

From internet memes to TikTok challenges: A multimodal content analysis of common patterns in sociocultural representation within digital culture

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Article Info	Abstract
Original article	Background: Digital media have become symbolic battlegrounds for the production and reproduction of social norms. Within this environment, internet memes and TikTok challenges have emerged as pervasive phenomena that are typically examined separately and in isolation from one another. Aims: This study aimed to integrate and comparatively analyze these phenomena in order to identify their shared socio-cultural mechanisms and functions. Methodology: The research employed a qualitative approach based on comparative multimodal content analysis using an iterative, theory-informed comparative methodology. The sample consisted of 19 units of analysis (10 memes and 9 challenges), which were purposively selected and coded across four analytical layers: visual/bodily, linguistic, auditory, and contextual. Findings: The findings showed that despite the fundamental difference in their production mechanisms (memes being based on textual re-contextualisation and challenges on physical reproduction), these two phenomena are organised into five common macro-dimensions: identity construction and group demarcation, emotion regulation and nostalgia, informal resistance and symbolic activism, digital normative laboratory, and attention economy with risk-taking. At the cognitive level, memes have become shortcuts for quick judgements, and challenges have become tools for self-presentation. Conclusion: The results emphasise that these phenomena are not simply reflections of culture, but rather microscopic machines of norm production that necessitate a transition from traditional media literacy to deep multimodal literacy.
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1. Introduction

In recent decades, digital media have moved beyond being merely tools for message transmission and have become the principal platforms of social action; spaces in which individuals not only receive news, but also interpret the social world, make judgements about others, regulate their emotions, and construct the identity boundaries of “us” and “them”. In this context, two phenomena have attracted particular attention: “Internet memes” and “TikTok challenges”. Both phenomena are among the most common forms of communication in contemporary digital culture and play a role that extends beyond entertainment. Internet memes, rooted in Richard Dawkins’s (1976) biological concept, have become compact units for the production, representation, and reproduction of sociocultural meanings. In parallel, TikTok challenges have emerged with the expansion of short-video-based platforms, particularly TikTok; a set of specific activities and performances that users share through imitation, recreation, and modification in a participatory process. A distinguishing feature of both phenomena is their multimodality.

A meme is typically a combination of image, typography, body language, music, and intertextual reference; and challenges likewise rely on the combination of video, bodily movement, rhythm, clothing, and lip-syncing. This multimodality means that the production and understanding of both phenomena require more complex skills than the simple reading of words. The audience must be able to integrate visual and auditory signs, recognise irony and humour, invoke cultural presuppositions, and extract meaning from a brief yet multilayered expression.

In practice, both phenomena function as a kind of cognitive shortcut; instead of lengthy explanation, they invoke an image, a sound, or a familiar movement in order to activate social judgement (admiration, ridicule, protest, empathy, or blame) in the shortest possible time. The present study seeks, by moving beyond superficial classifications, to examine memes and challenges as two sides of the same coin in the “culture of digital symbolic action” and to show how users think about, judge, and construct feelings regarding sociocultural issues through these multimodal artefacts. A focus on the sociocultural dimensions means that these phenomena are not merely subjects of laughter or entertainment; rather, they carry signs of values, sensitivities, collective memory, lifestyle, and modes of resistance or adaptation.

1.1. Problem statement

The remarkable expansion of research related to digital culture has led to two separate and to some extent isolated paths in the analysis of memes and challenges. In the field of memes, studies have generally either moved towards quantitative analyses, such as patterns of dissemination networks and levels of virality (Huntington, 2017), or

have examined the meme solely at the level of text and linguistic message (Pratiwi, 2022), while neglecting the simultaneous analysis of multimodal layers and cognitive mechanisms (Purwaningrum et al., 2020). By contrast, in the field of TikTok challenges, the focus of research has been directed more towards the psychological aspects of users' motivations, platform algorithms, or the physical risks of challenges, such as the Blue Whale Challenge, a phenomenon discussed in non-TikTok social-media contexts, or the TikTok-specific Milk Crate Challenge (Roth et al., 2021). This epistemic gap has resulted in the loss of a broader sociological perspective on a fundamental phenomenon. In societies undergoing transition, social media are no longer merely tools of communication but have become iconic battlefields for the determination of norms (Castells, 2010). Within this field, memes and challenges are regarded as two distinct tools that nevertheless serve the same purpose: the reproduction of subcultures (Hebdige, 1979) and the formation of networked identities.

If we examine the cultural data of these two phenomena, shared social tensions can be clearly traced. On the one hand, memes such as the traditional-modern dichotomy, memes critiquing influencers, or nostalgic memes show how users respond to value gaps and identity crises through the recontextualisation of pre-existing textual material. This process is directly linked to social cognition theory, in which memes become cognitive shortcuts for the activation of schemas and rapid judgements (Fiske & Taylor, 2013). On the other hand, challenges such as the Ekbatan dance challenge (as a form of political-gendered activism) or norm-breaking family challenges show how users challenge those same normative boundaries through physical reproduction. Here, Goffman's (1959) theory of self-presentation clearly explains how users represent a particular image of their identity through the management of body, clothing, and movement in challenges (Vizcaíno-Verdú & Aguaded, 2022).

The fundamental issue of the present study is to move beyond apparent media-based classifications and to examine these two phenomena as two sides of the same coin within the "culture of digital symbolic action".

Burgess et al. (2014) argue that challenges should be regarded as a form of "viral challenge meme" that is shaped through imitation and creative reinterpretation. However, the fundamental difference lies in their mechanism of production: memes rely on textual recontextualisation (Shifman, 2014), whereas challenges are grounded in bodily reproduction. Despite this difference, both converge at one point of structural commonality: their multimodal nature. Multimodal analytical approaches emphasise that meaning is produced through the interaction among modes (image, sound, bodily movement, and text) (Kress & van Leeuwen, 2006), and this, within the context of participatory culture (Jenkins et al., 2013), leads to the formation of

collective actions. The absence of a comparative multimodal analysis has meant that the shared mechanism of these two phenomena in activating social cognition and norm construction has not been adequately explained. Despite their entertaining appearance, these two cultural artefacts play a far deeper role. Research shows that these phenomena have become powerful tools for the organisation of social perception, the demarcation of identity boundaries, the regulation of collective emotion, the representation of lifestyle, and even informal critique and civic resistance. In effect, memes and challenges constitute a kind of cognitive shortcut; instead of lengthy arguments and verbal texts, by invoking a familiar image, a musical rhythm, or a bodily movement, they activate complex social judgements (admiration, ridicule, protest, or empathy) within a fraction of a second. From this perspective, examining these phenomena merely at the level of media studies or superficial content analyses is not sufficient; rather, it requires input from the field of social cognition in order to show how the combination of visual, auditory, and kinetic signs within networked contexts leads to the shaping of users' attitudes, collective memory, and affective norms.

The present study has been developed with an awareness of this analytical necessity and with a focus on sociocultural dimensions. In terms of practical significance, the results of this integration can show cultural policymakers and media literacy educators that understanding norm-breaking on platforms such as TikTok or Instagram requires instruction in multimodal criticism; because meaning and persuasion in these spaces operate not through explicit argument, but through the hidden interaction of signs (visual humour, musical rhythm, and bodily movement) (Kress & van Leeuwen, 2006; Purwaningrum et al., 2020).

1.2. Research questions

- RQ1.** What socio-cultural functions are shared by internet memes and TikTok challenges despite their different production mechanisms?
- RQ2.** How do visual, linguistic, auditory, bodily, and contextual modes interact in the meaning-making of memes and challenges?
- RQ3.** How do the meaning-making mechanisms of textual recontextualisation in memes and embodied reproduction in challenges differ in shaping social cognition, identity, and self-presentation?

2. Theoretical foundations: The necessity of a multi-layered framework for explaining digital symbolic action

Internet memes and TikTok challenges, owing to their hybrid and participatory nature, are multimodal and multidimensional phenomena. Explaining these phenomena solely through traditional media approaches, which regard media merely as a transmitter of messages, is

not possible. Therefore, in order to understand the shared processes and differing mechanisms of these two phenomena, the present study is grounded in the intersection of five theoretical layers as below.

2.1. The semiotic layer: A multimodal analytical approach

In critiquing the Logocentric view of text, Gunther Kress and van Leeuwen (2006) argue that, in contemporary communication, meaning is not produced exclusively through the reading of words. Each Mode, such as image, sound, colour, spatial arrangement, and bodily movement, possesses its own independent meaning-making capacities, and the final meaning emerges from Intersemiotic interaction.

What Kress and van Leeuwen mean is that each sign has its own distinctive voice, and meaning becomes complete when these signs are coordinated like an orchestra.

The meme “The past deceived me” (Dr. Nesvan): “If we were to read only the text, we would understand merely that an elderly man has experienced romantic disappointment” (A very superficial understanding).

However, through the approach of Kress and van Leeuwen (Intersemiotic interaction), we observe that the visual Mode (simple rural clothing and a sorrowful facial expression) stands in contrast to his claim. The auditory Mode (the remix of the song Romeo and Juliet) then enters and suddenly transforms this image from a simple disappointment into an epic and nostalgic mourning. Meaning is constructed through the combination of a humiliated image and elevated music (Kress & van Leeuwen, 2006).

The ring light challenge: “If we were to read only the text, there would usually be no speech, dialogue, or even on-screen text in this challenge. So, is this challenge meaningless?”

