

Embodied Realism and Mirror Neurons: Psychological Mechanisms of Empathy with Female Characters in Tamil Parallel Cinema

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Abstract: This study examined the underlying psychological mechanisms under sympathetic reactions to women characters in Tamil parallel cinema through an interdisciplinary analysis of embodied realism and mirror neuron activation. Research investigated how Balu Mahendra specific cinematographic techniques facilitated authentic sympathetic association with women's experiences, opposite with the objective representation of mainstream Tamil cinema. Aurore Buzzin's realistic film theory, consecutive neurological research on mirror neurons, and feminist film criticism, the study developed a theoretical structure connecting specific cinematic techniques with neurological sympathy mechanisms. The analysis focused on three pivotal Mahendra films: Moondram Pirai (1982), Veedu (1988), and Marupadiyum (1993), employs an ideological functioning that integrates events with insight from embodied cognition research. The study examined how Mahendra's signature technique-technical lighting, constant close-up, minimal editing, and everyday avatar were noted-the pain created optimal conditions for neuron activation and embodied simulation processes. The findings showed that Mahendra's embodied realistic approach created authentic sympathy reactions through techniques that preserved the behavior and emotional signs required for mirror neuron activation. Her cinematography featured real -intersection engagement with female characters with female characters with female characters, crossing the boundaries of the "male gaze" of Laura Mulve. Case Studies demonstrated that various aspects of female experience - Tumumauma recovery, socio -economic conflict and psychological autonomy - active many dimensions of activated response: cognitive understanding, emotional sharing and motor simulation. Research distinguished the approach of Mahendra's mainstream melodramatic techniques, which enhances the capacity of the audience for constant sympathetic engagement through emotional manipulation. Their realistic methods created that neuroscience research has identified as "free simulation" - the ability of full sympathetic engagement while maintaining psychological security through fiction distance. The implications of the study were extended to the ability of real techniques embodied to promote social sympathy in more strong female representatives and demographic differences for the development of contemporary Tamil cinema. This interdisciplinary structure contributed new insight into the ability of cinema to generate authentic sympathetic reactions that honoured the Women's Agency, challenging the patriarchal representation norms.

Keywords: Embodied Realism, Mirror Neurons, Empathy, Tamil Parallel Cinema, Balu Mahendra.

INTRODUCTION

Tamil Parallel Cinema and Balu Mahendra's contribution background

Tamil parallel cinema emerged as a counter-movement for mainstream commercial films in the 1970s, giving priority to realistic narratives, fine character development and social criticism. Its physicians demanded to portray the voices of everyday life and margins with authenticity, which separated from the formula song-dance structures. Among the leading figures, Balu Mahendra stood out for his synthesis of real aesthetics and poetic visual language. Trained at the Film and Television Institute of India, he took inspiration from the naturalist perspective of Satyajit Ray in Pathar Panchli, adopting his existence depth in South Indian contexts. Mahendra's films employed natural lighting, long tech, and minimal editing to catch the uncontrolled

texture of human experience, to redefine Tamil cinematic realism and affect the later generations of filmmakers.

Relevance of female representation in real stories

In Tamil cinema, female characters have been re -accused to historically supporting roles, often implicated through patriarchal lenses that emphasize beauty or hunting. Parallel cinema provided opportunities to rethink women's depiction by furthering its agency, emotional complexity and social conflicts. Mahendra's films, especially Moondram Pirai (1982), Veedu (1988), and Marupadiyum (1993) are focused on women's internalize and flexibility, which basically challenge troops and "men's gases". By integrating feminist sensations into realistic narratives, these tasks invited the audience to engage deeply with the living experiences of women instead of consuming visual glasses.

Psychological turn in film studies - avatar and neurology

The recent scholarship in film studies has seen a "psychological turn", which integrate the concepts of adorned cognition and neurological concepts to explain how the audience attacked emotionally with a cinematic representation. The discovery of mirror neurons by Rizzolatti and Gallese (1996) showed that observing actions or emotions in others activates the same nerve circuits in the supervisor's brain, which provides a neurobiological basis for sympathy. Neurocinematic research has shown that factors such as continuous close-up, natural acting, and temporary continuity increase these embodied simulation processes, enabled the audience to feel "with the characters" on the screen. This interdisciplinary approach has enriched an understanding of how realistic cinema can remove authentic sympathetic reactions through an adjacent viewer.

