual training platforms, online community spaces, and permanent digital memory archives. The bidirectional arrows indicate reciprocal influence patterns, while the circular flow demonstrates the continuous, iterative nature of community formation processes. The model synthesizes empirical findings from Boston, London, and Tokyo marathons to present a generalizable framework for understanding how contemporary sporting events generate and sustain emotional communities across physical and digital spaces.

5. Discussion

This study extends ritual communication theory by illuminating the distinctive characteristics of sports rituals, particularly their embodied nature and capacity to generate collective effervescence through synchronized physical suffering and achievement. Unlike traditional religious or civic rituals that primarily engage symbolic and cognitive dimensions, marathon events mobilize bodies as primary sites of meaning-making, creating what Shilling and Mellor [21] term "somatic solidarity" wherein shared corporeal experiences forge bonds that transcend linguistic and cultural boundaries. The digital transformation of ritual practices reveals how virtual participation and mediated experiences complement rather than replace physical co-presence, as demonstrated by the proliferation of virtual marathons during the COVID-19 pandemic that maintained community connections through GPS-tracked runs and synchronized online celebrations [22]. These findings challenge conventional understandings of ritual as necessarily requiring physical proximity, suggesting instead that digital technologies enable new forms of distributed ritualization that preserve emotional intensity while expanding spatial and temporal boundaries of participation.

The current research adds to the field of collective memory by showing how participatory sport events produce dynamic and embodied modes of remembrance, which contrast with the static commemorative practices that are more commonly scrutinized in memory research. Marathon memories are produced through the process of "kinesthetic empathy," where body sensations and movements create stronger mnemonic anchors in comparison to mere mental recall. In addition, digital technology allows for the perpetual reassembly of memories through the sharing of material on social media sites, visualization of GPS traces, and algorithmic curation of the running experience. A three-city comparison of Boston, London, and Tokyo highlights the ways that cultural contexts shape the processes of memory making and transmission; each city is associated with unique mnemonic practices—from Boston's emphasis on historical continuity to Tokyo's embracing of technological advancement—that reflect larger societal values while participating in an international marathon memory culture that is transnational in reach [23].

The ritualization of the marathon has developed historically in three phases with different interactions between athletic competition, urban identity, and collective participation. The first phase, from the 1980s to the 1990s, was the period of transition from elite athletic competition to mass-participation, with the guiding inspiration of the London Marathon's original philosophy aimed at democratizing the sport of long-distance running and making cities view marathons as engines of inner-city regeneration and international visibility [24]. The subsequent

commercialization and professionalization phase (2000s-2010s) saw the emergence of sophisticated sponsorship ecosystems, standardized operational protocols through organizations like the Abbott World Marathon Majors, and the integration of marathons into global city branding strategies that positioned these events as essential components of metropolitan cultural capital. The contemporary digital-global phase (2010s-2020s) has been marked by comprehensive technological integration enabling real-time tracking, virtual participation options, and social media amplification of individual experiences into collective narratives, while the COVID-19 pandemic accelerated innovation in hybrid event formats that blend physical and digital participation modalities [7].

The communication effects of marathon events manifest across cognitive, emotional, and behavioral dimensions, fundamentally reshaping how cities are perceived, experienced, and inhabited by both residents and global audiences. At the cognitive level, marathons function as what Chalip [22] terms "media-genic spectacles" that project carefully curated urban images through global broadcasting networks, updating mental maps of cities by highlighting scenic routes, cultural landmarks, and community vibrancy while enhancing international recognition and tourist appeal. The emotional dimension encompasses the generation of what Collins [25] conceptualizes as "emotional energy" through collective rituals, manifesting in heightened civic pride, strengthened place attachment, and the creation of affective bonds linking individual achievement to urban identity, with these emotional investments proving remarkably durable across time and capable of mobilizing continued participation and support. Behaviorally, marathon events catalyze transformations in urban lifestyle patterns, normalizing recreational running through visible role models and accessible training programs, institutionalizing volunteer service as expressions of civic engagement, and creating new forms of cultural consumption centered on health, wellness, and athletic achievement that extend far beyond race day into year-round practices reshaping urban social life.

6. Conclusion

This comprehensive investigation reveals that marathon events function as sophisticated cultural production mechanisms through which cities construct and maintain collective identities via the dynamic interplay of ritualized practices, memory formation, and narrative dissemination. The cyclical reinforcement mechanism linking ritual, memory, and narrative demonstrates how repeated annual marathons generate cumulative layers of meaning that transform athletic competitions into profound expressions of urban culture, with each iteration strengthening emotional bonds while simultaneously adapting to contemporary social contexts. The historical construction of emotional communities emerges through three distinct evolutionary phases—from elite-focused competitions to mass participation phenomena, through commercialization and professionalization, toward digital-global integration—revealing how marathons have progressively expanded their cultural reach while maintaining core ritualistic elements that foster collective effervescence. The communication effects manifest across multiple dimensions and temporal scales, reshaping cognitive maps of cities, generating sustained emotional energy that mobilizes civic engagement, and catalyzing behavioral transformations in urban lifestyle patterns that extend far beyond race participation into year-round practices of health, volunteering, and community involvement. These findings illuminate the enduring power of embodied collective experiences in an increasingly mediated world, suggesting that physical co-presence and shared corporeal challenges remain

fundamental to human meaning-making despite technological advances that enable virtual participation and digital memory preservation.