However, from the perspective of Kress and van Leeuwen, the answer is no. Here, it is the mode of lighting that constructs meaning (the darkening of the surroundings and the illumination of the ring light). It is the kinetic/bodily mode that transforms meaning (the sudden shift from loose clothing to a muscular body). And it is the auditory mode (the tension of the music) that renders this transformation exciting. Meaning, the display of charisma and the duality between appearance and reality, is produced without a single written word, solely through the interaction of light, body, and sound.

2.2. The processual layer: Participatory culture and the logic of dissemination

Henry Jenkins’s theory of participatory culture transforms the passive consumer into a prosumer (Producer/Consumer). However, for a more precise understanding of the mechanism through which memes and challenges circulate, this theory alone is not sufficient and must be integrated with Richard Dawkins’s (1976) concept of dissemination (imitation, variation, and selection) and Burgess et al.’s concept of viral

challenge memes. Burgess et al. (2014) argue that the spread of these phenomena is not merely a matter of blind social imitation (as in Tarde's notion of the herd); rather, they are adaptive and functional acts in which individual innovation is combined with a collective pattern.

Application of this integrated layer in explaining the research data: This theoretical integration allows us to demonstrate why memes and challenges appear similar on the surface but differ in practice. Both phenomena operate according to the Dawkinsian logic of dissemination (that is, a pattern is replicated), yet the manner of participation and innovation differs between them.

In memes, the participatory process occurs more in the domain of text editing and semiotic modification. The user takes a ready-made artefact (for example, the video of the serious debate *Are You Serious?! (Jedi Mifarmayed)* or the photograph of the Hungarian old man) and, by altering the text, irony, or context (variation), creates a new version that attracts others' selection for recirculation.

In challenges, the participatory process becomes manifest in the domain of bodily reproduction. The user takes a behavioural or kinetic pattern (for example, the Wednesday dance or the milk crate challenge) and, through the physical involvement of their own body in that pattern (Individual innovation within the framework of a Collective pattern), reproduces it.

Therefore, the integration of Jenkins et al. (2013), Dawkins (1976), and Burgess et al. (2014) in the present study helps to demonstrate that users in both phenomena are active actors in the production of networked culture; with the difference that, in memes, their instrument of innovation is "text/image", whereas in challenges, their instrument of innovation is "body and movement".

2.3. The psychological-cognitive layer: Cognitive shortcuts and attribution

This layer clarifies the mechanistic backbone of the distinction between the two phenomena. From the perspective of Fiske and Taylor's social cognition theory, human beings use cognitive shortcuts and schemas to avoid the heavy informational burden imposed by a complex environment. Memes perform precisely this function for audiences; through a familiar image, they activate a schema and facilitate rapid attribution. By contrast, from the perspective of Erving Goffman's (1959) theory of self-presentation, challenges serve as tools through which the performer constructs a desirable image of the self in the minds of spectators. Here, challenges become a field for managing an individual's digital charisma.

Fiske and Taylor (2013) (in memes, the user in the role of judge): When the user encounters the *Are You Serious?! meme*, there is no need to read a lengthy article on the traditional-modern divide. Their mental schema is activated within a second by the contrast in the appearance of the two experts, helping them to identify the party at fault rapidly

(rapid attribution). Likewise, in the Masoud Rajavi meme, without any need for familiarity with the ideology of this group, the schema of the “ridiculous other” is activated, and a mocking social judgement is formed.

The second example further illustrates how a familiar visual contrast can activate rapid social judgement through an already established cognitive schema, reinforcing the role of attribution in meme interpretation.

Goffman (1959) (in challenges, the user in the role of actor): In the ring light challenge, the user is performing a role. By managing the lighting and changing clothes, they are controlling the Front Stage in order to display a charismatic and muscular (fitness) identity. Likewise, in the Wednesday challenge, the adolescent, with dark make-up, is playing the role of a Gothic character in order to display their in-group identity.

2.4. The micro-interactional layer: The blurring of public/ private boundaries in the domestic space

Although Goffman’s theory was proposed prior to the emergence of the Internet, it remains highly efficacious for the analysis of challenges. Goffman conceptualises everyday life as a stage upon which individuals manage the impressions of others. In TikTok challenges, what warrants reflection is the breach of privacy; that is, the transformation of private spaces and backstage family interactions into a front stage for the production of public content and the acquisition of symbolic capital.

Breach of physical privacy. In the “light switch” challenge, where is the performance situated? The lavatory or the bathroom; the most secure and private space within the home (the backstage). Yet, the challenge transforms this very space into a public theatre for displaying gender-swapped clothing transitions.

Breach of family relationship privacy. In the challenges associated with Milad Hatami and Neda Yasee, the natural reactions of a parent to a child’s norm-challenging behaviour (such as smoking or bringing home a boyfriend), which ought to remain strictly domestic, are commodified as entertainment for strangers in the digital sphere. This theoretical layer demonstrates how challenges rupture the private boundaries of the family in pursuit of likes (Goffman, 1959).

2.5. The macro-structural layer: Power in the network society and digital subcultures

This layer explains the macro-political and cultural context of the phenomena. Manuel Castells, through the concept of the “network society”, demonstrates that power and identity are no longer produced within traditional institutions, but are instead shaped within the flows of transnational networks. Conversely, Dick Hebdige’s theory of subcultures explains how groups delineate their boundaries against the

dominant culture through specific symbols and styles. Memes and challenges sit at the intersection of these two theories; on the one hand, they function as tools of activism within transnational networks, and on the other, they act as producers of new digital subcultures.

Castells and transnational power (political activism). In the past, protesting against a government required physical presence in the streets or submitting statements to the mass media. However, in the “Ekbatan dancing” challenge or the “Salam Ya Mahdi” challenge, we observe how a dance or a dubsmash performed in a user’s bedroom in Tehran is transformed, via Castells’ transnational networks, into an instrument for transnational solidarity and global political activism in less than 24 hours. The power to produce meaning has decoupled from the state and has instead dispersed into the network.

Hebdige and digital subcultures (symbolic boundary-marking). In the “Wednesday” challenge, a specific subculture (Goth) with its distinct visual signifiers (black clothing, dark make-up) is constructed, delineating its boundary against mainstream adolescents. Similarly, in the case of memes, the deployment of niche memes (e.g. Latin humour memes or influencer memes) functions as a form of cultural and class-based passcode, indicating: “I am part of this digital group; you [if you don’t get this meme] are an outsider” (Castells, 2010; Hebdige, 1979).

2.6. Summary of the theoretical framework

The integration of these five theoretical layers constitutes a multidimensional framework, demonstrating why and how memes and challenges cannot be analysed through traditional single-dimensional approaches. These five layers enable us to extract a continuous trajectory of meaning-making from raw data: in the first layer (semiotic), we examine which combination of multimodal elements is employed; in the second layer (processual), we observe how this combination propagates and reproduces within the network; in the third layer (cognitive), we investigate what cognitive heuristics or identity performances this reproduction activates in the mind of the meme audience or the challenge performer; in the fourth layer (micro-interactional), we attempt to trace the consequences of these actions on the micro-scale of daily life and individual privacy (e.g., the family context); and finally, in the fifth layer (macro-structural), we demonstrate how this aggregation of micro-actions transforms into mechanisms for challenging power, transnational activism, and the reproduction of emerging subcultures at the societal macro-level.

In essence, this five-layered framework allows the present study to scrutinise the mechanistic differences between memes and challenges (in layers 1-3) whilst simultaneously substantiating their profound commonalities in influencing micro-life and macro-social structures (in layers 4-5). In the findings section, the empirical data of the study will be interpreted and evaluated precisely through this five-layered intersection.

3. Empirical research background

3.1. Domestic literature

The focus of previous domestic research has predominantly been on emojis and stickers as the most proximate digital artefacts within the local context. This is largely due to the novelty of memes and social media challenges at the inception of the initial research, which precluded independent studies on these phenomena at the time. Nasrollahi and Badinfekr (2019) demonstrated that the cultural approach underpinning emojis is rooted in modernism and postmodernism, which has precipitated phenomena such as cultural lag, cultural conflict, and cultural diffusion among audiences. Similarly, Izadpanah and Montazerolghaem (2019) examined Telegram stickers and found that the frequent use of stickers is primarily motivated by a desire for attention and social integration within peer groups. As is evident, whilst these studies have addressed visual signs within social networks, they lack an in-depth multimodal analysis and an examination of macro-level socio-political functions, such as those inherent in memes and social media challenges.

3.2. International Literature

From the evolutionary trajectory of memes to the emergence of TikTok challenges, global studies can be categorised into four primary thematic strands, which ultimately underscore the necessity of synthesising these two phenomena:

Theme I. Memes as tools for linguistic, humorous, and activist engagement

Research indicates that memes function well beyond mere humour. Pratiwi (2022) and Lestari (2018) demonstrated that memes possess a distinct linguistic style; through verbal irony and the dissonance between appearance and reality, they convey humorous yet thought-provoking insights regarding societal conditions. Huntington (2017) evidenced that political memes are utilised to articulate arguments far more complex than simple jokes. Simultaneously, Purwaningrum et al. (2020) observed during the COVID-19 pandemic that memes served as instruments of cultural resistance and critiques of state policies. Furthermore, Daugavietis (2023) conceptualised Instagram memes as behavioural templates for emerging subcultures. However, Rawi (2020) warns that this digital space may be weaponised, potentially becoming a toxic medium for the exercise of power and psychological warfare.

