Crafting Impactful Program Postprints Using Creative Video Editing Techniques

Authors: Zhao Xin

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Abstract

The advent of the digital era has precipitated revolutionary transformations in editing technologies for film and television programs. As public aesthetics undergo continuous evolution, visual demands for diverse genres of film and television content are escalating correspondingly. Conventional video editing methodologies prove overly mundane, failing to satisfy the requirements of contemporary audiences. Conversely, the extensive application of digital technology has introduced novel elements into video editing techniques. Various creative editing approaches and the deployment of special effects editing have intensified the visual sensory impact of film and television programs, thereby exerting a substantial facilitative influence on their audience ratings. Post-production editing technology constitutes a fundamental re-creation of video content, representing an indispensable and integral component of cinematic and televisual arts, as well as a pivotal determinant affecting the outcomes of film and television artistic productions. This study proceeds from an analysis of the current state of post-production editing technology in China, investigating the correlation between creative video technologies and program influence through comparative examination of innovative digital editing methodologies, with the objective of enhancing the viewability and artistic merit of film and television programs.

Full Text

Creating Impactful Programs Through Creative Video Editing Techniques

Abstract: The digital era has brought revolutionary changes to film and television editing techniques. As public aesthetics continue to evolve, audience demand for visual experiences across various program types has grown substantially. Traditional video editing methods often prove too conventional to satisfy contemporary viewers. However, the widespread application of digital technologies has introduced new elements to video editing, with various creative editing

techniques and special effects enhancing the visual impact of film and television programs and significantly boosting ratings. Post-production editing represents a form of re-creation, constituting an indispensable component of film and television art and serving as a critical factor influencing the final artistic outcome. This paper examines the current state of post-production editing technology in China, exploring the correlation between creative video techniques and program impact through comparisons with innovative digital editing methods, ultimately aiming to enhance the viewability and artistic quality of film and television programs.

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Video editing serves to advance narrative rhythm, express thematic ideas, and convey the underlying concepts of film and television programs, representing a crucial technical method for creating high-quality content. Innovative digital editing techniques have opened new possibilities for spatial-temporal relationships in film and television through creative transitions, enhancing both originality and viewability. As traditional editing forms gradually lose their effectiveness in communicating program impact, exploring new editing methods becomes increasingly significant for enhancing program influence.

1. Current Status and Significance of Video Editing Techniques Research

Video editing refers to the post-production process of selecting and combining large amounts of raw footage—including filmed footage, audio, images, and animation—using software to create a continuous, accurately communicative, and uniquely styled artistic work. As an expression of audiovisual art, video editing represents the most critical stage in film and television post-production. Editing determines a film' s narrative structure, controls its expressive rhythm, and can guide audiences into established contexts, manipulating psychological responses and emotional perception. Indeed, editing quality can determine a program' s success or failure.

In today' s fast-paced society, most people choose to watch film and television works for relaxation during their leisure time. As cinematography technology continues to improve, program content has become increasingly rich, enhancing the expressive power of visual language. However, visuals alone can no longer accurately convey creators' intentions, and traditional editing methods fail to meet contemporary audience visual demands. Intense competition in film and television programming has escalated requirements for post-production technology. CCTV has continuously sought paths for program innovation and optimization, with cultural programs such as *The Reader* and *Chinese Poetry Conference*—

themed around promoting traditional Chinese culture—standing out as refreshing alternatives that have attracted substantial audiences.

Traditional editing processes prioritized maintaining action continuity and fluidity, making cut points as invisible as possible to achieve narrative completeness while focusing on the minimal unit of editing: transitions between shots. This approach aimed to align editing with audience thought patterns. However, traditional long takes could not accomplish complex spatial-temporal transformations, particularly for extended-duration shots. Digital technology has perfectly resolved this issue, enabling long takes that effectively immerse audiences in narrative contexts and lead them into the emotions creators seek to express.

The digital editing era signifies dual advancement in both technical and artistic dimensions of editing. Conventional editing effects from traditional practices have become easier to implement and more versatile. Techniques such as match cuts, transitions, speed ramping, split screens, and parallel editing have gained creative applications, making spatial narratives more dynamic, reorganizing fragmented narratives, intensifying dramatic conflict, and rendering program rhythms more compelling. In terms of audience experience, visual impact and emotional communication have become more powerful. The combination of post-production digital editing with digital cinematography has delivered entirely new visual experiences. Creative editing techniques employing visual effects—such as digital matte painting, character keying, virtual cameras, and motion capture—have not only enriched program content structures and strengthened narrative artistry but also endowed programs with greater depth and emotional expression, providing audiences with better and more nuanced viewing experiences.

