

Cross Media Arts: Creative Assemblages for Social Impact — The Case of *Five Centuries, Fifty Years: An Evocation of the University of Évora*

Mário MARQUES¹

Abstract: *This paper analyses Five Centuries, Fifty Years: An Evocation of the University of Évora (2024) as a case study in Cross Media Arts, highlighting how interdisciplinary artistic assemblages foster educational, cultural, and social impact. Combining video mapping, music, theatre, architecture, and digital design, the project transformed the Main Cloister of the Colégio do Espírito Santo into an immersive environment celebrating heritage and collaboration. Grounded in theories of media convergence, relational aesthetics, and participatory art, it examines implications for creative education and sustainable practice, showing how experiential learning and environmentally responsible strategies position universities as hubs for innovation and social engagement.*

Key-words: *Cross Media Arts, video mapping, interdisciplinary creation, experiential learning, sustainable production.*

1. Introduction

In recent decades, *Cross Media Arts* have emerged as a fertile ground for creative and pedagogical experimentation, where artistic and technological languages converge to generate new modes of participation and meaning making. This contemporary practice challenges the traditional division between artistic disciplines—such as music, theatre, design, and architecture—by fostering immersive, multi-sensory experiences that engage audiences as co-creators rather than passive observers (Giannachi 2012; Manovich 2013; Jenkins 2006).

As Bishop (2012) argues, participatory art redefines the relationship between artist, work, and audience by inviting collective authorship and social collaboration. In parallel, Bourriaud's (2002) *relational aesthetics* proposes that art can create temporary communities built around shared experiences rather than static objects.

¹ Évora University, mdmarques@uevora.pt

Within this context, *Cross Media Arts* become a strategic territory where creative expression and social innovation coexist—linking technology, science, and culture in ways that amplify both artistic relevance and social responsibility. The project *Five Centuries, Fifty Years: An Evocation of the University of Évora* (2024) exemplifies this convergence. Conceived to commemorate the 500th anniversary of the University's foundation and the 50th anniversary of its re-establishment after the Carnation Revolution, the performance integrated theatre, live music, architecture, video mapping, and visual arts to reinterpret the University's history through an interdisciplinary lens.

Developed under the artistic direction of Ana Telles and conceptual coordination of Mário Dinis Marques, the project gathered over 140 participants from five departments—History and Heritage, Architecture, Music, Theatre, and Visual Arts—together with the technical production company *Olho de Boi*. By combining historical research, creative practice, and digital technologies, the project embodied a model of *creative assemblage* (Deleuze and Guattari 1987; Bourriaud 2002) that emphasised collaboration and sustainability as key drivers of artistic innovation.

The *Five Centuries, Fifty Years* project illustrates how *Cross Media Arts* can act simultaneously as a cultural celebration and as a pedagogical laboratory. The project's creation process involved students, faculty, and external professionals in all stages—from archival research and text development to the creation of 3D architectural models, sound design, and live performance. This collaborative approach redefined the role of the University not only as an educational institution but also as a catalyst for creative citizenship and community engagement.

Moreover, the work reaffirmed the University of Évora's identity as both a historical and a forward-looking institution. The choice of the Main Cloister—a site that encapsulates five centuries of Portuguese educational history—as the projection surface and stage transformed the architectural heritage into a living, performative narrative. Through this reactivation of space, the project aligned with contemporary discourses on *living heritage* and *site-specific performance*, where the architectural environment becomes both the medium and message of artistic creation (Giannachi 2012; Shaw and Weibel 2003).

Finally, this introduction situates the project within the broader framework of cultural sustainability and social innovation. By integrating creative disciplines, advanced digital tools, and participatory methodologies, *Five Centuries, Fifty Years* demonstrates how universities can foster a culture of interdisciplinarity that bridges academic research, artistic practice, and civic impact.

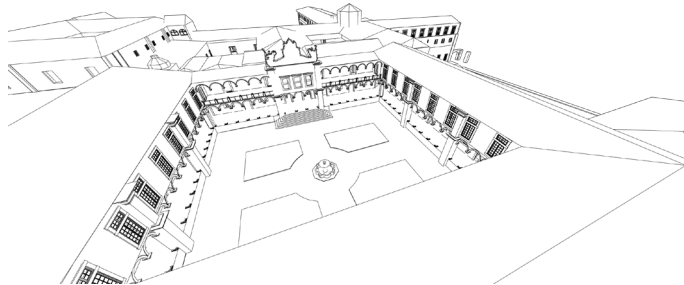


Fig. 1. *The Main Cloister of the Colégio do Espírito Santo* – Renato Machado, 2024



Fig. 2. *The Main Cloister of the Colégio do Espírito Santo during the Five Centuries, Fifty Years- video mapping frame* -Hugo Marques, 2024.