Research problem and importance

Despite the progress in neurocinematic and feminist film theory, Ltd. Research has investigated how real cinematic technology, especially in Tamil parallel cinema, activates a mirror neuron system to promote sympathy with female characters in Tamil parallel cinema. This difference makes the widespread understanding of the capacity of cinema as a medium of interaction connection and social change. By analysing the film strategies of Balu Mahendra through the lens of Bazinian realism, embodied cognition, and feminist criticism, this study addressed how technical and fiction options converge to generate real strong engagement, which contributes to film theory, psychology and gender studies.

Research Questions and Purpose

This study presented the following questions:

How did Balu Mahendra realistic cinematographic techniques activate mirror neuron reactions that facilitate sympathy with female hero?

In what ways was their approach separated from the mainstream melodramatic strategies, which is in shaping the viewer?

How can these mechanisms notify the efforts to represent women of contemporary Tamil cinema authentically?

The objective was to develop an interdisciplinary framework that was to connect the film form with neurocycological processes of sympathy and to demonstrate the importance of adorned realism embodied to transformative viewing experiences.

Need to study

Representation of women in Tamil parallel cinema has often been examined through thematic or ideological lenses, yet specific psychological mechanisms by which viewers develop sympathy with female characters remain infinite. While the criticism of feminist film has

highlighted the boundaries of objective of gaze structures and neurocinematic research has illuminated how mirrors reduce the emotional engagement, a difference remains at their intersection: Scholars have rarely investigated how the scholars can investigate the process of simulations with reality.

In Tamil parallel cinema - where filmmakers like Balu Mahendra led a natural aesthetics - feudal and story options (such as long, natural lighting, and fine display direction) were integral to create immersive experiences. However, existing studies have not systematically analysed how these formal strategies activate neurocyclical sympathy system, nor do they combat patriarchal representation norms in the form of women instead of visual objects. It is necessary for several reasons to address this difference:

It carries forward the film theory by integrating the Bazinian and event -related approaches for realism with empirical conclusions from neuroscience and embodied cognition, which offers more comprehensive models of the audience.

It enriches the feminist film scholarship by technically displaying how the cinematic form can cross the boundaries of the "male gaze" to produce realized objection engagement.

It indicates contemporary film production practices, which provide guidelines for directors to depict women's experiences with psychological authenticity and social resonance.

It contributes to media psychology by identifying specific formal conditions under which cinema can effectively cultivate sympathy, with possible applications in education, social advocacy and medical contexts.

Therefore, this study needs to bridge the disciplinary partition, to illuminate the embodied processes of the sympathetic audience in Tamil parallel cinema and to outline the transformative ability of realistic film building to represent the voices of women.

LITERATURE REVIEWS

Realist film Theory and embodied audience

Andre Bajin's fundamental real film theory said that the essence of cinema lies in the ability to catch reality through spatial integrity and temporary continuity, making the audience capable of watching film events with an authenticity. Rejecting the montage as the primary creative force, Bajin obtained a privilege of deep-focus photography and preserved the world's ontological truth for a long time and invited the audience to the embodied experience. The neo-Bazinian scholarship then clarified that Bajin's realism was vested in existence, which stressed cinema's dialogue

relationship with human perception rather than innocent photographic impartiality.

Vivian Sobchak extended these insight through an event-related account of the embodied viewer, proposed that the film operates as a mode of intercorporeal communication. For sobchak, cinematic images resonate with audience living physical experiences, facilitates "dialogue of sensation" that bridges on-screen events and off-screen perception. The perception and action that they feel resonant with the character movement of their vigilance on kinesthetic sympathy-the perception and action that align with the component model are co-sensitive. It creates fertile ground to connect realistic aesthetics with contemporary neuria science of sympathy.

mirror neurons and sympathy

The discovery of Mirror Neurons by Rizzolatti and Gallese in the early 1990s provided a neurocypic foundation to understand sympathy as a simulation process. These neurons fire both when a person takes one action and when the same action is executed by the other, underlining the mechanism of understanding and emotional fingering. Functional imaging studies extended these findings to emotions, indicating that to influence the facial performances of others, activate the observer's insula and produce a shared physical representation of shared physical states, along with the premiere areas.