2.1 Simulation of Surreal Camera Movement Enhances Program Visual Impact

Surreal camera movements are created through digital compositing techniques applied to existing footage. Their primary characteristic is that they cannot be achieved through conventional filming methods, typically representing motion patterns unimaginable and unattainable in real life or objective physics—such as the exaggerated effect of transitioning directly from microscopic cellular particles to cosmic scales. Film and television programs aim to present audiences with realistic effects; even if unrealizable in actuality, such techniques are acceptable as long as they conform to visual perception principles.

Films such as *Life of Pi* have utilized numerous surreal camera linkages to achieve fantastical scenes. Similarly, *Run Lola Run* employed surreal camera techniques, beginning with a high-altitude city overview, followed by a free-fall camera movement at tremendous speed, then seamlessly transitioning into an empty room where the camera settles on a telephone. While conventional filming cannot achieve such free-fall shots, digital technology enables smooth and fluid shot transitions, creating a series of visual spectacles from the audience' s

perspective.

Although many cinematic effects cannot be directly transferred to television programs due to various constraints, the underlying concepts can be adapted and adopted. CCTV' s program *Ji Guo Ren* (*Super Brain*), co-hosted by China Central Television and the Chinese Academy of Sciences, is a scientific challenge program that pits humans against machines in competition, highlighting China' s top-tier artificial intelligence capabilities and bridging the gap between technology and the general public.

The program frequently emphasizes details of human-machine competition scenes but relies on conventional shot transitions to create tension and excitement. This approach lacks novelty in presenting robot capabilities and the underlying technology, resulting in insufficient audience immersion. If surreal camera movements could be applied to these details, highlighting robots' powerful abilities through perspectives and dynamics impossible for humans to achieve visually, the program' s expressive power would be substantially enhanced. For instance, when multiple robots appear on stage requiring camera language to convey a sense of grandeur and novelty that shocks the audience, the program currently only uses wide-angle long shots to provide a macro perspective with insufficient visual impact. By incorporating three-dimensional animation or deploying ant-perspective camera positions to create surreal camera movements, the program could generate an overwhelming sense of robots descending from above, delivering more direct and intense audience experiences. This would enhance visual appeal and impact, achieve the intended intense competition tension between humans and machines, facilitate creators' expression, and better serve the popularization of scientific knowledge.

2.2 Impact of Montage Techniques on Program Rhythm

Television post-production fully demonstrates the charm of editing. As a fundamental technique, montage can be creatively processed to clarify and sharpen program rhythm, communicating creative intentions effectively.

Montage essentially represents an artistic capability for shot linking, combining two or more shots to form complete storylines and enriching camera language. This challenges post-production professionals' selection abilities and logical presentation skills. Conventional editing merely links shots according to predetermined sequences, lacking suspense and atmospheric construction, often leaving audiences feeling flat and uninspired. To achieve compelling editing requires approaching from the audience' s perspective, identifying psychological rhythms with appropriate rises and falls. Rhythm constitutes the soul of a film or television program, directly influencing its quality. Excellent programs can firmly capture audience attention through perfect rhythm control, guiding them through an emotional journey.

For editors, video editing involves more than simple technical execution; they simultaneously serve as ordinary viewers. During editing, they must fully grasp

audience psychology and complete their work from the perspective of general viewers. CCTV-4' s *Happy Chinese* Season 3, a Chinese language teaching program for international audiences, demonstrates superb post-production editing skills and creative montage application. Each episode clearly expresses its thematic content while perfectly achieving educational objectives, with strong continuity between episodes that attracts loyal viewership. Audiences not only comprehend the teaching content but also develop strong interest in the program itself, exemplifying the charm of editing. Post-production plays a crucial role in program effects, requiring editors to possess not only exceptional professional skills but also mastery of camera language transitions to ensure program coherence, communicate main ideas, and enable audience enjoyment—achieving artistic re-creation. Creative montage techniques perfectly integrate technology and art, promoting the development of Chinese language teaching programs for international audiences.