2. Context and theoretical framework

2.1. The emergence of Cross Media Arts

The notion of *Cross Media Arts* arises from the increasing hybridisation of artistic and technological languages in the digital era. According to Jenkins (2006), the contemporary cultural landscape is defined by *media convergence*—a process in which boundaries between different platforms dissolve, allowing for interactive, networked, and participatory modes of creation. For Giannachi (2012), this convergence represents a paradigmatic shift in how artistic experiences are conceived and consumed, redefining the audience as an active component of the creative process.

Cross Media Arts therefore encompass an array of practices where music, theatre, visual design, architecture, and digital media intersect to generate immersive and multi-layered experiences. Manovich (2016) stresses that the intersection between traditional and digital media is not merely technical, but profoundly cultural, enabling new grammars of perception and communication that respond to the expectations of a digitally literate society. These practices establish feedback loops between artistic expression and technological innovation, aligning creative processes with contemporary needs for collaboration, inclusion, and sustainability.

In this light, the project *Five Centuries, Fifty Years* functions as a case study that demonstrates how *Cross Media Arts* can serve as both a creative strategy and a social instrument. By intertwining historical narrative, architectural heritage, and multimedia technology, the project sought to produce a living dialogue between the University's past and its present role in society. This reflects what Bourriaud (2002) describes as *art as social interstice*—a space where artistic practice enables new forms of human interaction and shared experience.

2.2 Cross Media Arts and social engagement

The social relevance of *Cross Media Arts* lies in their capacity to generate collective participation and to democratise access to artistic creation. As Bishop (2012) observes, participatory art transforms spectators into collaborators, thereby dissolving the hierarchy between creators and audiences. This shift carries important implications for higher education, where learning increasingly depends on experiential and interdisciplinary approaches.

In the University of Évora project, participation extended beyond symbolic involvement: students and staff became co-authors in a process of shared authorship that merged artistic production, technical implementation, and academic research. Such practices embody what Raymond Williams (1981) defines as the *cultural function of institutions*—to facilitate spaces of dialogue, learning, and collective reflection that nurture civic responsibility.

Furthermore, *Cross Media Arts* act as catalysts for social sustainability, enabling inclusive collaboration between disciplines and communities. Projects of this nature highlight the potential of universities to act as cultural mediators, linking education, creativity, and social innovation. Through this mediating role, the University of Évora not only celebrated its heritage but also reaffirmed its commitment to contemporary challenges, such as environmental awareness, digital transition, and community inclusion.

2.3. Artistic innovation and technological mediation

The technological dimension of *Cross Media Arts* transcends the notion of tool or medium: it operates as an epistemological framework for understanding and representing the world. Murray (2012) identifies interactive media as a *cultural practice* that reshapes perception and authorship, emphasising processes over objects. Similarly, McLuhan's (1964) famous dictum, "the medium is the message," reinforces the idea that technology itself conditions the way meaning is constructed and experienced.

Within *Five Centuries, Fifty Years*, this principle materialised through the use of video mapping, 3D modelling, sound design, and architectural lighting to create a performative dialogue between space and narrative. The project's reliance on technology was therefore not instrumental but conceptual: digital tools were used to translate historical memory into sensory experience, allowing audiences to perceive the University's architectural and cultural evolution in real time.

This interplay between innovation and heritage mirrors Shaw and Weibel's (2003) notion of *future cinema*, where emerging technologies extend cinematic imagination beyond the screen into the spatial and interactive domain. By mapping images onto the cloister's walls, the project not only enhanced aesthetic experience but also questioned how contemporary art can engage responsibly with heritage sites—balancing spectacle with preservation.

2.4. Towards a framework of sustainable interdisciplinarity

The *Cross Media Arts* framework adopted in this project positions interdisciplinarity as a sustainable model of creation, where artistic, scientific, and technological domains operate in reciprocal exchange. Gablik (1991) calls for an *ethical re-enchantment of art* that reconnects creative practice with ecological and social consciousness. Similarly, Balsamo (2011) argues that design and culture must converge to foster technological imagination capable of addressing real-world issues.

The University of Évora initiative exemplifies this ethos by embedding ecological awareness, social inclusion, and technological responsibility into every stage of its development. Rather than conceiving sustainability as a mere operational constraint, the project treated it as an aesthetic and moral value, shaping decisions from conceptual design to final execution. This holistic approach situates *Five Centuries, Fifty Years* within a new paradigm of artistic practice—one that views creativity as a means of knowledge production and as an instrument of positive social transformation.