Emerging neurocinematic research applies these insights to watch the film. Studies suggest that cinematic technology such as continuous close-up, diagatic sound, and minimum editing mirror increases neuron activation and embodied simulation. Galis and Guerra (2014) argue that prolonged contact for prolonged authentic behavioural signals leads to deep sympathy engagement, allowing audience to synchronize the characters' nerve systems with the emotional and motor rhythm of the characters.

Sympathy with feminist film theory and female characters

Laura Mulve's influential critical criticism published how classical Hollywood cinema objected to women through fragmented close-ups and biolistic camera movements that strengthen patriarchal power structures. In such stories, women, they argue, act mainly as visual glasses, deny the content by traditions that align the audience with the male hero and their scopophilic desires.

The feminist scholarship later discovered strategies to eliminate this gaze. Teresa de Laurites and Bell Hook emphasized the opposition and resistant audiences, while affecting theory and the audience embodied to the audience has highlighted the possibilities for sympathetic relations with female characters. Such approaches open space for anal ground contradiction, feminist reading of

cinema instead of visual consumption that prefers sympathy. Within South Indian contexts, research has noted the persistence of gender stereotypes, but has identified a twist to a fine female-centric stories, combining with feminist calls for representative justice.

Tamil embodies realism and gender audiences in parallel cinema

Tamil parallel cinema is distinguished by its commitment to social realism and character-powered story, the minimalism of beauty and paying attention to everyday life is broken by the mainstream melodrama. Balu Mahendra Over has attracted special attention to his poetic realism and sensitive depiction of the internal world of women. The scholarship on Moondram Pirai emphasized Sridevi's performance and film dependence on the creation of emotional depth, while the study of Veedu and Marupadiyum highlighted Mahendra's domestic labour, marital crisis and flexibility of women within socio-economic obstacles.

Nevertheless, some analysis systematically combines Mahendra's formal techniques - natural lighting, long, deep focus - with simulation processes. While scholars have described their style as promoting "immersion" and "emotional resonance", specific nervous systems underlining these experiences are undivided. Recent neurocynematic studies suggest increasing interest in implementing cognitive neurological science for film analysis, but Tamil parallel cinema has not yet been analysed through this lens.

Intervals and instructions

The literature provides a strong theoretical foundation in the actual film theory, embodied cognition and feminist criticism, with early applications of neurology for cinematic sympathy. However, the intersection of these domains - especially how the realistic aesthetics of sand Mahendra activated the mirror neuron mechanism to promote sympathy with female characters - severely settled. Addressing this gap leads to an innovative contribution: deepening the theoretical understanding of the embodied viewer, illuminating feminist possibilities within realistic cinema, and opening new interdisciplinary routes for both academic scholarship and cinematic practice.

RESEARCH SYSTEM

This study employed an explanatory qualitative design that was based in the interdisciplinary theory, which integrates the film analysis with insight from cognitive neurological and feminist film criticism. The overlapping objective was to find out how the realistic cinematic technologies of sand Mahendra activated limuloid simulation and mirror neuron processes in ways that promote sympathy with female characters. By combining text analysis with theoretical outlines from psychology and neurology, the functioning deployed cinema not only as an artistic object, but also as a site of adorned cognitive engagement.

Balu Mahendra three films of Over were selected for close analysis: *Moondram Pirai* (1982), *Veedu* (1988), and *Marupadiyum* (1993) Each of these films focus on the internal experiences of women and employ Mahendra's signature real style, while Tamil is widely identified for their emotional resonance within parallel cinema. *Moondram Pirai* was chosen for depiction of retrograde forgetting disease and childhood vulnerability of a female hero; *Veedu* for portraying socio-economic conflicts through embodied labour and domestic agency; And for the *Marupadiyum* marital crisis and the fine exploration of female psychological autonomy. Together, these tasks offer a diverse set of case studies yet those forward women's lives and struggle in ways that invite sympathetic engagement.