Theme II. TikTok challenges and the pivotal role of music and the body

With the ascendancy of TikTok, scholarly inquiry has pivoted towards short-form video content and viral challenges. Yang and Zilberg (2020) and Marx et al. (2022) examined the indispensable role of music on the TikTok platform, demonstrating that metrics such as 'danceability' and the energetic profile of a track directly correlate with the popularity of

a challenge. Vizcaíno-Verdú and Abidin (2021), as well as Vizcaíno-Verdú and Aguaded (2022), established that musical challenges serve as conduits for performing in-group identity and, further, as mechanisms for the empowerment of marginalised communities.

Theme III. Psychosocial motivations for participation in challenges

What compels users to endanger their physical well-being or participate in such challenges? Roth et al. (2021) demonstrated that factors such as attitudes, peer norms, the gratification derived from ‘likes’, and a sense of self-confidence motivate adolescent participation. Eryc (2022) further established that the motivations of Generation Z range from social interaction and entertainment to self-expression and self-discovery.

Theme IV. The intersection of memes and challenges and the necessity of multimodal approaches

Some recent research has sporadically pointed to the intersection of these two phenomena. Burgess et al. (2018) proposed the concept of viral challenge memes, arguing that challenges are social practices based on imitation and innovation (drawing on Tarde’s theory). Tanjung (2024) went a step further, using digital ethnography to show that memes on TikTok have become a culture based on shared algorithmic rituals. Tarisayi (2022) and Destira et al. (2020) also emphasised that YouTube, memes, and TikTok develop learning and media literacy through ‘multisensory’.

3.3. Summary of the literature review

The literature review demonstrates that whilst international scholarship has addressed memes (as text/humour) and challenges (as video/movement) in isolation, and a limited number of studies (e.g., Burgess et al. (2018) and Tanjung (2024)) have alluded to their viral commonalities, there remains a paucity of comparative multimodal analyses that explicate how these two phenomena achieve a set of shared cognitive and social functions— such as emotion regulation, identity boundary-marking, and activism— through divergent mechanisms: textual recontextualisation versus bodily reproduction. Furthermore, within the Iranian context, this theoretical gap remains unaddressed, particularly regarding the analysis of indigenous Persian-language data. The present study is, therefore, designed to bridge this structural void.

4. Conceptual model of the research

Intersection of mechanisms towards shared functions: Following the methodological analysis and comparative findings presented in the preceding sections, the conceptual model of the present study is designed in five independent yet interconnected layers, illustrating how two distinct digital phenomena culminate in a common social output.

Layer 1 (Phenomenological context). The model input comprises two distinct cultural artefacts within the digital sphere—on the one hand, internet memes characterised by their static image, text, or spliced video nature; and on the other, TikTok challenges characterised by their short-form performative video nature.

Layer 2 (Meaning-making mechanism; point of divergence). At this layer, the trajectories of the two phenomena diverge. Memes operate primarily through the mechanism of textual recontextualisation, involving editing, the incorporation of ironic text, and the alteration of an existing artefact's context. Conversely, challenges derive their meaning through the mechanism of bodily reproduction, characterised by creative imitation, physical engagement, movement, and rhythm.

Layer 3 (Multimodal tools; point of intersection). Notwithstanding their divergent mechanisms, both phenomena rely on a common instrument for success: the synergy of multimodal elements (a synthesis of visual/corporeal, linguistic/dubsmash, auditory/musical, and contextual layers).

Layer 4 (Cognitive-dramaturgical mechanisms). This multimodal synthesis activates specific processes within the mind of the audience/actor. In the case of memes, the mechanisms of cognitive heuristics and attribution are triggered, thereby activating cognitive schemata and facilitating rapid social judgements. Conversely, in challenges, the mechanisms of self-presentation and identity management are mobilised.

Layer 5 (Socio-cultural output functions). Ultimately, notwithstanding the divergences in the second and fourth layers, both phenomena converge on five overarching macro-functions:

- Identity construction and in-group/out-group boundary maintenance,
- Emotion regulation and soft mourning,
- Informal resistance and symbolic activism,
- Digital normative laboratories,
- The attention economy and risk display.

Figure 1 illustrates the integrated conceptual model of internet memes and challenges.

5. Methodology

The present study is applied in terms of objective and qualitative in terms of approach. To achieve the integrative objective of the research, a comparative multimodal content analysis with an iterative, theory-informed approach was employed. The theoretical framework informed the interpretation and comparison of the coded material, while the five shared macro-dimensions were formulated only after the unit-level coding and cross-case comparison were completed.

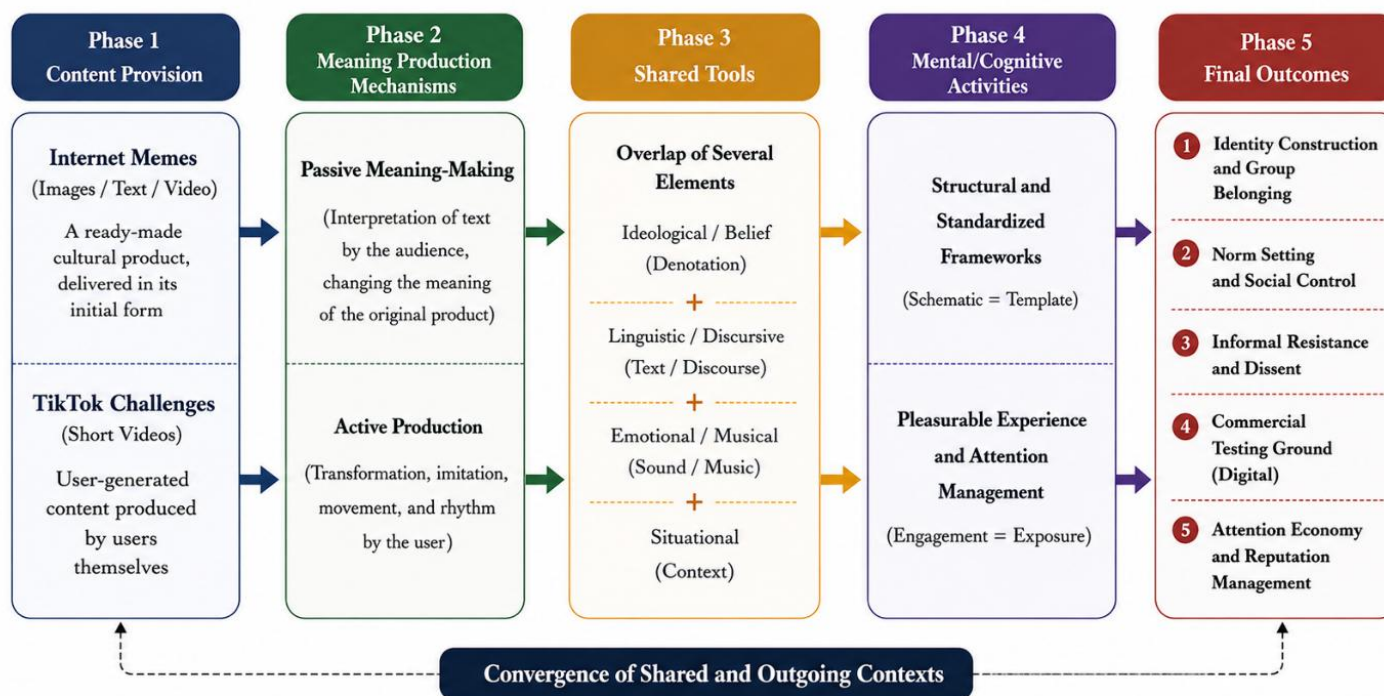


Figure 1. Conceptual model of internet memes and challenges convergence mechanisms in shared contexts

5.1. Statistical population and research sample

The research population comprises prevalent networked cultural artefacts circulating within social media spaces, particularly Persian-language platforms and TikTok. The research sample consists of 19 units of analysis selected through purposive sampling. This sample is composed of 10 internet memes and 9 TikTok challenges. The selection criteria in both sections included thematic diversity (political, social, familial, and entertainment-related), functional diversity (emotional, normative, and oppositional), the capacity to represent various cultural dimensions, documented prominence and repeated re-circulation observed during the collection window, and the prominence of multimodal elements (music, effects, the body, and editing).

Data collection window: November 2024. The corpus documentation below records the platform/source information and engagement indicators required for traceability.

Table 1. Corpus documentation of the selected memes and TikTok challenges

Type	Unit of analysis	Platform of origin	Collection window
Meme	The Past Deceived Me	Instagram	November 2024
	Masoud Rajavi		
	Habib (Hootan Shakiba)		
	Are You Serious?! (Jedi Mifarmayed)		
	Escaping the Police		
	Drake		
	Hollywood Actors		
	Aysan Eslami		
	Antony Starr		
Challenge	Hungarian Old Man	TikTok	
	Wednesday Challenge		
	Childhood Photo Recreation Challenge		
	Ekbatan Girls’ Dance Challenge		
	Salam Ya Mahdi Challenge		
	Challenges Promoted by Milad Hatami and Neda Yasee		
	“Flip the Switch” Challenge		
	Ring Light Challenge		
	Corn on the Drill Challenge		
	Milk Crate Challenge		

5.2. Analysis tools

Integrated multimodal protocol. To standardise the observation and coding of these 19 units, a shared researcher-developed protocol was utilised, which possessed the capacity to simultaneously accommodate both memes (predominantly static images/spliced videos) and challenges (performative videos). Each unit of analysis was examined across four layers:

- **Visual/corporeal layer:** Comprising characters, objects, symbols, colour, layout, camera angle, lighting, gesture, gaze, bodily movement, attire, and makeup (focusing primarily on

key image frames in memes, and on live physical performance in challenges).