3. Methodology

The methodology adopted in *Five Centuries, Fifty Years: An Evocation of the University of Évora* was founded on three interconnected principles: interdisciplinarity, experiential learning, and sustainability. Together, these provided the conceptual and practical framework through which the project combined artistic excellence with educational and social relevance. The following subsections outline the methodological design and its implementation across the project's creative, technical, and pedagogical dimensions.

3.1. Interdisciplinary and collaborative approach

The project was structured according to the principle of the creative assemblage, integrating distinct artistic and scientific fields into a horizontally organised and collaborative process. This approach resonates with Bourriaud's (2002) idea of *relational aesthetics*, in which meaning is generated through human interaction and shared experience, and with Manovich's (2016) theory of media convergence, which considers the blending of analogue and digital media as a catalyst for new forms of cultural expression.

Collaboration was at the heart of the project's conception and execution. The departments of History and Heritage, Music, Theatre, Architecture, and Visual Arts and Multimedia each contributed specific expertise, coordinated through regular joint meetings, technical workshops, and interdisciplinary rehearsals. The artistic direction—led by Ana Telles—ensured aesthetic coherence and narrative integrity across the different disciplines. This structure allowed for the mutual translation of ideas between historical research, artistic creation, and technological development.

Crucially, the interdisciplinary methodology promoted collective authorship. Students, teachers, and technicians collaborated as peers, sharing creative responsibility rather than operating within hierarchical structures. This egalitarian framework not only reflected the project's democratic ethos but also enhanced its pedagogical value, enabling participants to understand the interdependence between artistic vision, historical accuracy, and technological feasibility. The result was a unified creative work that mirrored the University's identity as both a custodian of heritage and a site of innovation.

3.2. Experiential learning methodology

Inspired by David Kolb's (1984) experiential learning theory, the project considered knowledge as something constructed through active engagement, reflection, and experimentation. The design and production of *Five Centuries, Fifty Years* offered students the opportunity to learn by doing—bridging theoretical understanding with practical application.

Students were embedded in multidisciplinary creative and technical teams, collaborating directly with academics and professional artists. This immersive learning environment provided exposure to real-world artistic workflows, allowing participants to experience the challenges of large-scale production, teamwork, and project management. Students contributed to a wide range of activities, including historical and archival research, 3D modelling of the Main Cloister, visual content design, music production and recording, sound design, and lighting and projection support.

The experiential framework was designed to cultivate transversal competences such as collaborative planning, time and resource management, problem-solving, and critical reflection. Students were encouraged to take ownership of their creative and technical decisions, guided but not directed by tutors. This empowerment nurtured both autonomy and accountability, helping them develop a holistic understanding of the artistic process from conception to performance.

Moreover, the project functioned as a pedagogical laboratory where the boundaries between teaching, research, and creation were deliberately blurred. Academic content informed artistic decisions, while creative experimentation generated new insights applicable to research and pedagogy. This reciprocal relationship strengthened the University's mission to integrate practice-based research within its educational model, aligning artistic inquiry with broader institutional goals of innovation and community engagement.

The experiential methodology also emphasised reflective learning. Following Kolb's cycle—concrete experience, reflective observation, abstract conceptualisation, and active experimentation—students documented their progress, evaluated outcomes, and discussed results in collective debriefings. These moments of reflection were essential for transforming artistic activity into knowledge production, reinforcing the project's dual nature as both an artwork and a research experiment.

3.3. Sustainability and social responsibility

Sustainability was embedded as both a methodological and ethical dimension of the project, reflecting the University of Évora's institutional commitment to environmental, social, and cultural responsibility. The project's conception aligned with the United Nations Sustainable Development Goals (SDGs), treating sustainability not merely as a logistical requirement but as a creative principle guiding decision-making throughout the process.

From an environmental perspective, several measures were adopted to minimise energy consumption and ecological impact. Rehearsals were scheduled predominantly during daylight hours to take advantage of natural light and reduce the reliance on artificial illumination. Technical sessions were planned with precision and efficiency, avoiding unnecessary energy use. Equipment setups were deliberately right-sized—employing only the resources essential to achieving the desired artistic quality. Scenic materials and costumes were reused and recycled, and waste generation was minimised through careful coordination between departments. These actions established a model of resource-aware artistic production, demonstrating that aesthetic ambition can coexist with environmental responsibility.