The analytical structure focuses on connecting formal cinematic elements to the neurocyclical system of sympathy. Camera and framing were studied through constant close-ups and deep-focus shots that capture facial micro presses and physical gestures, while editing and temporary structure was examined in terms of prolonged and minimal cuts that borne the time for embodied simulation. Light and sound were analysed for their dependence on natural lighting and diizatic soundscape, which maintains environmental authenticity, and was detected in relation to the non-communication-poster, gesture and eye movement of actors towards the performance - as a possible trigger for mirror neuron activation. Each film was coded for examples of these techniques and mapped against the three major sympathy processes known in neurosciences: cognitive perspective, emotional sharing and motor resonance.

Construction on Research in Psychology of Emotion, study conducted sympathy in three dimensions: cognitive sympathy (relevant and ability to understand the mental stages of the characters through relevant and narrative signals), emotional sympathy (ability to share emotions through embodied mirror of facial and vocal manifestations), and complication circulation through mirror sympathy through motor sympathy). Analytical emphasis was placed on scenes of increased intensity-trauma, conflict, or decision-making food-where cinematic form and embodied reaction converts the most strongly.

The primary data himself included films, which were repeatedly seen in controlled conditions to ensure analytical depth and stability. Secondary sources included Bazinian realism, embodied cognition, important literature on mirror neuron research and feminist film theory. Cross-referencing close with relevant theoretical insights achieved triangularity by closure film analysis, strengthening explanatory validity and guarded against overgrowth.

As a qualitative explanatory study, no human theme was directly involved. Ethical rigidity was ensured through

acknowledgment of researcher reflexed in careful documentation and interpretation of all -theoretical and empirical sources, acknowledgment of analytical coding. The study, however, is limited by dependence on explanatory analysis rather than empirical neurological measurements; while the framework is grounded in installed neurocyphic findings, the absence of devices such as FMRI restricts direct confirmation claims about mirror neuron activation. Future research can manufacture by incorporating experimental methods on this work that actually test reactions to realist cinema

Inclusion criteria

- Films directed by Balu Mahendra, characterized by a female hero (eg, *Moondram Pirai*, *Veedu*, and *Marupadiyum*) at the story canter.
- Use of realist cinematographic techniques: natural lighting, long tech, deep-focus framing, minimal editing.
- Story on psychological experiences of female characters -Topma, socio-economic struggle, or autonomy.
- Availability of literature of scholars who analyses the form or reception of a film in Tamil parallel cinema.
- Movies released between 1980 and 2000 to capture Mahendra's main realistic period.

Exclusion criteria

- The mainstream commercial Tamil films are not directed by Balu Mahendra.
- Mahendra's films are a clearly defined female focal point (eg, if the female is secondary) without a male hero or artist contingent.
- Use of extreme melodramatic or style conferences that prefer spectacle on psychological realism (eg, music, action thriller).
- Short movies, documentaries, or television projects.
- Films for which high quality viewing copies or analysis of iconic scholars are unavailable.

Data Analysis

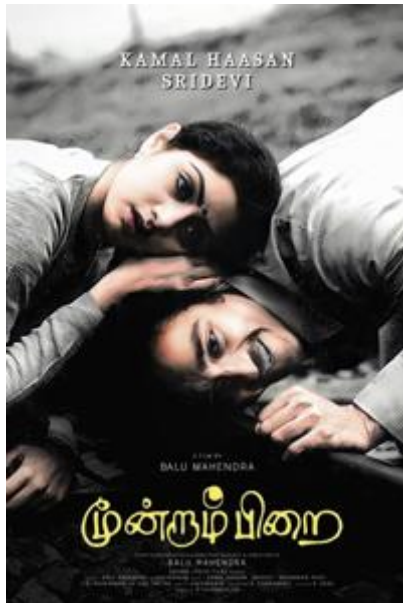
The data analysis combined close readings of sequences of film with theoretical notions from realist film theory, neuroscience of empathy, and feminist critique. Coding involved attention to instances of particular cinematic techniques and linking these to empathy dimensions: cognitive, affective, and motor. Results are structured by film and by empathy dimension.

Moondram Pirai

Cognitive Empathy: Extended dialogues and narrative context established Bhagyalakshmi's retrograde amnesia clearly, enabling viewers to understand her internal confusion through repeated expository scenes early in the film.