- **Linguistic and textual layer:** Comprising text overlaid on the image/video, dialogue, dubbing/dubsmash, keywords, irony, and hyperbole.
- **Auditory layer:** Comprising music, rhythm, sound effects, tone, silence or pauses, and background tracks.
- **Contextual-functional layer:** Examining the networked or real-world situations in which this artefact is typically deployed (e.g., family, peer groups, protest spaces, education, etc.).

The data were gathered through documentary methods from content published in cyberspace. The preparation process comprised the following steps:

- **Recording and archiving all 19 units:** Saving the image or video files and documenting the source information available at the time of collection.
- **For both image/video memes and challenges:** Selecting key frames (focusing particularly on frames conveying gesture, gaze, or emotional shifts).

Because the current manuscript file does not contain the archived source stills for all 19 units, representative still frames should be inserted from the preserved corpus before final submission; no image has been reconstructed retrospectively.

- **Transcribing speech:** Transcribing spoken dialogue, dubbing/dubsmash, and auditory text.
- **Recording auditory characteristics:** Documenting tone, intensity, rhythm, and music.
- **Formulating a descriptive profile for each unit of analysis:** Including the theme, dominant multimodal elements, and its common function within networks.

5.3. Data analysis process

To maintain methodological consistency and rigour, the analysis of the 19 units (10 memes and 9 challenges) was structured precisely around a five-column coding matrix. This process progressed through five distinct steps, corresponding to the evolution of the columns within the analysis table.

Step 1 (Raw content). In this step, each unit of analysis (meme or challenge) was treated as an intact whole. Without any analytical intervention, the visual, auditory, and textual events occurring within the unit (for instance, a detailed description of the film sequence, the user's movements, or the physical appearance of the individuals) were recorded descriptively and objectively in this column.

Step 2 (Open coding). In this step, the descriptive text formulated in the previous step was deconstructed into its smallest meaningful

components. Any bodily movement, gesture, gaze, word, expression, type of attire, musical genre, vocal tone, or subtle environmental reaction that conveyed a message was extracted and designated with a short descriptive label (for instance, laughing whilst weeping, dark/Gothic-style makeup, nostalgic song remix, or resting feet on the table).

Step 3 (Axial coding). At this stage, the scattered open codes of each unit were categorised based on semantic and functional similarities. Codes referring to a single phenomenon were integrated into a mid-level category (for instance, merging the codes romantic song and nostalgic song into the axial category of collective memory and nostalgia, or merging the codes baggy clothing and smiling face into the axial category of identity bifurcation).

Step 4 (Concept). In this step, the extracted axial categories were elevated from a descriptive level to a conceptual level. Theoretical frameworks were used as interpretive lenses at this stage, while the categories remained grounded in the coded material.

Step 5 (Dimension). After the concept-level coding of all 10 memes and 9 challenges was completed, the two coding matrices were aligned comparatively. The five shared macro-dimensions were then formulated from recurring similarities across the two datasets, rather than imposed as coding categories at the outset.

5.4. Validity and reliability of the research

To enhance the validity of the findings of this integrative study, a strategy of continuous data review and constant comparison of codes was utilised. The selection of a diverse sample (19 units with varying themes and formats) enabled the acquisition of a comprehensive picture of the different dimensions of the phenomena. Furthermore, the sustained application of the theoretical frameworks (Fiske (2013), Goffman (1959), Jenkins et al. (2013), and Castells (2010)) during the conceptual and comparative coding stages contributed to enhancing the interpretative validity of the results and the internal consistency of the paper. The analysis process was conducted in a phased and systematic manner to ensure tractability and reviewability by the journal's reviewers.

5.5. Ethical Considerations

The study relied exclusively on publicly accessible social-media content and did not involve recruitment, direct interaction, intervention, or collection of private communications from human participants. Identifiable public figures and content creators are named only where their identity is integral to the interpretation of the circulated media artefact. No private personal data were collected. Particular care was taken with politically sensitive and potentially reputational content; the analysis concerns the representation and circulation of the media artefact rather than independent verification of allegations about the individuals depicted. The ethical risk assessment focused on

identifiability, reputational risk, and the political sensitivity of the cases. Naming was retained only where the public identity of the person was integral to interpreting the circulating artefact; no additional private or non-public information was introduced. Where institutional ethics approval exists for the underlying project, the approval information should be inserted here rather than inferred or reconstructed.

5.4. Data analysis procedure

At this stage, the 9 challenges and 10 memes were presented (Table 2), and each challenge and meme was detailed individually across five sections: raw content, open coding, axial coding, concept, and dimension.

6. Results

Comparative analysis of the 19 units (comprising 10 memes and 9 challenges) based on the four-layered multimodal protocol revealed that, notwithstanding fundamental differences in their superficial formats, memes and challenges are organised across five macro socio-cultural dimensions. Within each dimension, the mechanisms of meaning-making diverge; however, their cognitive and social outputs for the network user remain virtually identical. These dimensions are elaborated below:

Dimension 1. Identity construction and group boundary marking (From verbal satire to bodily performance)

Both phenomena serve as instruments for addressing the questions of “who are we?” and “who are they?”; however, the trajectories towards establishing this identity diverge. In memes, identity construction occurs predominantly through “othering” and humour. For instance, in the “Masoud Rajavi” meme, the synergy between the visual layer (uniform group attire) and the auditory layer (pleading cries accompanied by laughter) results in the production of an out-group outcast. Predicated on social cognition theory (Fiske & Taylor, 2013), the audience, by laughing at this meme, activates the schema of the ridiculous “Other” without the need for prolonged cognitive processing, thereby demarcating their own identity boundaries. Similarly, in the “Aysan Eslami” meme, the linguistic layer (the northern Iranian dialect) and the visual layer (luxury vehicles) delineate the identity boundaries of consumerist migrant influencers.

Conversely, in challenges, identity construction is realised through bodily simulation. In accordance with Goffman’s self-presentation theory, users project a desirable self-image by engaging their bodies within a structured template. In the “Wednesday Challenge”, the visual/corporeal layer (dark makeup and black attire) and the kinetic layer (the mysterious dance) constitute a physical representation of the Gothic subculture. By physically engaging in this challenge, the adolescent performs and displays their own identity alignment rather than passing judgement on others.

Table 2. The comparative coding matrix of memes and challenges

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
Challenge	Wednesday Challenge	This challenge is derived from the dance performed by a teenage girl named Wednesday Addams—a cold and emotionless character—in the US-produced series Wednesday (2022).	Cold and emotionless character of Wednesday Addams; dance performed in the series Wednesday; teenage girl's dance in the series Wednesday; US-produced series Wednesday.	Cold and emotionless characterisation; dance in a series/film; teenage girl's dance; US-produced series.	Representation of the cold and Gothic identity of the character Wednesday.	Media influence on adolescent identity formation.
Challenge	Wednesday Challenge	Wednesday Addams's peculiar dance style and eccentric attire in this series captured the audience's attention, to the extent that the challenge participants—predominantly young girls—perform a mysterious and eerie dance while wearing all-black formal dresses and heavy, dark makeup reminiscent of gothic/satanic aesthetics.	Wednesday Addams's peculiar dance; teenage girls as the primary participants of this challenge; eerie dance style in the challenge; mysterious atmosphere dominating the challenge; dark/Gothic-style makeup; wearing all-black formal dresses; representation of Gothic subcultural style in the challenge.	Unconventional dance; a challenge for girls; eerie/scary dance; mysterious atmosphere; dark/Gothic-style makeup; black formal attire; Gothic subculture.	Imitation of the mysterious dance coupled with dark attire and makeup.	Representation of Gothic subcultural style and dark aesthetics.
Challenge	Childhood Photo Recreation Challenge	This challenge, derived from the music video for the song "I'm Just a Kid" by Simple Plan, involves selecting a childhood photograph—typically a group photo featuring family members, relatives, or friends—and taking a new photograph in the exact same location, with the same individuals reproducing their	Derived from Simple Plan's "I'm Just a Kid" music video; utilisation of old photographs; recreating new photos based on old ones; presence of family members/relatives; presence of old friends.	Adaptation of a music video; utilisation of historical/old photographs; photographic replication; familial significance; strong peer	Nostalgia construction and the reconstruction of collective family memory.	Collective nostalgia.