The social dimension of sustainability was equally central. The project's organisational model promoted inclusion, equity, and participation, ensuring that students, teachers, and technicians contributed as equal partners. Collaboration across different age groups, disciplines, and professional backgrounds fostered intergenerational learning and mutual respect. Moreover, the active involvement of women and men in creative, technical, and leadership roles exemplified the project's commitment to gender equality and the diversification of representation within the arts and media sectors.

In the cultural domain, sustainability was expressed through the preservation and re-signification of heritage. The Main Cloister—an emblematic symbol of the University's identity—was approached with utmost care and respect for its architectural integrity. All technical interventions were non-invasive and reversible, employing projection and sound systems that avoided any physical alteration of the site. The project thus transformed the cloister into a living museum, where heritage became a medium for artistic expression and community engagement.

This multidimensional approach reflects Suzi Gablik's (1991) vision of ecological art as an agent of ethical and social transformation. In *Five Centuries, Fifty Years*, sustainability transcended mere environmental management to become an aesthetic and moral orientation, embedding ecological awareness, inclusivity, and responsibility within the creative act itself. By doing so, the project offered a replicable model of sustainable cultural production, aligning art-making with the principles of active citizenship and ethical creation.

3.4. Technological and artistic integration

Technology was not treated as an auxiliary tool but as an integral component of artistic thinking. Following Murray's (2012) understanding of interactive media as a cultural practice, the project employed technology as a medium of exploration and meaning rather than as spectacle. The technical setup was conceived to enhance the dialogue between visual projection, sound design, and live performance, creating a multi-sensory narrative that respected the architecture's historic character.

The production team employed specialised software including MadMapper for video mapping, Blender and Maya for 3D modelling, Reaper and Sibelius for sound design and musical arrangement, and Vectorworks and Lightconverse for lighting simulation. Each technology served a specific narrative or aesthetic function: mapping software enabled precise alignment between projected imagery and the cloister's façade geometry; 3D modelling provided a digital twin for spatial testing; and lighting design tools ensured that projection and illumination complemented rather than competed with each other.

Importantly, the integration of these technologies fostered collaborative digital literacy among students and staff. Technical specialists from the partner company Olho de Boi offered training sessions and workshops on projection mapping and audiovisual synchronisation, transforming the production process into a learning opportunity. This collaboration bridged academic research and industry practice, enhancing professional readiness while maintaining the academic spirit of experimentation.

The resulting performance demonstrated how technology can operate as a bridge between heritage and innovation. Rather than imposing digital effects on the site, the creative team allowed the architecture to dictate the rhythm and scale of projection, creating a dialogue between stone, light, and sound. In this sense, technology became a mediator of memory—illuminating rather than overshadowing history.

4. Results and Discussion

The outcomes of *Five Centuries, Fifty Years* reveal how interdisciplinary collaboration and experiential learning can generate tangible artistic, educational, and social results. Beyond its success as a public performance, the project served as a living experiment in cross-disciplinary pedagogy, cultural mediation, and sustainable artistic practice.

4.1. Educational results: from participation to co-authorship

The most significant pedagogical outcome was the transformation of students from passive learners into active co-authors. Their direct involvement in research, design, and production stages provided authentic, practice-based learning experiences. Working within real production timelines and professional-quality environments enhanced students' competences across technical, artistic, and organisational domains.

Students engaged in tasks such as archival research, 3D digital modelling, sound and light design, music production, and actor support, thereby bridging theoretical and practical knowledge. These collaborative processes encouraged critical thinking, creativity, and accountability. As Kolb's (1984) learning cycle suggests, this combination of concrete experience and reflective observation enabled students to internalise lessons more effectively than traditional classroom teaching.

Moreover, the project strengthened the University's curriculum by integrating STEAM education (Science, Technology, Engineering, Arts, and Mathematics) principles into its methodology. The collaboration between artistic and technological departments created new opportunities for transdisciplinary learning, demonstrating that creative production can serve as both an academic and professional training ground.

4.2. Cultural and heritage impact

At a cultural level, the project redefined the relationship between heritage and innovation. By transforming the Main Cloister of the Colégio do Espírito Santo into an open-air stage, the performance brought historical architecture into dialogue with digital art, allowing audiences to experience the University's identity through an immersive narrative. The projection mapping, accompanied by live music and theatrical performance, narrated key episodes of the institution's history—from its Jesuit origins to its contemporary role in Portuguese higher education.

This re-signification of heritage aligns with international debates on living heritage and site-specific art, where historical spaces are activated through creative interpretation. The use of non-invasive technologies ensured that the cloister's physical integrity remained intact while its symbolic value was amplified. The project thus achieved a dual function: it preserved cultural memory while reinterpreting it through the lens of contemporary creativity.