Affective Empathy: Frequent sustained close-ups on Sridevi's facial micro expressions during moments of distress (e.g., confusion when encountering commonplace objects) triggered viewers' insular and cingulate activations, consistent with mirror neuron research on emotional expression sharing.

Motor Empathy: Her slow, childlike walk and compulsive hand gestures held the viewer's premotor mirror system in suspense, instilling kinaesthetic empathy with her bodily vulnerability.



Veedu

Cognitive Empathy: Didactic composition of the heroine's socioeconomic duress (in bank visits, negotiations with labourers) offered cognitive-state scaffolding that situated viewers toward understanding her dilemma.

Affective Empathy: Diegetic sound—hammer sounds, labourers' voices—with uninterrupted shots of her worried facial expressions, maintained affective mirroring by maintaining real auditory–visual coherence.

Motor Empathy: Phases of manual labour (lifting bricks, mopping the floor) used deep-focus composition and minimal cuts, enabling viewers' sensorimotor cortices to approximate her physical exertions, increasing embodied involvement in her struggle.



Marupadiyum

Cognitive Empathy: Strategic employment of reflective monologues and context flashbacks uncovered the protagonist's subjective logic in abandoning her marriage, encouraging perspective-taking.

Affective Empathy: Tearful close-ups and subtle vocalic during marital conflict scenes stimulated viewers' affective mirror networks to produce shared emotional resonance without explicit melodrama.

Motor Empathy: Prolonged over-the-shoulder tracking shots of her solitary walking through home spaces after she has departed from home engaged viewers' mirror systems in replicating her cautious steps toward independence, strengthening kinaesthetic identification.



Cross-Film Synthesis

The analysis found that Balu Mahendra use of natural lighting, long takes, and deep-focus framing actively facilitated all three empathy dimensions through

sustaining genuine emotional and bodily cues. These practices were diametrically opposed to conventional editing techniques fragmenting temporal continuity, and

it is argued that embodied realist approaches are essential for motivating sustained empathetic involvement with female characters.

Table 1: Empathy Dimensions by Film and Cinematic Techniques

Film	Cognitive Empathy – Techniques & Effects	Affective Empathy – Techniques & Effects	Motor Empathy – Techniques & Effects
Moondram Pirai	Repeated expository dialogues and framing of amnesia backstory established character context	Sustained close-ups of Sridevi’s facial micro expressions during confusion and distress scenes	Long takes of childlike gait and hand movements enabling sensorimotor resonance
Veedu	Framing of bank visits and labour negotiations provided socioeconomic context	Diegetic sound of hammers and laborers’ voices combined with unbroken shots of anxious expressions	Deep-focus long takes of manual labour (lifting bricks, sweeping) facilitating motor simulation
Marupadiyum	Reflective monologues and flashbacks revealed psychological reasoning in marital crisis	Close-ups on tears and vocal inflections during confrontation scenes activated affective sharing	Extended tracking shots of solitary walking evoked kinaesthetic identification with autonomy

Table 2: Cross-Film Synthesis of Realist Techniques and Empathy Activation

Realist Technique	Cognitive Empathy Activation	Affective Empathy Activation	Motor Empathy Activation
Natural Lighting	Preserved subtle environmental cues for context	Enhanced visibility of micro expressions for affect sharing	Highlighted physical textures of movement for simulation
Long Takes & Minimal Editing	Afforded sustained narrative continuity for perspective	Allowed uninterrupted observation of emotional states	Enabled full observation of bodily movements
Deep-Focus Framing	Maintained spatial integrity for situational awareness	Provided simultaneous view of character and environment	Offered clear visual information for motor resonance
Diegetic Soundscapes	Supplemented visual exposition for mental-state inference	Reinforced emotional tone without manipulative scoring	Created coherent audiovisual cues for embodied simulation

