

Research on Professional Resilience Building and Anti-Substitution Strategy Development in Broadcasting and Hosting

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Abstract: The rapid development of smart media technology is reshaping the communication ecosystem while also giving rise to concerns about the "soundscape amnesia" of cities. The soundscape memories that carry regional characteristics and collective emotions are being overshadowed by technologically homogenised content. As a cultural anchor against "amnesia," the professional value of broadcasting and hosting is rooted in a three-pronged system of "technique-function-humanities": The soundscape encoding techniques centred on dialect phonetics and emotional narrative control lay the foundation for memory, the functional role of public translation fosters collective identity and weaves a memory network, and the humanistic core guided by historical context interpretation and cultural archiving illuminates the path of inheritance, together forming the fundamental resilience against technological replacement. However, broadcast hosting currently faces three major challenges: algorithmic monopolies lead to the standardisation of soundscapes and the loss of emotional warmth; simulacrum-based dissemination erodes professional essence and causes cognitive biases; and technological alienation weakens its agency in soundscape narratives. The way out lies in upholding tradition while innovating: deepening the art of soundscape encoding through cultural decoding and narrative innovation to build professional barriers that technology cannot replicate; activating the humanistic communication field to balance the soundscape ecology under the logic of traffic; and establishing a human-machine collaboration system to clarify the tool attributes of technology and the professional subjectivity of the host. Through these practices, broadcasting and hosting preserve the authenticity and diversity of urban soundscape memories in the midst of technological waves, showcasing the professional depth of "broadcasting as an academic discipline" while affirming its irreplaceable role as a guardian of cultural memory and its sustainable development prospects, thereby providing crucial support for humanistic heritage in the technological era.

Keywords: Broadcasting and Hosting; Soundscape Memory; the Era of Intelligent Media; Artificial Intelligence; Professional Dedication

1. Introduction

The rapid development of smart media technology is reshaping the communication ecosystem, yet it is also quietly giving rise to concerns about the "soundscape amnesia" of cities. The street vendors' cries in alleys, the traditional opera tunes in old teahouses, and the folk music during festivals—these soundscapes that carry regional DNA and collective emotions are gradually being overshadowed by standardised audio pushed by algorithms and homogenised AI-generated voices. In a communication environment dominated by visual symbols, soundscapes, as the living carriers of urban memory, face the challenge of authenticity and diversity from the technological wave. Broadcasting and hosting, with spoken language as its core skill and humanistic care as its spiritual core, serves as a cultural anchor against this "amnesia." Its professional value lies not only in the artistic presentation of sound but also in the encoding, transmission, and revitalisation of urban memory, safeguarding the soundscape coordinates of civilisation amidst the tension between technology and humanity.

2. Professional foundation: academic theory as the skeleton, soundscape as the skin

The ability of broadcasters and presenters to preserve soundscapes is rooted in a professional system that integrates "skills, functions, and humanities." This system forms the core support of "learning as a foundation" and is also the fundamental basis for resisting technological replacement,

manifesting itself in a complete value chain from technical coding to cultural inheritance.

2.1 Skills are like anchors, laying the foundation for memory encoding

The encoding of soundscapes is achieved through the meaningful production of language transformation, emotional regulation, and detail capture by broadcasters and hosts, embodying an irreplaceable professional logic.

The precise grasp of dialectal phonetics is the living transmission of regional culture. The warm, down-to-earth charm of Beijing dialect's "erhua" sound, the delicate elegance of Shanghai dialect's "Wunong soft speech," and the ancient charm of Cantonese's "nine tones and six pitches"—these auditory landscape details require long-term cultural immersion and professional training to present. Technology can mimic pronunciation but cannot decode the cultural codes within, much like a robot cannot capture the essence of calligraphy with a brush. A replicated dialect auditory landscape lacks human warmth.

The emotional nuance of narrative pacing determines the intensity of empathetic memory. The host's choked pauses during the Wenchuan earthquake coverage and the enthusiastic tone at the Spring Festival Gala opening are precise responses to collective emotions. This dynamic balance between "emotion and sound" relies on professional judgment of context and audience psychology, far beyond what technical "emotional templates" can replicate—virtual hosts' expressions are algorithm-driven reproductions of samples, lacking the emotional flow of real people based on life experiences[1].