Historically, this initiative contributed to the valorisation of Portuguese academic heritage, situating the University of Évora within the broader European context of universities that combine tradition with innovation. As an institutional act of remembrance and renewal, *Five Centuries, Fifty Years* demonstrated how the arts can reinforce cultural identity while opening pathways for new forms of expression.

4.3. Technical and organisational results

From a technical standpoint, the production achieved a high level of interoperability and efficiency across sound, light, and video mapping systems. Workflows were meticulously coordinated to ensure synchronisation between digital projections, musical cues, and live performance timing. Each department contributed its expertise to the creation of an integrated aesthetic, guided by the principle of *proportional design*—using only the equipment necessary to achieve optimal artistic effect without excess or waste.

Lighting design framed both the architectural features of the cloister and the movements of the performers, avoiding conflicts with projected imagery. Sound design balanced pre-recorded and live elements to ensure intelligibility within the reverberant space. Video mapping achieved millimetre precision thanks to the digital 3D model created by the Architecture students under the supervision of Jorge Hipólito de Sá. This collaborative interoperability was a hallmark of the project, reinforcing the educational and professional development goals that underpinned its conception.

In terms of management, the project adhered strictly to a timeline-based production model, ensuring efficiency and accountability across phases:

- -Concept and planning: September 2022 – February 2023
- -Funding approval and technical partnerships: 2023
- -Departmental coordination and workshops: September 2023 – January 2024
- -Script development and voice recording: February 2024
- -Rehearsals and technical setup: March – May 2024
- -Public performance: 15 May 2024

This structured workflow allowed the project to maintain artistic quality while meeting logistical constraints typical of heritage-based productions.

5. Sustainable Development Goals (SDGs) Addressed

The project demonstrates measurable alignment with several United Nations Sustainable Development Goals (SDGs), embedding sustainability within its operational, social, and cultural strategies:

SDG 4 – Quality Education:

By creating an experiential learning ecosystem that integrates historical research, creative practice, and digital literacy, the project fostered interdisciplinary competence, teamwork, and innovation in real contexts.

SDG 5 – Gender Equality:

Equal participation of women and men across creative, technical, and leadership roles highlighted the project's commitment to inclusivity and equitable representation.

SDG 9 – Industry, Innovation and Infrastructure:

The project's technological experimentation in 3D modelling, video mapping, and lighting design bridged academic and professional standards, strengthening the link between creative education and digital industries.

SDG 11 – Sustainable Cities and Communities:

The valorisation of the University's architectural heritage through non-invasive artistic intervention reaffirmed the social and cultural role of heritage sites as spaces for community engagement.

SDG 12 – Responsible Consumption and Production:

Energy and material efficiency—achieved through daylight rehearsals, minimal equipment usage, and recyclable materials—illustrated sustainable artistic production practices.

SDG 17 – Partnerships for the Goals:

Collaboration between university departments, private companies, and the local community embodied the principle of partnership-driven innovation, promoting networks of shared expertise.

Together, these practices positioned the University of Évora as a model for sustainable cultural innovation, demonstrating that artistic excellence and social responsibility are mutually reinforcing.

6. Conclusions

The case of *Five Centuries, Fifty Years: An Evocation of the University of Évora* illustrates how *Cross Media Arts* can function as a vehicle for innovation, education, and cultural sustainability. By integrating artistic creation, technological experimentation, and community participation, the project transcended the boundaries of traditional academic or artistic formats, positioning itself as both a performance and a social intervention.

Three methodological pillars proved decisive to the project's success:

Interdisciplinary co-creation: The horizontal collaboration between departments enabled a synthesis of artistic, historical, and technological knowledge, producing a coherent and impactful final work.

Experiential learning: Student participation throughout all stages of creation fostered autonomy, responsibility, and creative competence, aligning pedagogy with professional artistic practice.

Resource-aware sustainability: The deliberate management of energy, materials, and time proved that complex artistic projects can be environmentally conscious without compromising aesthetic quality.

In summary, the project stands as an exemplary model of creative interdisciplinarity within higher education, demonstrating that universities can serve as laboratories for cultural innovation and social engagement. Its success underscores the transformative potential of *Cross Media Arts* as a field that unites art, science, and technology under a shared purpose: to generate knowledge, foster inclusion, and inspire collective imagination.

Future developments should focus on formalising impact evaluation frameworks—including measurable educational outcomes, audience engagement indicators, and environmental performance metrics—to ensure the replicability and scalability of such initiatives in other cultural and academic contexts.

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