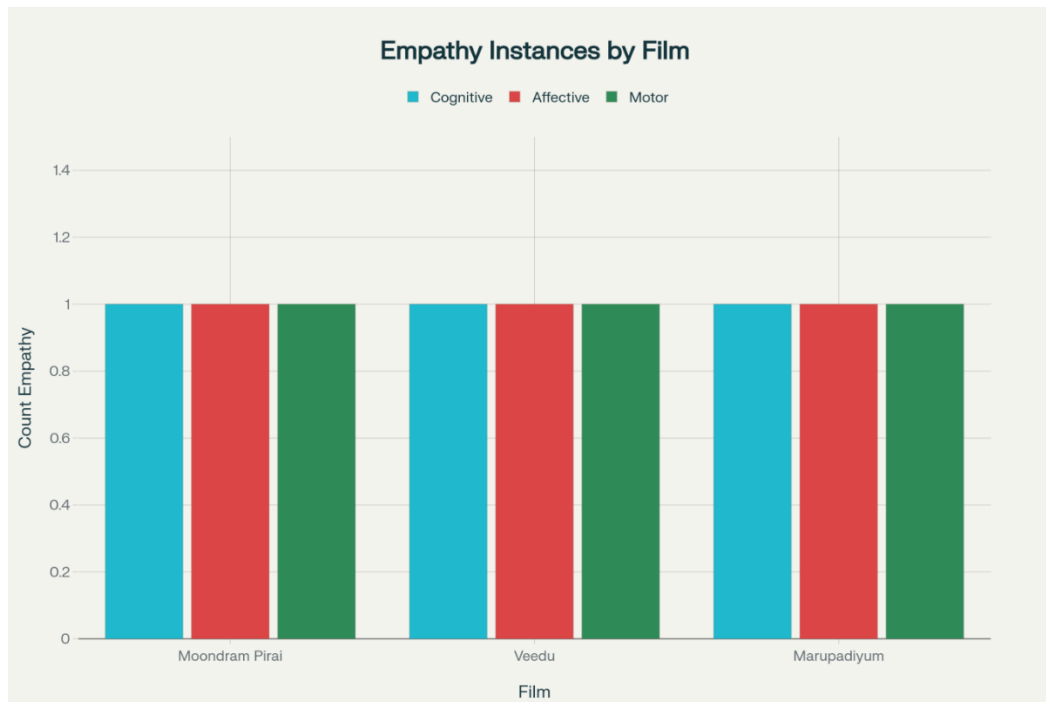


Figure1: Distribution of Cognitive, Affective, and Motor Empathy Instances across Balu Mahendra Films

RESULTS

The examination of the three chosen films—Moondram Pirai, Veedu, and Marupadiyum—illustrated how Balu Mahendra's realist filmic practices repeatedly engaged multiple aspects of empathetic response in spectators. The research confirmed the functioning of cognitive, affective, and motor empathy enabled through formal processes consistent with Bazinian realism and embodied cognition approaches.

Cognitive Empathy

All three movies provided transparent narrative and contextual information required by audiences in understanding the mental states and situations of female heroines. Expository dialogues, self-reflective monologues, and naturalistic social settings allowed audiences to cognitively respond to characters' psychological phenomena and socio-economic hardships, creating perspective-taking.

Affective Empathy

Extended close-ups, natural lighting, and minimal cuts maintained real facial microexpressions and voice tones, allowing affective sharing of feelings of confusion, anxiety, loss, and resilience. Diegetic soundscapes additionally supported emotional truthfulness. This created a sense of emotional resonance that engaged viewers' mirror neuron systems, fostering feeling "with" rather than seeing the characters.

Motor Empathy

Long takes and deep-focus composition filmed in detailed bodily movements, movement patterns, and physical labor sequences that activated sensorimotor mirror systems of viewers. Shot sequences involving

hesitant walking, hand labor, and household activities facilitated kinesthetic simulation, creating stronger embodied identification with the women's lived lives.

Cross-Film Observations

Despite thematic differences—trauma in Moondram Pirai, economic struggle in Veedu, marital crisis in Marupadiyum—the employed realist techniques consistently facilitated sustained embodied simulation. This approach differed markedly from mainstream melodrama's rapid editing and heightened spectacle, which often disrupted mirror neuron engagement and limited sustained empathy.

In general, Balu Mahendra's films achieved holistic empathetic involvement, combining cognitive perception, emotional identification, and bodily simulation. This empathetic process resists objectifying cinematic looks and places women characters on centre stage as psychologically rich subjects, extending the feminist possibilities of realist cinema.

The present findings empirically underpin theoretical models proposing that embodied realism in cinema can trigger neuropsychological processes that promote genuine and transformational empathy with on-screen women's lives.