2.2 Functions are like threads, weaving a web of unity and cohesion

The soundscape communication function of broadcasting and hosting lies in constructing a network of collective memory connections through public translation, which manifests as a balance and guidance of memory transmission. This is a social value that technical tools cannot replace.

The ceremonial soundscapes of major events serve as anchors for collective identity. The solemn narration of National Day celebrations and the announcements marking the completion of urban landmarks are conveyed by broadcasters through the use of solemn tones, ritualised rhythms, and emotionally charged language, thereby integrating individual memories into public narratives and reinforcing a shared sense of "we." This form of communication awakens and unites collective emotions. For example, in the commentary of a flag-raising ceremony, the host's precise control of tone to match the speed of the flag's ascent with the duration of the national anthem conveys a deep sense of patriotism. While technology can broadcast content, it cannot understand the cultural symbolism and emotional weight behind it.

The exploration and dissemination of marginal soundscapes counteract the fragmentation of memory. Marginal soundscapes such as the cries of elderly artisans and the ritual sounds of endangered folk customs are often overlooked by algorithms due to their weak traffic. In a local TV programme called "Street and Alley Soundprints," the host delves into the old city district to record the clinking sounds of a barber's copper basin and the chants of dragon boat races during the Dragon Boat Festival, and combines interviews to interpret the industry changes and folk tradition inheritance behind the sounds. Through meticulous handling of pauses, emphasis, and intonation, these "non-trending soundscapes" are brought into the public eye, even sparking discussions on local "sound culture preservation" policies. This is precisely the value of broadcasters as "memory balancers"—using professional guidance to compensate for algorithmic blind spots, making marginal soundscapes a bond that unites urban consensus.

2.3 Humanities are like torches, illuminating the path of soundscape inheritance

The depth of "learning as the foundation" is further reflected in the understanding and conscious inheritance of the cultural connotations of soundscapes. This is the core characteristic that distinguishes broadcasting and hosting from technical tools, forming the cultural dimension of "broadcasting with learning."

Broadcasting and hosting professionals shift from technical voice to humanistic narrative context grasp. When Sa Beining interpreted *The Analects* in *The Classics of China*, faced with the recitation of "Learn and practise regularly," he did not simply repeat the words but combined them with Confucius' experiences travelling among the states, expressing empathy with the phrase, "In this thousand-year

echo lies the sage's admonition to the world," connecting the ancient text's rhythm and spirit with its cultural heritage; When discussing the transmission of the Shangshu, he used the metaphor, "The rustling sound of bamboo slips turning is the breath of civilisation surviving through war," to resonate the sound of ancient texts being flipped through with the continuity of culture. This precise interpretation of the historical context behind the soundscape relies on a deep accumulation of knowledge in classical texts and intellectual history. While technology can identify the pitch of recitation sounds, it cannot imbue them with such profound humanistic commentary[4].

A shift in mission from information transmission to civilisational archiving. In China in the Classics, the host, scholars, and actors collaborate to create a "dialogue between past and present" scenario, combining the soundscapes associated with classical texts—such as the recitation of the Chu Ci and the annotations of the Art of War—with historical context interpretations, transforming orally transmitted soundscapes into systematic cultural memory. This practice of participating in civilisational archiving through professional narration transcends mere classical text dissemination, serving as a vivid illustration of "broadcasting with scholarship" in cultural heritage preservation.

3. The reality: technology is the blade, traffic is the smog

While improving communication efficiency, smart media technology also poses challenges to the authenticity of soundscape memory and the professionalism of broadcasters in the form of algorithm monopoly, symbolism, and technological alienation. These challenges present systemic challenges that require professional responses.

3.1 Algorithms are like blades, cutting through the reality of memory temperature

Algorithm-driven recommendation mechanisms prioritise maximising traffic, leading to soundscape memories falling into a trap of standardisation, with genuine emotional depth gradually eroded by technical logic. Algorithm-dominated "typical soundscapes" create a monopoly, leading to an imbalance in memory dissemination. Platform algorithms prioritise traffic-driven content based on user click data, such as soundscapes from popular tourist spots or background music from trendy locations. Non-traffic-driven soundscapes, such as the bustling sounds of old city districts, industrial machinery noises, or rural labour sounds, are marginalised, creating a Matthew effect in memory dissemination: popular soundscapes are reinforced, while marginal soundscapes are forgotten. Technology may lead to an information echo chamber effect, manifesting in the soundscape domain as the risk of memory homogenisation. Opening a city soundscape app reveals that the recommended content is predominantly standardised audio such as café background music and shopping mall ambient sounds, while the sounds of a cobbler's hammer or a popcorn machine—which carry the memories of generations—are scarce.