References

- [1] Y. Lin, C. Cai, and L. Li, "Research on perceived brand characteristics of marathon participants," *Scientific Reports*, vol. 14, no. 1, p. 30621, 2024.
- [2] E. Zheng, C. Xue, G. Chen, Y. Zhang, and J. Zou, "Unveiling urban marathon development characteristics and urban growth strategies in China: Insights from time series analysis of Baidu Search Index," *Plos one*, vol. 18, no. 6, p. e0287760, 2023.
- [3] B. Zhou, L. Wang, S. S. Huang, and M. Huang, "Personal development of marathon tourists: Scale development and validation," *Journal of Hospitality and Tourism Management*, vol. 61, pp. 78-90, 2024.
- [4] Z. Liu and H. Qi, "Media framing of mega sport events: a case study of the Beijing 2022 Winter Olympics," *Managing Sport and Leisure*, pp. 1-15, 2025.
- [5] J. Grix and P. M. Brannagan, "Sports Mega-Events as Foreign Policy: Sport Diplomacy, "Soft Power," and "Sportswashing"," *American Behavioral Scientist*, p. 00027642241262042, 2024.
- [6] M. Lang, "The evolutionary paths to collective rituals: An interdisciplinary perspective on the origins and functions of the basic social act," *Archive for the Psychology of Religion*, vol. 41, no. 3, pp. 224-252, 2019.
- [7] J. J. Pizarro *et al.*, "Emotional processes, collective behavior, and social movements: A meta-analytic review of collective effervescence outcomes during collective gatherings and demonstrations," *Frontiers in Psychology*, vol. 13, p. 974683, 2022.
- [8] K. Cmiel, "Culture as Communication: Essays on Media and Society," ed: JSTOR, 1992.
- [9] I. Tamir and S. Lehman-Wilzig, "The routinization of media events: televised sports in the era of mega-TV," *Television & New Media*, vol. 24, no. 1, pp. 106-120, 2023.
- [10] S. Gabriel, J. Valenti, K. Naragon-Gainey, and A. F. Young, "The psychological importance of collective assembly: Development and validation of the Tendency for Effervescent Assembly Measure (TEAM)," *Psychological Assessment*, vol. 29, no. 11, p. 1349, 2017.
- [11] J.-F. Orianne and F. Eustache, "Collective memory: between individual systems of consciousness and social systems," *Frontiers in Psychology*, vol. 14, p. 1238272, 2023.
- [12] J. Assmann, "Communicative and cultural memory," in *Cultural memories: The geographical point of view*: Springer, 2011, pp. 15-27.
- [13] B. C. Clift, J. Francombe-Webb, and S. Merchant, "Remembering learning to play: reworking gendered memories of sport, physical activity, and movement," *Qualitative Research in Sport, Exercise and Health*, vol. 15, no. 4, pp. 449-466, 2023.
- [14] F. Cugurullo, F. Caprotti, M. Cook, A. Karvonen, P. McGuirk, and S. Marvin, *Artificial intelligence and the city: Urbanistic perspectives on AI*. Taylor & Francis, 2023.
- [15] K. O'Sullivan, F. Shirani, R. Hale, N. Pidgeon, and K. Henwood, "Identity, place narrative and biophilic urban development: Connecting the past, present and future for sustainable liveable cities," *Frontiers in Sustainable Cities*, vol. 5, p. 1139029, 2023.
- [16] N. Kalman-Lamb, "Imagined communities of fandom: sport, spectatorship, meaning and alienation in late capitalism," *Sport in Society*, vol. 24, no. 6, pp. 922-936, 2021.
- [17] B. Cayli Messina, "Why temporality matters in collective resistance: Shifting civic norms in a

- post-traumatic society," in *Sociological Forum*, 2024, vol. 39, no. 2, pp. 201-215: Wiley Online Library.
- [18] G. Brunton, J. Thomas, A. O'Mara-Eves, F. Jamal, S. Oliver, and J. Kavanagh, "Narratives of community engagement: a systematic review-derived conceptual framework for public health interventions," *BMC Public Health*, vol. 17, pp. 1-15, 2017.
 - [19] L. Meng, Y. Zhao, Y. Jiang, Y. Bie, and J. Li, "Understanding interaction rituals: The impact of interaction ritual chains of the live broadcast on people's wellbeing," *Frontiers in psychology*, vol. 13, p. 1041059, 2022.
 - [20] L. E. Johannessen and R. Collins, "The future of interaction rituals: an interview with Randall Collins," *Theory and Society*, pp. 1-14, 2024.
 - [21] C. Shilling and P. A. Mellor, "Re-conceptualizing sport as a sacred phenomenon," *Sociology of Sport Journal*, vol. 31, no. 3, pp. 349-376, 2014.
 - [22] D. Westmattmann, J.-G. Grotenhermen, M. Sprenger, and G. Schewe, "The show must go on-virtualisation of sport events during the COVID-19 pandemic," *European Journal of Information Systems*, vol. 30, no. 2, pp. 119-136, 2021.
 - [23] M. Roche, "Mega-events and social change: Spectacle, legacy and public culture," in *Mega-events and social change*: Manchester University Press, 2017.
 - [24] C. Gratton, S. Shibli, and R. Coleman, "Sport and economic regeneration in cities," in *Culture-Led Urban Regeneration*: Routledge, 2020, pp. 141-155.
 - [25] R. Collins, "Interaction ritual chains," in *Interaction ritual chains*: Princeton university press, 2014.