2.3 Impact of Particle and Fluid Animation Techniques on Film and Television Programs

Particle and fluid animations, as editing special effects, operate by data-elementalizing object motion processes according to physical laws and digital modeling principles, creating massive morphological transformations. These techniques produce extraordinary scenes unattainable in daily life. Commonly employed in documentary programs, they can spectacularly depict natural phenomena. Particle animation simulates interactions between objects in nature through technologies that generate large quantities of similar objects moving independently—such as fountains, snowflakes, and sandstorms. By controlling particle structure, size, direction, color, and speed through editing, different effects can be achieved. The character "Sandman" in *Spider-Man* exemplifies particle animation, as do the sandstorms and scarabs in *The Mummy*.

Fluid animation resembles particle animation but applies to liquid scene reconstruction, whereas particle animation focuses on solid object decomposition and reassembly. Common elements like blood and rivers can be reprocessed through fluid animation editing techniques to present physical characteristics with stronger expressive power. The liquid metal character in *Terminator* demonstrates fluid animation application.

Particle animation also belongs to swarm animation—an editing special technique for generating and controlling large-scale, mass scene scheduling. Many filming situations face objective condition constraints that prevent achieving powerful expressive effects. Grand scenes and magnificent crowd gatherings can achieve expected results through swarm animation. Intelligent swarm animation provides each individual element with independent surrounding space, ensuring collision avoidance while maintaining generally consistent directional movement. Many anthropomorphized natural characters employ such special effects editing techniques to enable timely reactions to environmental stimuli

through human senses—sight, hearing, touch, smell, and taste—mimicking human stress responses for action control and movement. This renders characters more vivid, three-dimensional, and humane, effectively narrowing the psychological distance between characters and audiences.

CCTV Documentary Channel' s *Panorama Nature* is a comprehensive documentary program showcasing historical, natural, and technological landscapes, filming global species and stories across 14 countries and regions. The program presents comprehensive land, sea, and air perspectives, with each series featuring different themes. The Pacific series, for instance, focuses on describing the Pacific Ocean' s rich resources and biodiversity. All stories in each episode center on themes rich in human and animal emotions, perfectly and unexpectedly interpreting the Pacific' s multiple personalities. This documentary frequently employs swarm animation special effects editing to richly describe oceans and various marine life behaviors and transformations. Through detailed construction, it enables nature-distant audiences to experience nature' s charm immersively, as if following marine creatures through a wondrous world. The series' stories about Chinese waters demonstrate unique ingenuity in construction and design, opening new perspectives for global audiences and deepening understanding of the Pacific and China' s maritime regions through innovative camera language.

2.4 Digital Matte Painting Techniques Compensating for Production Limitations

In conventional program production, integrating subjects with backgrounds presents significant challenges, typically addressed through background pattern production or rear projection methods using glass reflections. Such techniques often fail to present natural, realistic effects. Digital matte painting perfectly resolves this issue by applying perspective principles during post-production editing to add rendered, composited, or even hand-painted virtual backgrounds onto footage of physical backgrounds and characters, maintaining consistency with live-action style and shot processing. This technique liberates programs from temporal and spatial constraints, delivering unimaginable visual impacts and reconstructing reality.

In digital matte painting, many scenes may not objectively exist in reality, making the realism of these technologically created scenes the determinant of success. *National Treasure* is a cultural exploration program that has generated substantial discussion since its launch, combining documentary and variety show production methods—cloaking cultural essence in variety show packaging while maintaining documentary quality as an entirely new cultural expression form. Each episode selects a "national treasure guardian" to perform the artifact' s past and present, deciphering the genetic code of Chinese culture. The current program format reconstructs history through scene creation and advances program progression through actor performances, with stage backgrounds serving merely as props that cannot authentically shape historical environments. While the

program' s innovation has garnered praise, applying digital matte painting to transform stage presentation—integrating actors and backgrounds authentically, narrowing the connection between artifacts and people, and creating museum appeal to attract more offline visitors—would better facilitate understanding artifacts and inheriting the spiritual essence of Chinese civilization.

Conclusion

Video post-production editing carries significant meaning for film and television program effects. The digital editing era provides broader creative space for program creation, while creative editing techniques inject new elements into audience visual experiences. Only through continuously improving editing standards, emphasizing creative editing technique application, satisfying increasingly sophisticated audience visual demands, and achieving developmental progress in film and television editing for the digital age can programs truly achieve profound impact.

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(Author Affiliation: CCTV Technical Production Center)

Note: Figure translations are in progress. See original paper for figures.