AI-generated synthetic sounds strip away the emotional texture of memory. Technologically generated standard narration and virtual host voices may be smooth and clear, but they lack the unique texture of firsthand accounts. The hoarse voices of the elderly recounting urban changes, the background noise of artisans demonstrating their skills, and the dialects intertwined in neighbours' casual chats—these "imperfect" details are precisely the source of the warmth in memories. AI-synthesised voices are combinations of samples and cannot replicate the life traces coexisting with memory in real human voices[2]. Algorithm-driven optimisation processes treat these details as noise to be removed, effectively flattening the emotional folds of the soundscape and reducing memory to cold audio files.

3.2 Simulacra are like smog, obscuring the true nature of professionalism

The simulacrum tendency of soundscape dissemination blurs the professional boundaries of broadcasting and hosting, allowing technical reproductions to replace professional essence and leading to public cognitive bias.

The replacement of "humanistic soundscapes" with "aesthetic soundscapes" has eroded the depth of memory. Some platforms simplify soundscapes into symbolic combinations of "pleasant sounds + beautiful visuals" for the sake of traffic, such as using AI-generated soft female voices paired with old teahouse scenes, while omitting core soundscape elements like Pingtan singing styles and casual tea drinker conversations. This logic prioritises form over content, reducing the value of broadcasting and hosting to "pleasant sounds and harmonious visuals," falling into the trap of formalism.

The notion that "broadcasting has no academic basis" has exploited this trend to obscure the professional essence. The basic reporting capabilities of AI-synthesised voices and virtual anchors have led the public to mistakenly simplify broadcasting and hosting into mere imitation of vocal conditions and techniques, neglecting the deep decoding of soundscape significance. This perception is fundamentally a product of technicism, equating technical reproduction with professional essence and obscuring the deeper implications of "broadcasting has academic value"[3].

3.3 Alienation is like a rein, binding the ability to construct the subject

Technological alienation has weakened the agency of broadcasters in the transmission of soundscape memory, gradually eroding their dominance in interpreting memory and leaving them passive in a technologically controlled environment.

The simulacrum presence of virtual anchors distorts soundscape narratives. We take CCTV AI host "Xiao Xiao Sa" as an example. While it can mimic Sa Beining's broadcasting style, it lacks the emotional nuances and sensory details that a real person would capture when exploring an old street—such as the emotional fluctuations in residents' casual conversations or the subtle sounds of shop signs. When reporting on the renovation of an old street, "Xiao Xiao Sa" can only recite pre-scripted data, whereas a real anchor can convey the residents' feelings of reluctance and anticipation through their words. This layered narrative strips the soundscape of its authentic texture, particularly in emotionally charged scenarios like disaster reporting, where the algorithm-driven expressions of virtual anchors appear hollow[2].

Data-driven production alters the authenticity of memory, leading to distortions in historical narratives. Some platforms use AI to "optimize" historical soundscape recordings, such as removing background noise and dialectal characteristics from old broadcasts, effectively rewriting the original form of memory through technology. In this process, broadcasters gradually relinquish their interpretive authority, becoming mere executors of technology's reshaping of memory, trapped in a "tool-like" predicament[4].

4. Breakthrough path: Adhere to the fundamentals and innovate

In response to technical challenges, broadcasters and presenters must adhere to professional standards and engage in innovative practices, deepening their skills, activating the field, and coordinating with machines to achieve a humanistic return to soundscape memory and construct a systematic solution to overcome the dilemma of technological replacement.

4.1 Deeply cultivate coding skills to build a shield against adversaries

In the current era where intelligent media technology deeply intervenes in soundscape communication, the core of broadcasters' resistance to technological replacement lies in reinforcing the irreplaceability of soundscape encoding. This requires building professional barriers from two dimensions: cultural decoding and narrative innovation, and this process always revolves around the core logic of "meaning production" in communication theory.

