

New Musical Writing Processes for Cinema

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Before the arrival of electronic technologies, music writing practices for cinema were not substantially different from those used by composers of orchestral and opera repertoire. Only in post-production did film music avail itself of the editing potential typical of recorded and electronic music. With rare exceptions, such as Bebe and Louis Barron's soundtrack for *Forbidden Planet* (Fred M. Wilcox, 1956), it was not until the 1970s when directors such as Michelangelo Antonioni and Andrei Tarkovsky and sci-fi movies incorporated synthesized sounds in the soundtracks of their films. These early attempts to emancipate film music from traditional procedures gathered pace and since the 1980s synthesizers have made it possible to combine traditional compositional practices with experimental processes. Nevertheless, electronic music remained essentially a collection of sound effects, or a means to simulate orchestral instruments, until synthesized sounds were integrated with the distinctive timbres of an orchestra. The revolutionary combination of synthesizers, sequencers and software for music writing in the 1990s resulted in the Digital Audio Workstations which modern-day composers use to produce mock-ups, i.e. digital music demos. Through multi-timbral sampling, complex sound mapping techniques and spectral morphing, it became possible to mimic actual timbres and articulations of classical music instruments, leading to new compositional practices that allowed first the composer and the music team, then the filmmakers, to preview the final score. This new trend accelerated composition and production processes and encouraged hybrid scores, and was welcomed by directors who in many cases had a background in advertising and pop video production. A willingness to accept such new digital processes emerged in part through collaborations with rock and pop musicians and contributed to hybridized musical languages and new composing practices.

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EVOLUTION OF FILM SCORING

Up until the 1950s, much film music borrowed from the familiar expressive codes of late nineteenth-century music. It was thus superficially associated with musical cliché and general accessibility, all of which contributed to the sense of film music as an essentially inferior or second-rate craft in contrast to consecrated art music and more challenging avant-garde idioms. Film music, being in the service the moving image, had, it seemed, surrendered its cultural value, an assessment rooted in the belief that classical music was, of all the arts, the most autonomous, illustrated most obviously in the notion of absolute music. From the 1950s onwards, music for film began a slow renewal manifested in cautious, although still confused, innovation. The scores modelled on the late nineteenth-century symphonic style were no longer an undisputed point of reference. Directors now began to embrace popular music, jazz and even rock. The role of sound accompaniment was also changing: the sense of music as redundant commentary, which for many years had characterized film music, now appeared tired and even anachronistic. Musicians and directors opted for scores that were capable of acting in counterpoint with images, opening new audio-visual pathways.

It was against this background that we can place the experience of the composers of the new generation: they dealt not just with new aesthetics and composition models, but also with new technologies. This historical perspective in turn sheds light on the new film music language, and substantial changes to traditional harmony and melody, e.g. the blurring of the boundary between sound and noise achieved by electronic means; use of procedures derived from spectral music for creating harmonic areas, sometimes merging, sometimes clashing in different pitch ranges; spectral transformation for smooth harmonic transitions; and overlapping of different spectra. Such new music writing practices have not yet been systematically studied, nor do they feature in traditional composition manuals. Research in this field also fulfils a didactic purpose, providing future composers with musical analyses of selected works and composition models representative of the new film music writing, which today are, in most cases, learnt through practical-empirical experience and thus transmitted orally.

EVOLUTION OF FILM SCORING STUDIES

Up until the end of the twentieth century, the study of music in film had been informed by aesthetics and narratology; the interaction of soundtrack and moving images was geared to understanding the role of music within the audio-visual dramaturgy. From the early 2000s onwards, critical literature increasingly focused on reconstructing film music's creative processes from the 1930s to the 1980s when writing was done primarily on paper, inevitably involving the study of preparatory materials collected in composers' archives.

The historical shift from paper to audio documents then to IT has led to an uncertainty about sources; the absence of documentation and of the tracking of production from genesis to the final version has all but erased creative histories. In the first decade of the twenty-first century, scholars started to grapple with these issues, but research on the creative process of new music for cinema has become notably more frequent over the last five to six years. The problem of locating and decrypting digital sources means that there have inevitably been fewer reconstructions of the creative process than of the earlier symphonic era. In its place, reconstructions of film music written in the final decade of the twentieth century and the first two decades of the twenty-first century have relied on interviews with, or in accounts by, the composers themselves. Such approaches have only highlighted the lack of a coherent methodology for interpreting electronic, IT and digital sources, and revealed an equivalent demand for new technological competencies on the part of musicologists and film scholars. What research there is—almost exclusively specific case studies—remains in its infancy. More systematic theoretical work is therefore required, an urgent and fundamental step in redrawing traditional research methodologies on film music writing in order to understand the digital music creative processes that have changed film music.

RECONSTRUCTING THE CREATIVE PROCESSES

The study of the creative process of the new musical writing for cinema requires appropriate methods able to investigate how and to what extent the development of increasingly advanced technologies might have influenced composition paradigms. The starting point is the theoretical account of the creative processes of electro-acoustic music formulated in critical literature over the past two decades. It is there that questions about sound source processing and the relationships between audiovisual documents and other types of preliminary materials have been raised. Further methodological tools are offered by recent research on the creative processes involved in Computer Assisted Composition (CAC), though because these have taken the form of case studies unrelated to film music there is an obvious need for recontextualisation. As to the question of lability and the ephemeral nature of electronic and IT sources, recent methodologies for the analysis and the critical editing of electronic music are helpful. Such approaches address all the phases leading to the production of a film soundtrack from an historical perspective, including the changes of production processes, and raises for researchers a whole set of questions of fundamental importance. Covering a period from the infancy of film sound to the modern day, this means issues of methodology, definition of the object of study, the heterogenous writing processes and resultant documentary sources such as original handwritten scores, printed editions, composers' sketches and

notes, rough drafts; SIAE programmes (including reliability testing), sketch pads and notebooks, drafts, time counts and specific cues, correspondence with partners, business cards, receipts and other personal materials.