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		original poses. This is then remixed with the song “I’m Just a Kid” and shared.		connections.		
Challenge	Childhood Photo Recreation Challenge	In certain cases, individuals who were present in the original photograph may have passed away, and their memory is honoured by displaying their photo in the new version. Alternatively, a new family member might be substituted for pets (such as dogs, monkeys, or cats) present in the original photo, which—in addition to the nostalgic atmosphere—renders the challenge humorous.	Commemorating deceased family members in the challenge; the nostalgic essence of the challenge; substituting new individuals for pets.	Commemoration of the deceased; creation of a nostalgic atmosphere; parodying others; playfulness with others.	Commemoration and remembrance of ancestors / Humour arising from pet substitution.	Cultural mourning/ Media creativity.
Challenge	Ekbatan Girls’ Dance Challenge	This challenge was initiated by a group of young women in the Ekbatan neighbourhood of Tehran during the height of the “Woman, Life, Freedom” movement on the 8th of March (International Women’s Day), serving as a form of protest dance against the state’s handling of the Mahsa Amini case.	Collective dance by a group of young women in Tehran’s Ekbatan neighbourhood; protest dance during the peak of the “Woman, Life, Freedom” movement; performing the dance on the 8th of March (International Women’s Day).	Iranian women’s dance; protest dance; socio-political action.	Dance as a symbolic act of protest.	Cultural-gender resistance.
Challenge	Ekbatan Girls’ Dance Challenge	Performed to the song “Calm Down” by Rema and Selena Gomez, this dance was widely embraced by Iranian protesters	Protesters’ reception of the dance performed to “Calm Down”; coverage and support of this action by	Alignment of protesters with the challenge; media coverage and	Mediatisation of protest and the role of external	Transnational dissemination.

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		and covered by Persian-language diaspora media outlets, thereby transforming into a protest gesture against the ruling establishment.	Persian-language diaspora media.	support.	media actors.	
Challenge	Ekbatan Girls' Dance Challenge	The non-conventional performance style of the dance, alongside the form-fitting attire of the dancers, contributed to its viral spread on one hand, whilst triggering significant controversy and backlash from the traditional and religious segments of society on the other.	Provocative and unconventional nature of the Ekbatan girls' dance; form-fitting attire worn by the dancers; backlash from the traditional and religious strata against the challenge.	Sexualised dance; form-fitting attire; opposition of the religious strata to the challenge.	Sexualised dance in form-fitting attire / Tension between modernity and tradition.	Bodily representation / Cultural and value cleavage.
Challenge	Salam Ya Mahdi Challenge	Following the escalation of conflicts in Gaza, this challenge gained global traction, with diverse participants—ranging from Muslims to non-Muslims, secular activists, prominent influencers, and ordinary citizens worldwide—joining the trend.	A global challenge to express solidarity with the people of Gaza; a trans-religious and transnational challenge for global activists; activism against military actions in Gaza; participation of secular individuals and prominent influencers.	Humanitarian action; trans-religious appeal; global rights activism; participation of secular influencers.	Expressing transnational socio-political and humanitarian solidarity through lip-syncing (dubsmash).	Digital activism / Transnational solidarity.
Challenge	Salam Ya Mahdi Challenge	The challenge involves lip-syncing (dubsmash) to the Arabic version of the song "Salam Farmande" ("Salam Ya Mahdi"). Participants utilise a mask-like filter shaped as the Palestinian flag; whilst singing, they perform a military salute	Lip-syncing to the song "Salam Ya Mahdi"; utilisation of the Arabic version of "Salam Farmande"; performing a military salute during the performance; using a Palestinian flag filter;	Lip-syncing to "Salam Ya Mahdi"; Arabic rendition of "Salam Farmande"; military salutation; utilisation of	The intersection of religion and politics as a legitimising tool for protest /	Politicisation of religious music / Symbolic politics / Performative collective affect.

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		and look into the camera with a somber, tearful expression.	maintaining a somber and tearful expression.	digital filters; display of grief and sorrow.	Utilisation of the Palestinian flag for semantic emphasis / Military salutation and collective grief display.	
Challenge	Challenges Promoted by Milad Hatami and Neda Yasee	Neda Yasee, a Canadian-based Iranian influencer, and Milad Hatami, a Turkey-based influencer (who was subsequently extradited to Iran and incarcerated, with legal charges including the dissemination of transgressive online challenges), actively encouraged users to participate in challenges framed around norm-boundary contestation. Examples include: calling a friend to discuss alcohol consumption to film parental reactions; pulling down the trousers of family members or friends; venturing outdoors in undergarments; flatulating in front of family members;	Challenge promotion by Yasee and Hatami; reframing of behaviours commonly treated as taboo; repeated presentation of norm-challenging conduct within the family; representation of norm-boundary transgression; contestation of conventional family norms; representation of alcohol use in domestic settings; pulling down family members' trousers; appearing in public in undergarments; flatulating in front of family; normalisation of suggestive messaging within the family; smoking in front of parents; de-sensitisation towards	Influencer-led promotion; de-stigmatisation of taboos; weakening the family institution; representation of norm-boundary transgression; representation of behaviour departing from conventional norms; alcohol consumption; invasion of personal boundaries; provocative attire; flatulence;	Creation of norm-defying domestic challenges / Normalisation of behaviour represented as departing from a stated norms / Utilisation of shock value and invasion of domestic privacy as content-generation strategies.	Dissolution of moral boundaries within the family / De-stigmatisation of taboos / Commercialisation of domestic sensitivities.

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		sending sexually suggestive messages to relatives; smoking in front of parents; daughters falsely confessing to pregnancy; asking family members about missing condoms; and bringing romantic partners home, all while recording the subjects' reactions.	premarital relations; normalisation of cross-gender relations.	suggestive messaging; normalisation of smoking; reduced salience of conventional sexual taboos; unconventional dating practices.		
Challenge	“Flip the Switch” Challenge	This challenge, typically featuring couples (partners, friends, or family members) and usually set in a domestic bathroom in front of a mirror, involves participants dancing to Drake's song “Nonstop”. Upon flipping the light switch on and off, their outfits are suddenly swapped—resulting in men appearing in women's clothing (and vice versa), or children wearing their parents' attire (and vice versa)—whilst looking at each other in feigned astonishment.	Participants dancing to Drake's “Nonstop”; executing the challenge in bathrooms; swapping clothes post-switching the light; utilising domestic spaces and lighting; men appearing in women's clothing and vice versa; adults wearing children's attire and vice versa; utilising the bathroom mirror.	Dancing to rap music; executing challenges in domestic sanitary spaces; outfit swapping; utilising domestic resources; cross-dressing/clothing inversion; adult-child clothing swap; utilising bathroom mirrors.	Disrupting sartorial and gender norms through humour and surprise / Inverting male-female or adult-child clothing / Utilising private spaces to generate public content.	Fluidity of gender roles / Ludic negotiation of identity and social roles / Blurring of public-private boundaries in the network era.
Challenge	Ring Light Challenge	In this challenge, the participant initially appears in plain, loose-fitting attire with a cheerful and naive expression, holding a ring light. Upon passing the light behind their back in sync with	Plain appearance and loose-fitting attire at the onset; cheerful expression of participants initially; presenting a naive persona prior to illuminating the ring	Loose-fitting attire; cheerful countenance; naive persona; strategic music selection;	Dual-body identity construction through lighting / Naive	Appearance-reality duality / Narrative construction of the self / Beauty technologies /

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		the song “Infinity” by Jaymes Young, the ambient lights are extinguished and the ring light is illuminated, suddenly revealing the participant’s bare, well-conditioned, and muscular physique paired with a highly charismatic and transformed facial expression.	light; movement of the ring light and alteration of appearance in sync with the music; showcasing a well-conditioned and muscular physique; charismatic facial expression post-illumination.	showcasing physical conditioning; charismatic presentation.	characterisation / Utilisation of lighting techniques to generate audience appeal / Utilisation of music to create visual tension / Exhibition of the idealised body.	Media-driven influence / Fitness culture.
Challenge	Corn on the Drill Challenge	This challenge involves participants attaching a cob of corn to a power drill; as the drill spins the corn, they place it in their mouth, moving the drill side to side. Within a brief duration, the cob is completely stripped of its kernels, filling the participant’s mouth.	Eating corn using a power drill; utilising technology for food consumption; leveraging culinary appeal; creativity in combining tools and food items.	Eating corn with a drill; technological utilisation; culinary appeal; tool-food synthesis.	High-risk, thrill-seeking creativity aimed at attention-seeking and entertainment.	Risk representation in network culture.
Challenge	Corn on the Drill Challenge	Whilst this action is perceived as engaging and thrilling, prompting user imitation, there have been instances where the high speed of the drill resulted in fractured teeth or entangled hair being pulled out, categorising	Audience perception of the challenge as thrilling; fracturing teeth during performance; hair pulling/entanglement by the drill; classification as a high-risk and hazardous challenge.	Thrill-seeking/excitement; dental injury; hair loss/entanglement; high-risk nature.	Visual appeal and manual speed / Presenting personal risk as entertainment	Sensation-seeking and experiential desires / Hazardous self-presentation.