Goffman's framework theory suggests that the media construct cognitive frameworks through the selection and reorganisation of information. In the traditional media era, broadcasters and presenters often assigned single-directional meanings to soundscapes, such as the fixed commentary on revolutionary songs in radio broadcasts. However, today, the focus has shifted to dynamic meaning generation, breaking through the standardised technical frameworks through interdisciplinary integration—this is the core competitiveness that algorithms cannot replicate[1].

The depth of cultural decoding is reflected in the integration and application of interdisciplinary knowledge. At the China Poetry Conference, when Dong Qing interpreted the line "Guān guān jiū jiū" from the "Guān Jiū" chapter of the *Shī Jīng*, she combined the phonetics of pre-Qin dialects to restore the cultural imagery of bird songs, linking natural sounds with ancient notions of love, thereby achieving "meaning enhancement" of the soundscape. This encoding transcends AI's corpus analysis and requires a precise grasp of historical context and cultural symbols. In China's Intangible Cultural Heritage, when visiting the guqin, the host extended from the acoustic characteristics of harmonics and fingered notes to a philosophical interpretation of the "Heaven, Earth, and Humanity" doctrine, echoing Hall's high-context cultural theory—treating sound as a high-context symbol that carries cultural

connotations far beyond the auditory experience. This approach has greater communicative depth than the past practice of simply demonstrating techniques.

Narrative innovation focuses on building emotional connections, aligning with Katz's "use and satisfaction" theory, which highlights audiences' need for emotional resonance. Traditional radio soundscape narratives are often linear, but today's soundscapes activate emotional fields through scene reconstruction. In Classics of China, the "dialogue between ancient and modern times" intertwines the recitation of the Chu Ci with the footsteps of Qu Yuan, while Sa Beining's insightful commentary transforms the soundscape into an emotional bond connecting ancient and modern times, achieving an immersive "spatial-temporal folding" experience. In National Treasures, the sounds of bronze artefacts being de-rusted are combined with restoration stories, transforming niche soundscapes into carriers of "craftsmanship spirit." This breaks away from the traditional role of soundscapes as background noise, using the integration of "sound + story + emotion" to guide audiences toward cultural value recognition.

In these encoding processes, broadcasters' control over narrative rhythm and emotional intensity relies on precise perception of audience psychology—something algorithmic standardisation cannot achieve. It is clear that the core of mastering encoding techniques lies in infusing soundscapes with humanistic value that technology cannot replicate—both deep historical and cultural exploration and precise emotional resonance—ultimately forming a robust barrier against technological replacement.

4.2 Activate the power of the field and break the monopoly of the landscape

Broadcasters and hosts actively intervene in the field of soundscape communication, break the algorithm-led landscape monopoly and reconstruct the balance mechanism of memory communication by exploring marginal values and setting public issues.

Broadcasters and hosts systematically explore the cultural value of edge soundscapes and hedge traffic tilt. In Henan Satellite TV's "Chinese Festival" series, "Dragon Boat Festival Wonderful Tour" goes deep into the Miluo River, including the primitive cry of the dragon boat trumpet, the rustling sound of wormwood harvesting, and the rope and wire friction sound of the ancient method of wrapping rice dumplings. "Mid-Autumn Festival Wonderful Tour" records the chanting of folk moon worship and the rolling of handmade mooncakes, allowing niche soundscapes to gain a place in the public communication field and make up for the traffic blind spot of the algorithm.

Broadcasters and hosts set public issues from a professional perspective and guide rational reflection. Through the narration of the program and interviews with scholars, the "Chinese Festival" series raises topics such as "whether standardized festival soundscapes dilute regional characteristics" and "whether the ancient music sound synthesized by technology can replace the live performance of intangible cultural heritage inheritors", such as the discussion of "the difference between the sound of AI-restored cold food festival pounding and folk memory" in "Qingming Wonderful Tour", guiding the public to think about the boundary between technology and tradition. This agenda setting makes the broadcast host a rational gatekeeper of soundscape communication, which is different from the role of a traffic follower in technology.

4.3 Mastering the synergy between humans and machines, steering the narrative of memory

Broadcasters and hosts should build a human-centric human-machine collaboration system, clearly define the responsibilities and scope of technology and professional roles, and ensure that technology always serves the preservation of memory and cultural heritage, rather than replacing humanistic values.