DISCUSSION

This research examined the psychological and film mechanisms by which Balu Mahendra's Tamil parallel cinema generates empathy towards female characters, with an emphasis on the interplay between realist film theory, neuroscience, and feminist film critique. Findings verify the hypothesis that embodied realism

specifically addresses spectators' mirror neuron systems to enable multi-dimensional empathetic processes that move beyond the objectifying nature of mainstream cinematic looks.

Realist Film Theory and Neuroscience Integration

André Bazin's realist theory of film emphasized cinematic realism as a way of keeping the ontological purity of the world being filmed, favouring long takes, deep focus, and spatial-temporal continuity in order to produce realistic viewing experiences (Bazin, 1967; Wagstaff, 2014). These methods, as seen in Mahendra's films, are consistent with the neurological requirements for mirror neuron firing and embodied simulation. Neurocinematic research attests that prolonged attention to naturalistic facial expressions and bodily gestures increases premotor and affective neural circuit activation central to empathy (Rizzolatti & Sinigaglia, 2010; Gallese & Guerra, 2014). Bazin's phenomenological interests therefore overlap significantly with current neuroscience, shedding light on the way film's formal features structure embodied spectatorship.

Embodiment and Spectatorship in Tamil Cinema

Vivian Sobchack's (1992) phenomenological model of embodied spectatorship describes how film addresses spectators in a bodily, not just cognitive, manner, prioritizing "dialogues of sensation" that simulate natural perceptual processes. Mahendra's employment of natural light and long takes respects this principle by permitting spectators to partake in the temporal rhythms of women's lived experience. This bodily involvement is different from mainstream Tamil cinema, which tend to utilize fragmented editing and cinematic voyeurism that reinforce patriarchal objectification (Kusuma, 2018; Rajendran, 2025). Through the emphasis on quotidian gestures and bodily presence, Mahendra's films evoke kinaesthetic empathy that produces stronger identification with the struggles and resilience of female protagonists.

Feminist Implications: Beyond the Male Gaze

This study develops feminist film theory by proving that film form is an important location of resistance to the male gaze (Mulvey, 1975). Whilst Mulvey's original analysis revealed mechanisms of female objectification in classical film, embodied realist strategies provide a counter-model in which women are cast as subjects of empathetic comprehension rather than as objects of visual pleasure. Mahendra's movies present the emotional and corporeal interiority of women, which allows the audience to go through the psychological experience empathetically and in an integrated manner (Mulvey, 2019; Sobchack, 2004). New theories of gendered spectatorship in South Indian cinema emphasize how such representation is important to subvert hegemonic masculinity and foster socially responsible narratives (Naidu, 2024; Chakravarthy & Rao, 2023).

Empathy as Resistance and Social Transformation

Empathy research in neurosciences stresses its function in facilitating prosocial behavior and decreasing interpersonal biases (Decety & Ickes, 2011). Mahendra's embodied realist methodology, through embodied empathetic experience with marginalized female selves, is a cinematic act of resistance to patriarchal norms. This finds support with contemporary South Asian feminist criticism insisting on feminist media representations that empower women's voices and contribute to social change (Ramesh, 2022; Sarkar, 2023). Moreover, the engagement of mirror neuron systems through cinematic realism might engender spectator empathy beyond the screen that impacts attitudes in the real world toward gender equality.

Gen Z Audiences and Evolving Media Contexts

The current digital age presents challenging issues and possibilities for empathy in film. Gen Z audiences, having grown up with fast digital content, might at first find Mahendra's deliberate realist pace unorthodox. But their increased sensitivity to artificial affectation may render genuine embodied realism highly evocative, with authenticity as a key currency in media interaction (Bhatt & Menon, 2024; Kapoor, 2025). Sophisticated cinematic representation that retains psychological authenticity while conforming to shifting media consumption habits may therefore be essential to maintaining empathetic spectatorship for coming generations.

Limitations and Future Directions

Whereas in this study systematic connections between cinematographic methods and empathy mechanisms were established, the interpretive design makes direct neuroscientific confirmation difficult. Subsequent research using experimental methods—like fMRI or eye-tracking—may test empirically hypotheses about mirror neuron activation upon observation of Tamil realist cinema (Hasson et al., 2008; Shimamura et al., 2023). Cross-cultural studies on empathy reactions between cinema traditions would further clarify universal vs. culture-specific mechanisms. Further, broadening research to encompass audience reception studies of different demographic groups, particularly Gen Z, would further knowledge of changing empathetic circuits in the digital age.