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		this as a hazardous and high-risk challenge.			capital.	
Challenge	Milk Crate Challenge	This challenge is a thrilling yet hazardous and high-risk activity wherein participants stack empty, inverted plastic milk crates in a stepped, podium-like structure. The objective is to walk across the unstable crates to the other side. Due to the inherent instability of the structure, participants frequently fall, often suffering fractures or even spinal injuries; only individuals possessing exceptional focus and physical balance can successfully complete the challenge.	Classification as a thrilling and high-risk challenge; utilisation of empty milk crates; physical fractures/injuries sustained during the challenge; success of high-focus participants; success of individuals with superior physical balance.	Thrill-seeking and high-risk activity; utilisation of low-cost materials; bodily fractures; high-focus individuals; physical equilibrium.	Displaying recreational risk-taking for attention-seeking purposes / Requisite cognitive focus / Significance of physical equilibrium.	Risk culture and digital adventure / Low-cost participatory culture / Individual skill / Somatocentricity (body-centricity).
Meme	Masoud Rajavi	In this video, apart from Masoud Rajavi, two women and one man wearing the attire of the Mojahedin-e Khalq (MEK) are visible; the women wear headscarves and coats (manto), whilst the men wear suits, ties, and moustaches.	Distinctive attire of the individuals in the video; specific appearance of the individuals in the video; uniform appearance and clothing of the men and women; wearing of headscarves and coats (manto) by the women; men styled in suits, ties, and moustaches holding political/ideological identification.	Uniform clothing; a group with a distinct appearance; identical appearance; full hijab; wearing ties within an anti-Western group.	Identity exhibitionism	Collective representation

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
Meme	Masoud Rajavi	Masoud Rajavi's demeanor and facial expressions in this video—such as shouting whilst smiling, becoming highly emotional, shaking his head in a pleading and wailing manner, and finally closing his eyes while loudly chanting “Hal min nasirin yansurna” (Is there any helper to help me?)—have become a source of satire for users.	Masoud Rajavi shouting in the video; Masoud Rajavi smiling whilst shouting and wailing; Masoud Rajavi pleading and wailing in the video; Masoud Rajavi becoming highly emotional in the video; Masoud Rajavi's head movements and closing of his eyes.	Shouting; smiling whilst wailing and shouting; pleading; becoming emotional; head movements and closing of the eyes.	Incongruity between speech and behaviour	Semiotics of contradiction
Meme	Aysan Eslami	Aysan Eslami is a 37-year-old single blogger from Nowshahr who migrated to the United States in his youth. Having secured a good career and accumulated wealth, he achieved high popularity by sharing his personal life on Instagram. His daily life consists of business, gym workouts, shopping for clothes, cruising in luxury cars, and publicly depicted activities such as relationships with multiple women, drinking alcohol, and clubbing. Combined with his authentic Northern (Mazandarani) dialect and vulgar language, this creates an appealing mix for users.	Aysan Eslami as a famous blogger; Aysan Eslami being single; Aysan Eslami's migration to the US; Aysan Eslami's career advancement in the US; sharing daily life on Instagram; Aysan Eslami achieving fame through Instagram; displaying business affairs to the audience; Aysan Eslami's interest in fitness; purchasing numerous expensive clothes by Aysan Eslami; driving luxury cars and displaying them to the audience; Aysan Eslami's casual relationships with women; Aysan Eslami drinking alcohol in front of	Blogger culture; being single; migration to the US; encouraging migration; influencer culture; fame-seeking; work culture; encouraging fitness; consumerism; luxury lifestyle; casual sexual relationships; consumption of alcoholic beverages; intersection of local and Western	Self-exhibition and online persona construction	Influencer culture of self-presentation

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
			the audience; Aysan Eslami's authentic Northern dialect in the US; frequent use of vulgar language by Aysan Eslami.	culture; frequent use of vulgarity.		
Meme	Aysan Eslami	Numerous memes of Aysan Eslami's speeches have been shared in cyberspace, but this particular meme has garnered significant attention due to the absence of vulgar language. In this meme, Aysan Eslami says with a distinctive, exaggerated expression: "Ah yes... he must be a prince... come to inspect the border territories [marazi-ye arazian - malapropism]... what a brave lad [shir pesar]..."	Comparing Aysan Eslami to Reza Pahlavi in this meme; use of the nonsensical phrase marazi-ye arazian; use of the term shir pesar (brave lad) by Aysan Eslami.	Monarchist tendencies; nonsensical vocabulary; exaggerated self-conceit.	Humorous grandiosity	Exhibited prestige
Meme	"The Past Deceived Me"	The elderly poet holds a higher education degree and a PhD in literature.	High level of education.	High level of education.	Contrast between mental image and reality	Social perception
Meme	"The Past Deceived Me"	The romantic heartbreak experienced by "Doctor Nesvan" in his youth, which led to his lifelong bachelorhood.	Lifelong bachelorhood; romantic heartbreak; depressed appearance.	Celibacy/Bachelorhood; Doctor Nesvan's youth romantic heartbreak; Doctor Nesvan's worn and depressed appearance.	Failed romantic love	Emotions and affective life

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
Meme	“The Past Deceived Me”	The mixing of the romantic and nostalgic “Romeo and Juliet” theme song by the Italian composer Nino Rota, which is finely synchronised with the visuals.	Romantic song; nostalgic song.	Mixing a romantic song to evoke romantic heartbreak; mixing a nostalgic song to evoke youth.	Musical nostalgia	Collective memory
Meme	“The Past Deceived Me”	The simple clothing and attire of “Doctor Nesvan”, which effectively conveys his rural background to the audience.	Rural attire.	Doctor Nesvan’s simple and rural clothing.	Representation of the rural class	Culture and lifestyle
Meme	Habib	In this scene, Hootan Shakiba, playing Habib—a naive, comedic, and chronically infatuated character who has a peculiar fondness for the colour brown, brown clothes, and fur—is sitting on a chair with his feet on the table. Whilst drinking tea with a sugar cube in his mouth, he says to Amir Hossein Rostami (who ironically agrees with him): “Did she [the girl who rejected Habib] become miserable, or did I? Did she lose out, or did I?..” and when Amir Hossein Rostami ironically confirms, Habib replies: “Exactly, she made herself miserable.”	Habib’s naive persona in this meme; Habib’s comedic and endearing persona; Habib’s fur clothing; Habib’s fondness for the colour brown; Hootan Shakiba [the character] being single and seeking marriage; Hootan Shakiba as a chronically infatuated character; Habib putting his feet on the table; drinking tea with a sugar cube in the mouth whilst speaking; Amir Hossein Rostami’s ironic confirmation of Habib; expressing indifference towards being rejected despite his inner distress.	Naive personality; comedic character; fur attire; fondness for the colour brown; seeking marriage; chronically infatuated character; putting feet on the table; nonchalance; ironic validation; expressing nonchalance despite inner grief.	Self-deception and feigned indifference towards romantic rejection	Defence mechanism
Meme	Habib	This meme is utilised in situations where an individual or a faction	Refusal to accept failure in this meme; concealing	Refusal to accept reality; denial of	Inversion of failure and	Self-deception

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		has failed in an endeavour but refuses to show weakness to others, portraying themselves as the winner and the actual winner as the loser.	weaknesses and failures; portraying oneself as the winner and the actual winner as the loser.	weaknesses; inversion of truth.	self-portrayal as the winner	
Meme	“Are You Serious?!” (Jedi Mifarmayed)	The beliefs of the two experts correspond to their physical appearance: Majdzadeh represents a traditional, religious, and revolutionary archetype, whilst Doroudgar represents a Western-oriented, modernist archetype.	Majdzadeh’s simple, revolutionary appearance and attire; Doroudgar’s modern, stylish appearance and attire; Majdzadeh’s traditional and religious beliefs; Doroudgar’s Western-oriented, liberal beliefs; confrontation and conflict between the opposing ideologies of the two experts.	Revolutionary appearance; modern appearance; religious beliefs; liberal beliefs; discourse confrontation.	Cultural dualism and identity conflict	Value conflict
Meme	“Are You Serious?!” (Jedi Mifarmayed)	This meme is employed in situations where one wishes to point out someone’s (or a faction’s) mistake, proving the error of the matter using documents and evidence.	Pointing out others’ mistakes in this meme; proving others’ errors with documents and evidence.	Exposing others’ errors; accountability framing.	Exposing errors and demanding accountability	accountability-oriented critique
Meme	Escaping the Police	This meme features a photograph from the protests against Alexander Lukashenko’s re-election as President of Belarus. In the image, Belarusian police, wielding batons and shields, are chasing a protester. Notably, the protester looks back at the police with a mocking, laughing	Protests against Alexander Lukashenko’s re-election; Alexander Lukashenko as President of Belarus; police chasing a protester; a protester escaping the police; mocking gaze towards the police; meaningful laughter directed at the police; police	Popular protests; President of Belarus; police authority; anti-authoritarian framing; mockery; derisive laughter; depicted violence.	Mocking the ruling power and symbolic escape from authority	Civil resistance

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		expression.	carrying batons and shields.			
Meme	Escaping the Police	This meme is utilised to represent an individual's or a faction's reaction to an unreasonable, unachievable, or irrelevant demand, capturing their frustration in a meme format.	Unreasonable demand from an individual/faction; unachievable demand; irrelevant demand; anger due to irrelevant requests; undue expectations from others.	Unreasonable request; unachievable; irrelevant demand; feelings of anger; undue expectations.	Ridiculing unrealistic demands	Situational critique
Meme	Drake	This meme consists of two images of Drake: in one, he frowns and holds his hand up to shield his face; in the other, he points forward with closed eyes and a knowing smile.	Drake's frown in the first image; Drake shielding his face with his hand; a smile of satisfaction on Drake's lips; closed eyes indicating ease of mind; pointing forward as a sign of approval.	Frowning face; shielding the face; smile of satisfaction; closed eyes; approval through body language.	Rejecting one option and endorsing another through body language	Social valuation
Meme	Drake	This meme is used in instances where principled or beneficial actions are discouraged, and conversely, actions departing from the stated norm are recommended.	Prohibiting principled/correct actions; recommending actions departing from the stated norm; discouraging virtue and representing conduct represented as departing from a stated norm as acceptable in a single frame.	Encouraging laziness; encouraging actions departing from the stated norm; semantic fusion.	Encouraging incorrect behaviour and discouraging correct behaviour	Normative inversion
Meme	Hollywood Actors	In the first part, Michael Caine is shown staring at the camera (the audience), seemingly making a request. In the second part, a sequence of identical clips featuring Toby Maguire,	Michael Caine staring at the audience; Michael Caine requesting an action; the actors' satisfaction with the audience's action; actors looking into the camera;	Eye contact with the audience; making a request; satisfaction with the audience; uniform gaze of	Collective endorsement as social feedback	Emotional legitimisation