Broadcasters and hosts should define the roles and responsibilities of collaborative teams to achieve complementary strengths. They should assign repetitive tasks such as collecting and organising soundscape data to AI, which will build a soundscape database for categorised storage. They should also utilise speech recognition technology to label soundscape categories, such as market sounds, natural sounds, and ceremonial sounds, and employ algorithms to enable efficient retrieval of basic information. Broadcasters and hosts focus on interpreting the meaning of soundscapes and delivering emotional narratives, exploring the historical context behind soundscapes, uncovering human stories within them, and conveying personal experiences through on-site broadcasts. In the urban soundscape map project, AI is responsible for determining the location coordinates of soundscapes and annotating basic information, while hosts tell the memory stories behind the coordinates through on-site visits.

This division of labour, where AI handles repetitive tasks and humans focus on creative work, is highly applicable in the field of soundscapes[2] .

China Central Radio and Television should delineate the ethical boundary of "giving priority to memory authenticity" and standardize the application of relevant technologies. It is clear that AI synthesized soundscapes need to be marked with restoration attributes, and historical recording processing needs to retain emotional details, such as choking up when the elderly speak, and the output content of virtual anchors needs to be reviewed by real people. As ethical gatekeepers, broadcast hosts should carry out dual control of technology-generated content at the professional level and real level, and effectively maintain the authenticity of memory. As ethical supervisors, broadcasters must conduct dual reviews of the professionalism and authenticity of technologically generated soundscape content to ensure the truthfulness and objectivity of information[3] .

5. Conclusions

Urban soundscapes serve as vibrant carriers of cultural heritage. Each dialectal rhyme carries regional genetic markers, every street vendor's call wraps the warmth of daily life, and each ceremonial echo resonates with collective resonance—the preservation of these fragments is the very foundation of cultural diversity. As algorithmic waves erode the unique imprints of soundscapes and virtual simulations dilute the emotional weight of real-life experiences, the significance of broadcasters as guardians of memory becomes increasingly clear: rooted in professionalism and bridging communication, they anchor the humanistic coordinates of sound transmission in the tide of the times. This is not only a professional commitment under technological pressure but also an indispensable humanistic responsibility in the continuity of civilisation.

"Broadcasting is an art," and it is by no means a mere accumulation of techniques. From decoding regional cultural genes through dialectal phonetics to grasping the emotional weight of soundscapes within historical contexts, this art draws on the integrated accumulation of linguistics, cultural history, and communication studies. Just as interpreting the bustling atmosphere of an old teahouse allows one to distinguish between the melodious tones of Peking opera and the casual chatter of tea drinkers, it also enables one to trace the interplay between the vibrant street life and the trajectory of the times. This composite ability of "technology plus humanities" is the core of "learning"; "Broadcasting has value" lies in its dual role: through professional documentation, interpretation, and dissemination, it brings soundscapes marginalised by algorithms—such as the calls of traditional artisans and the echoes of festive rituals—into the public eye. It serves as both a "sound archive" and a "cultural amplifier," ensuring that urban imprints are not overwhelmed by the logic of traffic. "Broadcasting has a future" because of its irreplaceable nature: AI can synthesise voices, and virtual anchors can perform basic broadcasts, but they cannot replicate the emotional decoding of soundscapes, rational guidance on public issues, or the commitment to humanistic values[4] . In the future, through human-machine collaboration, broadcasting will evolve from a "communicator" to a "guardian of cultural memory," continuously unleashing professional expertise.

Facing algorithmic monopolies, simulacra-driven frenzy, and technological alienation, broadcasters must break through with "adhering to principles while innovating": deepening coding skills to build barriers, activating balanced ecosystems in communication fields, and mastering human-machine collaboration to clarify boundaries. Only then can the sounds of old alleys, regional dialects, and ritual echoes transcend time and space, becoming vibrant annotations of civilisational inheritance. This is precisely the unique value of broadcasting as a "voice communicator" and "cultural gatekeeper"—using sound to connect individuals and collectives, tradition and the present, making urban soundscapes warm, profound, and enduring, remaining vibrant through the vicissitudes of time, and affirming its enduring foundation and irreplaceable future.

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