Such work reveals the dense, complex network of relationships between various sound and audio-visual documents—soundtracks, preliminary audio materials, commercial sound recordings, recordings made by sound-effect technicians for musical purposes—and, more recently, software, digital encoding of music (e.g. MIDI, MusicXML, etc.), and computer coding. Research such as this also engages with new electronic organology, sound spatialization, interfaces of sound production and processing strategies (from the earliest electric instruments to the most recent declinations of programming languages), opto-electrical instruments, the relationship between programming and visual representation of sound, and sound libraries.

VIRTUAL LIBRARIES

In the digital age, more and more composers are making use of computer library repositories of sampled sounds and musical themes. These trends, frequently apparent in popular music, are increasingly extended to “art” music and film scoring. Today, composers can access and contribute to a wealth of audio materials, procedures and languages, where historicity and innovation coexist in a kind of eternal present. The web has become a huge archive that composers can consult to develop their musical ideas. Musicians and musicologists are dealing with a global expansion of a practice of shared patches, sounds, and libraries born some 30 years ago at the dawn of the Computer Assisted Composition.

Today, the production of multi-timbre samplers and increasingly sophisticated interfaces that control the performance parameters of virtual instruments is an industry and a source of revenues for orchestras (e.g. Vienna Symphonic Library). The production of virtual instruments, moreover, is often under the creative direction of cinema composers and sound-designers who develop new libraries that reflect modern cinematographic idioms. Sophisticated though they may be, libraries cannot provide the exact timbres and expressive potential of traditional instruments. Inevitably, the language of film music has been transformed, with composers and orchestrators opting for musical designs suited to available samples, with a strong tendency towards new film music stereotypes. At the same time, new technologies of sound design have presented new creative possibilities that still allow for the distinctive voices of individual composers to be heard. Direct contact between musicologists and film music composers together with industry professionals encourages more detailed analysis of topics not treated in existing literature and deepens our understanding of the practical aspects of software composition. Such work will help clarify the production processes of hybrid scores, i.e. those made using virtual orchestration techniques, and those that blend “real” instruments with simulated equivalents.

THE ARTICLES IN THIS JOURNAL

This issue of *Cinéma & Cie* presents a collection of papers that share a common purpose of remodeling existent theories developed to analyse “art” music in order to reflect the current aesthetic and production context of film music. Only by addressing specific aspects of more recent film music composition and production, and developing new analytical tools, can we historicize and fully understand the differences between the film music of the twentieth and the twenty-first centuries.

Roberto Calabretto discusses the role of film music in the works of directors Michelangelo Antonioni and Andrei Tarkovsky, particularly their use of electronic sounds. Tarkovsky, collaborating with Eduard Artemyev, incorporated electronic music in films like *Solaris*, moving away from typical science-fiction tropes. Similarly, Antonioni worked with Vittorio Gelmetti in *Deserto Rosso* to reflect the protagonist’s mental state through electronic music, adding a human dimension. In both cases, noise and music were blended to create a rich and complex soundscape.

Luca Cossettini highlights how Edgard Varèse’s electronic composition is deeply intertwined with his reflections on the relationship between music and film, suggesting that these two art forms are closely connected, almost inseparable. His works, including *Déserts* (1954), *La procession de Verges* (1955), and *Poème électronique* (1959), explored pioneering ways of integrating music with moving images—ranging from fictional to documentary films and multimedia experiences. The digital production tools of today help reveal the visionary nature of Varèse’s aesthetic approach, particularly his understanding of music in relation to visual media. The paper explores the final years of his life, focusing on his studio work and his engagement with technology, showing how these elements contributed to the development of film music.

Donald Greig considers *Crimson Tide* (Tony Scott, 1995), an example of the Hollywood “high-concept” film. Hans Zimmer’s score is a landmark in the composer’s career, consolidating his image as an action-adventure specialist. The article explores Zimmer’s now-familiar work process and key stylistic trademarks such as a male chorus, which acts both commentatively and symbolically. Using Neo-Riemannian theory, the article analyzes harmonic techniques that connect Zimmer’s music to earlier Hollywood traditions, showing his work as more a continuation than a radical evolution of familiar style topics.

Kristjan Stopar analyses the production of Hans Zimmer, one of the most renowned and prolific film composers today, shaping the characteristics of modern film music. His eclectic style reflects his ability to work across different musical genres, while his efficiency is evident in both composition and production.

Since arriving in Hollywood in 1989, Zimmer has revolutionized the traditional music production process, optimizing it through computer technology. While he often employs a traditional narrative method with thematic elements, his stylistic evolution has moved away from classical concepts like thematic development. Zimmer's blend of traditionalism and innovation has significantly influenced the evolution of film music.

Finally, Ilario Meandri, Andrea Bruno e Giulia Ferdeghini study how the digital transition has profoundly changed the workspace of contemporary composers, leading to a new "digital documentality" that calls for updated musicological research methods. This paper presents early findings from ethnographic fieldwork at Christopher Young's studio, emphasizing the importance of studying both documents and production practices. The research combines archival work with oral history and diverse documentary sources, proposing a redefined methodology for examining modern creative processes. Field observations, focused on Young's work for three films (*The Autopsy*, *The Offering*, and *The Piper*), highlight how digital technologies have transformed the compositional process with innovative technical and creative solutions. This shift marks the end of a traditional compositional era and the beginning of a new creative phase, characterized by collaboration, an abundance of musical material, and the increasing marginalization of traditional musical notation. While the findings are not universally applicable, they offer valuable methodological insights for studying contemporary film music.