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		Leonardo DiCaprio, Christian Bale, Bryan Cranston, Michael Caine, and Tom Cruise shows them smiling knowingly at the camera and nodding in satisfaction at the audience's fulfilment of Caine's request.	actors smiling at the audience; nodding in satisfaction.	the actors; smiling at the audience; nodding in satisfaction.		
Meme	Hollywood Actors	This meme is employed to encourage others to act against values or to neglect them, or by individuals seeking to justify their laziness and mistakes.	Encouraging others to act against values; encouraging the neglect of values; justifying laziness; justifying mistakes.	Representing behaviour as acceptable within a humorous frame; neglect of values; justifying laziness; justifying errors.	Critical satire in justifying improper behaviour	representation of norm deviation
Meme	Hungarian Old Man	One of the first viral memes in the online world features András Arató, a cheerful, lively, and well-groomed 79-year-old Hungarian man who worked as an advertising model. He gained widespread attention online thanks to images showing him sitting at a laptop.	András Arató as a global meme pioneer András Arató, an elderly man from Hungary András Arató, a 79-year-old man András Arató as an advertising model András Arató as the subject of a photo meme András Arató's cheerful, lively, and well-groomed appearance	Avant-garde Hungarian old man 79-year-old man Advertising model Image meme Sprightly senior	The globalization of ordinary faces through memes	Participatory culture
Meme	Hungarian Old Man	This meme evokes a state of "what we thought would happen versus what actually happened — an unexpected event that the	Evokes a state of what we thought versus "what actually happened...	Contrary to expectation Used in two ways	The collapse of prediction and reality	Failure of expectations

Type	Name	Raw content	Open coding	Axial coding	Concept	Dimension
		audience could not have anticipated. This event or piece of news can be either positive or negative, and is used in both situations accordingly.				
Meme	Antony Starr	In this meme, Antony Starr is standing among a crowd of American people holding T-shirts and placards in the shape of the American flag. He looks at the crowd in bewilderment. When he sees the crowd applauding him, he is surprised by their reaction, which he did not expect. He nods his head with a meaningful smile and says, All right, and looks at them with an excited gaze, conveying his sense of satisfaction to them.	Placards in the shape of the American flag in people's hands Antony Starr's bewildered look at the crowd The crowd cheering for Antony Starr Antony Starr being surprised by the crowd's applause Antony Starr's surprised smile at the crowd Antony Starr nodding his head as a sign of approval Antony Starr's excited gaze at the crowd Conveying a sense of satisfaction by Antony Starr	In the form of: American flag American symbol Bewildered Being cheered on Being caught off guard Surprising smile Nodding head Excited look Sense of satisfaction	Surprise at receiving unexpected support from the crowd	Contradiction between performance and outcome
Meme	Antony Starr	This meme is used in situations where an individual or a group, based on their performance, expects a negative outcome, but against all odds, a positive result emerges, surprising them — and perhaps luck also plays a role in this success.	Positive outcome contrary to negative performance Being surprised by a positive result despite negative performance The role of luck in unintended successes	Breaking the rules of success Positive result contrary to negative performance Having luck	Accidental or contrary-to-expectation success	Rule-breaking in success

Conversely, in challenges, identity construction is realised through bodily simulation. In accordance with Goffman's self-presentation theory, users project a desirable self-image by engaging their bodies within a structured template. In the "Wednesday Challenge", the visual/corporeal layer (dark makeup and black attire) and the kinetic layer (the mysterious dance) constitute a physical representation of the Gothic subculture. By physically engaging in this challenge, the adolescent performs and displays their own identity alignment rather than passing judgement on others.

Dimension 2. Emotion regulation, nostalgia, and soft mourning

Digital culture provides novel instruments for rendering anxiety and failure tolerable; nonetheless, the reproduction of these emotions diverges between memes and challenges. In memes, suffering is rendered manageable through the establishment of a humorous distance. In the "Past Deceived Me" (Gozashteh Faribam Dad) meme, the synergy between the visual layer (a weathered countenance and rural attire) and the auditory layer (a mixed nostalgic soundtrack) transmutes a romantic bereavement into an aestheticized, soft experience of mourning. Similarly, in the "Habib" meme, the linguistic layer (rationalising failure) and the visual layer (feet resting upon a desk) construct a psychological defence mechanism to evade the pain of defeat.

Conversely, within challenges, emotion is managed via the somatic representation of memory. In the "Childhood Photo Recreation" challenge, the user resuscitates collective memory by physically replicating historical gestures alongside family members, accompanied by a nostalgic soundtrack. Furthermore, the substitution of deceased relatives in these recreated photographs constitutes a form of cultural mourning, demonstrating that challenges have evolved into alternative ritualistic condolences within the network society.

Dimension 3. Informal resistance and symbolic activism

The findings demonstrate that protest in the network era obviates the need for classical manifestos and slogans. In memes, resistance is enacted through the dissection of power using the shears of satire. In the "Are You Serious?" (Jedi Mifarmayed) meme, the visual layer (the juxtaposition of traditional and modern appearances) serves the functional layer (exposing systemic errors), thereby becoming an instrument for the informal critique of value discrepancies. Similarly, in the "Fleeing the Police" meme, the mocking laughter of the protester in the visual layer disarms the symbolic power of the police (represented by batons and shields).

Conversely, in challenges, resistance is manifested through symbolic reclamation of space via the body and rhythm. In the "Ekbatan Dance Challenge", the kinetic layer, in stark contrast with the contextual layer

(political crisis), transmutes the body into a living document of protest. In the “Salam Ya Mahdi” challenge, the synthesis of the auditory layer (religious dubbing) and the visual layer (Palestinian flag stickers and weeping countenances) constructs a transnational solidarity without a single written word. This finding corroborates Castells’ network society theory, wherein power is reproduced through symbolic transborder networks.

Dimension 4. Digital normative laboratories (Negotiating ethical and gender boundaries)

Social media platforms have evolved into sites for negotiating and testing normative boundaries, a phenomenon conceptualised through Hebdige’s subcultural theory. In memes, norms are challenged through logical inversion. In the “Drake” and “Hollywood Actors” memes, the synergy between the linguistic and visual layers is structured such that counter-normative behaviour is represented while normative conduct is comparatively disfavoured. This juxtaposition calls into question traditional ethical norms (such as Amr bil-Ma’ruf/ representation of virtue) via a humorous cognitive shortcut.

Conversely, in challenges, normative transgression migrates from virtual spaces into the tangible domestic sphere of the family. In the challenges of “Milad Hatami” and “Neda Yasee”, the kinetic layer (performing behaviours presented as norm-challenging within family interactions) and the contextual layer (filming the shock of family members) commodify privacy into content for generating engagement. Similarly, in the “Flip the Switch” challenge, the visual inversion of male and female attire reconfigures gender-role presentation through domestic playfulness. Challenges demonstrate that norm-related contestation is expressed not only cognitively but also through embodied performance.

Dimension 5. Attention economy, symbolic capital, and risk demonstration

Within both phenomena, visibility itself has metamorphosed into a primary value and source of capital, corroborating Jenkins’ participatory culture theory; however, the instruments utilised to acquire this capital diverge. In memes, symbolic capital is accumulated by constructing charisma through abstract editing. In the memes of “Antony Starr” or the Hungarian old man, the synthesis of a specific facial expression within a novel situation elevates the individual into a charismatic memetic figure. Users then appropriate this charisma to evaluate their own situational experiences by superimposing their own textual commentary.

Conversely, in challenges, symbolic capital is brokered directly through somatic engagement and physical risk. In the “Ring Light” challenge, the lighting layer and the abrupt physical transition (from baggy clothing to a muscular physique) ostentatiously display somatic capital. In the “Corn on the Drill” or “Milk Crate” challenges, the kinetic layer (performing high-risk actions) juxtaposed with the

contextual layer (falling and fracturing teeth) illustrates a novel digital transaction: the bartering of physical risk in exchange for attentional capital (likes and views). This finding demonstrates that challenges, owing to the direct and visceral engagement of the physical body, possess a substantially higher potential for associating physical risk with entertainment.

7. Discussion

The findings of this convergent research present a picture that extends beyond a simple content categorisation of memes and challenges; rather, these findings indicate an affective-cognitive shift within contemporary digital culture. What was highlighted in this research is the fundamental difference in the meaning-making mechanism of these two phenomena (namely, textual re-contextualisation versus embodied re-enactment), which allows us to gain a more precise understanding of how social cognition operates in the network age.