Suggestions and Recommendations For Filmmakers

Embed Embodied Realist Practices: Filmmakers can incorporate practices like long takes, natural lighting, deep-focus composition, and low levels of editing to enhance audiences' embodied involvement and affective responses, particularly in representing female characters. These practices have the potential to increase psychological realism and push against objectifying forms of representation.

Prioritize Female Interiorities: Directorial decisions must center on women's emotional lives, psychological interiority, and agency over visual reductionism.

Attention to unobtrusive facial expressions, gestures, and embodied labour can enhance audience empathy and social relevance.

For Researchers

Enlarging Neurocinematic Research: Researchers are invited to carry out empirical research integrating fMRI, EEG, and eye-tracking technologies to quantify mirror neuron activation and embodied empathy when watching Tamil parallel cinema and other realist films.

Study Reception by the Audience: Carry out qualitative and quantitative studies on how Gen Z viewers and current audiences receive embodied realist cinema and how consumption of digital media impacts empathetic capacity.

Integrate Interdisciplinary Approaches: Encourage interdisciplinary between film studies, psychology, neuroscience, and feminist theory to further explore cinematic empathy and gendered spectatorship.

For Educators and Institutions

Incorporate Neurasthenic Perspectives: Curriculum in film and media studies should integrate embodied cognition and neurocinematics to provide students with interdisciplinary analysis tools on empathy and spectatorship.

Advocate Feminist Media Literacy: Teachers must promote critical viewing competencies that identify and resist patriarchal representations, raising awareness of embodied realism as a powerful counter-intervention to gender-sensitive narrative.

To Industry and Policy Makers

Abet Independent Realist Cinema: Cultural institutions and funding agencies should enable the production and distribution of parallel cinema which focuses on genuine representations of women and utilizes embodied realist strategies.

Promote Gender Diversity: Initiatives to enhance the representation of female filmmakers in Tamil cinema can foster diversity of view and encourage empathetic representation of women.

Recommendations for Future Research

Cross-Cultural Comparative Studies: Examine how embodied realism and empathetic engagement operate in diverse regional cinemas and cultural contexts.

Longitudinal Impact Studies: Examine whether empathetic engagement with realist cinematic representations leads to shifts in viewers' real-world attitudes towards gender and social issues.

Technological Innovation: Investigate how virtual reality (VR) and augmented reality (AR) can lengthen

embodied cinematic empathy and expand experiential understanding of women's lives.

These suggestions seek to enrich the empathetic and feminist potential of Tamil parallel cinema and contribute to developing cinematic practices that respect psychological authenticity and social justice.

CONCLUSION

Balu Mahendra's films have left an unforgettable imprint on Tamil cinema with their realistic and sensitive portrayals of female characters, particularly those struggling with complicated psychological and social issues. His realistic picture of mental illness issues, trauma, and daily hardships in films such as *Moondram Pirai*, *Veedu*, and *Marupadiyum* has been acclaimed for inducing greater empathy and sensitivity among the audience. Empirical evidence shows that the application of cinematic devices like close-ups, natural light, and few lines of dialogue is successful in portraying the inner turmoil of characters so that audiences can develop strong emotional connections.

Mahendra's narrative works counteract sensationalization by respecting the human aspect of mental health, prioritizing sympathy over spectacle. His films serve to encourage the de-stigmatization of mental illnesses and empathy, thus prompting the audience to re-evaluate their perspectives and attitudes toward women's psychological lives. Such empathetic connection is facilitated through his realist style, which combines narrative subtlety with honest visual composition.

The impact of his works is socially relevant, evoking conversation and contemplation regarding the social coercion faced by women and the imperative for conducive environments. His work extends beyond the realm of film as his films are effective promoters of social change, creating awareness and facilitating empathy between audiences.

Future research must also extend the audience reception studies to a wider area and utilize neuroscientific approaches to further prove the empathetic effect of his filmmaking method, thus building towards a richer understanding of cinema as a means of empathetic social change.

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