At the micro, individual level, the integration of Fiske and Taylor's (social cognition) and Goffman's (self-presentation) theories clarified that the audience and user on these platforms are positioned in two entirely distinct cognitive situations. When encountering a meme, the user assumes the role of a cognitive judge; relying on mental shortcuts and schemas, they engage in attribution without the need for prolonged analysis. For instance, upon viewing the Masoud Rajavi meme, the user, within a fraction of a second and through the contrast between visual and auditory layers, activates an 'othering' schema and demarcates their own identity boundaries. However, when encountering a challenge, the user appears in the position of a performative actor; employing their body, attire, and rhythm (as seen in the Wednesday Challenge or the Ring Light Challenge), they are managing others' perceptions of their identity. Nevertheless, the ultimate outcome of both mechanisms at the macro level is congruent: both lead to identity construction and emotion regulation, but memes achieve this through the pathway of judgement, whilst challenges arrive at this point via the pathway of display.

At the meso, group level, the difference in emotion and collective memory management was highly noteworthy. The research indicated that memes regulate emotion through ironic distancing. In a meme such as "Habib," the user constructs a defence mechanism through a justificatory text and an indifferent gesture to make the suffering of romantic heartbreak bearable. In contrast, challenges (such as the Childhood Photo Recreation challenge) manage emotion through the physical re-enactment of bonds; the user, through corporeal engagement in a real space (standing in the same past pose), revitalises collective memory. This finding suggests that, in the absence of traditional rituals, challenges and memes have transformed into alternative rituals for mourning, nostalgia, and soft condolence.

Table 3. Comparative matrix of multimodal elements and socio-cultural functions in selected memes and challenges

Common denominator (Axis of integration)	Phenomenon type	Meme / Challenge name	Multimodal analysis summary (Synthesis of visual, linguistic, and auditory layers)	Final function (Conceptual coding)
1. Identity construction and group boundary setting	Meme	Masoud Rajavi	Visual: Uniform group attire and head movement. Auditory: Entreating shouts accompanied by laughter. Contextual: Organizational setting.	Out-group identity performativity and mockery (othering).
	Meme	Aysan Eslami	Linguistic: Northern dialect and indistinct vocabulary. Visual: Display of luxury cars and a specific lifestyle.	Highlighting the identity boundary of consumerist émigré bloggers.
	Challenge	Wednesday Challenge	Visual/Corporeal: Dark make-up and black formal attire. Movement: Mysterious and unconventional dance Auditory: Horror music.	Corporeal imitation for belonging to the Goth subculture.
2. Emotion regulation, nostalgia, and soft mourning	Meme	“The past deceived me” (Dr. Nasvan)	Visual: Depressed face and simple rural clothing. Auditory: Mix of a nostalgic love song.	Transformation of romantic heartbreak into soft, aestheticised mourning.
	Meme	Habib (Hootan Shakiba)	Visual: Placing feet on the table and drinking tea. Linguistic: Justification of heartbreak, inverting reality.	Defence mechanism and self-deception for managing emotional distress.
	Challenge	Childhood Photo Recreation Challenge	Visual/Corporeal: Exact replication of old poses with family. Auditory: Song “I’m Just a Kid”.	Collective memory reconstruction, nostalgia, and intergenerational bonding.
3. Informal resistance and symbolic activism	Meme	Are You Serious?! (Jedi Miformayed)	Visual: Contrast between traditional appearance (Majdzadeh) and modern (Doroudgar). Contextual: Exposing errors with evidence.	Informal critique of value gaps and ironic discourse creation.
	Meme	Running from the Police	Visual: Mocking gaze of a protester running backwards. Contextual: Confrontation between an ordinary	Symbolic disarming of power through laughter and sarcasm.

Common denominator (Axis of integration)	Phenomenon type	Meme / Challenge name	Multimodal analysis summary (Synthesis of visual, linguistic, and auditory layers)	Final function (Conceptual coding)
4. Normative laboratories (Disrupting norms)			individual and police authority.	
	Challenge	Ekbatan Girls Dance	Corporeal/Movement: Free, collective dance by girls. Contextual: Political crisis and International Women's Day.	Digital activism and transforming the body into an instrument of civil protest.
	Challenge	Salam Ya Mahdi	Auditory: Dubsmash of a religious song (Arabic version). Visual: Palestine flag sticker and crying face.	Transnational solidarity and supra-religious symbolic politicking.
	Meme	Are You Serious?! (Jedi Mifarmayed) / Hollywood Actors	Linguistic/Visual: Affirmation of wrong behaviour and rejection of principled behaviour in one frame.	Normative inversion and critical humour in representing behaviour represented as departing from a stated norm.
	Challenge	Milad Hatami and Neda Yasee Challenges	Corporeal/Movement: Performing behaviours framed as norm-challenging in front of family. Contextual: Filming the shock and reactions of family members.	reduced salience of conventional ethical boundaries, blurring of family privacy boundaries.
	Challenge	Flip the Switch Challenge	Visual: Sudden swap of female and male clothing. Movement: Surprise in the mirror.	Fluidity of gender roles and play with social identity in a humorous format.
5. Attention economy, symbolic capital, and risk	Meme	Antony Starr / Hungarian Old Man	Visual: Blank, stunned stare (Starr) / Cheerful face (Old Man). Contextual: Users employ for interpreting unforeseen situations.	Construction of abstract charisma for rapid redistribution and judgement.
	Challenge	Ring Light Challenge	Visual: Sudden change in lighting and appearance (from baggy clothes to muscular physique). Auditory: Tense music.	Identity dual-picturisation and display of bodily symbolic capital (fitness).
	Challenge	Corn on the Drill / Milk Crates	Corporeal/Movement: Performing a dangerous, balance-requiring act. Contextual: Falling, breaking teeth, or success.	Digital risk-taking; trading physical danger for attention capital (likes).

At the macro and political level, this research demonstrated that social media platforms have become normative laboratories. The network society (Castells) has provided a substrate wherein traditional norms are no longer merely debated in traditional media but are tested practically in the form of a dance or a meme. Particularly in the dimension of informal resistance, it was observed that protest in digital culture has diverged from the language of classic manifestos. In memes (such as Running from the Police), resistance is achieved through the dissection of power with the scalpel of humour (symbolically disarming the police with a laugh). However, in challenges (such as the Ekbatan Dance or Salam Ya Mahdi), resistance occurs through symbolic domination of space via the body and rhythm. This indicates that even political activism itself is compelled to become multimodal; because, within the attention economy, slogan-writing is no longer noticed, and a dancing body or a combination of a flag and a song transmits the protest message more rapidly.

The findings of the fifth dimension (attention economy) also unveiled darker facets of participatory culture (Jenkins). When, in challenges such as “Corn on the Drill”, we observe users endangering their physical well-being, we are witnessing a digital transaction: the exchange of “physical risk” for “attention capital” (likes and views). This contrasts with memes, where this capital is acquired through “creative semiotic editing.” This difference suggests that challenges, due to the involvement of the body, possess a substantially higher potential for physical harm and the association of physical risk with entertainment.

8. Conclusion

This research was conducted with the aim of analytically integrating internet memes and TikTok challenges, emphasizing their socio-cultural dimensions. In response to the first research question, the findings demonstrated that despite differences in superficial format, these two phenomena are organised around five overarching, shared functions: identity construction and group boundary setting, emotion regulation and soft mourning, activism and informal resistance, digital normative laboratories, and the attention economy coupled with risk-display. In response to the second research question, it was substantiated that in both phenomena, meaning is not exclusively situated within the text; rather, multimodal elements (image/ body, text/ dubs mash, music/ rhythm, and contextual background) operate synergistically. Music plays the role of an emotion regulator, and the body/ image assumes the function of a tool for judgement or display, thereby confirming the necessity of a multimodal approach in digital culture studies. Finally, in response to the third research question, the fundamental difference in mechanisms was elucidated: memes, through textual re-contextualisation, become instruments for rapid cognitive judgement and mental shortcuts, whereas challenges, through

embodied re-enactment, are transformed into tools for identity management and self-presentation (based on Goffman's theory).

In a final summation, it can be asserted that internet memes and challenges are not merely reflections of digital culture but are microscopic engines of norm production within the network society. They demonstrate that in the present era, the power to shape attitudes has shifted from traditional media to algorithms, humour, musical rhythms, and the bodily movements of ordinary users. From a practical perspective, these findings carry a clear message for educational institutions, cultural policymakers, and families: combating harmful digital content cannot be achieved solely through filtering words or images. As the data have shown, in norm-breaking challenges within the family or in satirical memes, the harmful meaning lies not in the words themselves but in the subtle interplay of signs (for example, the fusion of cheerful, high-energy music with risky or norm-defying behaviour). Therefore, the necessity of transitioning from traditional media literacy (focused on text-reading) to deep multimodal literacy is keenly felt. The audience (particularly adolescents) must learn how an auditory layer can normalise a dangerous visual layer and how humour can become a tool for concealing unfair prejudices.

Conflict of interest

The authors declared no conflicts of interest.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

This study analysed publicly available social-media content and did not involve recruitment, interviewing, or direct interaction with human participants. No private or non-public material was intentionally collected. Because the corpus includes identifiable public figures and user-generated media, the analysis was limited to information necessary for interpreting the digital artefacts, and identifying details unrelated to the multimodal analysis were excluded. The researchers assessed the potential risks of naming identifiable individuals and retained names only where they were integral to identifying a widely circulated public media artefact. No attempt was made to infer private information or to establish legal culpability. The study should be evaluated in accordance with the authors' institutional requirements for research using publicly available online data.

Data availability

The dataset generated and analyzed during the current study is available from the author on reasonable request.

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