
The Conference Convenors received a total of 44 abstracts. Abstracts underwent a double-blind peer review by two members of the Conference Organising Committee. Authors of accepted abstracts (32) were invited to submit a full paper. All submitted full papers (18) were again double-blind peer reviewed by two reviewers. Papers were matched as closely as possible to referees in a related field and with similar interests to the authors. Sixteen full papers were accepted for presentation at the conference and a further 6 papers were invited to present based on submitted abstracts and work-in-progress. Revised papers underwent a final post-conference review before notification of acceptance for publication in these conference proceedings.

Please note that papers displayed as abstracts only in the proceedings are currently being developed for submission to a digital cultural heritage special edition of an academic journal.
Abstract

In July 2016, a group of design students from Monash University were presented with the opportunity to engage their communication design practice with the emerging interdisciplinary field of digital cultural heritage through participating in the 2016 Culturescape study abroad course. As part of an immersive research studio run in conjunction with the Biennale Sessions programme of the 15th Venice Architecture Biennale, these undergraduate students were challenged to conceive of designed interventions that respond to the “experimental preservation” of Venice. Taking inspiration from the Victoria & Albert Museum’s special exhibition at the biennale, A World of Fragile Parts, their resulting speculative designs offer a platform for thinking critically and creatively about contemporary themes related to cultural heritage by offering creative propositions for how historical objects, places and everyday social practices can be experienced in the postdigital era.

This short paper will focus its discussion to considerations associated with establishing a situated learning experience, inspirations driving the immersive research studio, the “culturescraping” design brief and the design concepts that were generated through this programme.

Keywords: A World of Fragile Parts, Communication Design, Culturescape, Curatorial Design, Digital Cultural Heritage, Teaching/Research Nexus
on four separate occasions since 2009, CS operates as a flexible learning programme that promotes attentiveness to cultural specificity and the situatedness of studio learning experience. While adapting to different curricular contexts with each of its previous deliveries, the programme has consistently demonstrated a pedagogical approach that emphasises participants engaging in meta-cognitive activities that encourage each student to become increasingly aware of the contexts and institutional settings in which their learning takes place. Situated learning acknowledges how the process of knowledge co-construction occurs in context and is embedded within a particular social environment. (Lave & Wenger 1991) Theoretically, situated learning stands in contrast to most conventional forms of teaching and learning activity where knowledge (and “know how”) is largely abstracted by being imparted out of context. CS produces a composite “learning environment” by designing a curricular structure that interrelates closely with its cultural setting and social situation. Through the integration of fieldwork, creative process and studio critique, students are provided with an immersive studio experience enabling them to explore their creative practices by developing cultural content for emerging art and design practices. In the case of CS2016, particular emphasis was directed towards exploring the role of communication design in the curatorial design of cross-platform, transmedia experiences in digital cultural heritage. As part of its conceptual framework, curatorial design emphasises the integration of digital mediation and spatial practice by recognizing that digital technologies and their associated cultural practices have become increasingly interwoven into the museological communications of contemporary, postdigital museums and heritage institutions. (Dziekan 2012)

No longer residing exclusively in physical monuments or collections of artefacts, by acknowledging the “living expressions” contained in oral traditions, social practices and rituals (UNESCO 2017) cultural heritage has evolved into a defining element of the contemporary, globalized world; this is especially so in regards to ensuring that cultural diversity is maintained in the face of the pressures of globalization and through promoting the essential value of intercultural dialogue. Heritage is described by historian Steven Hoelscher (2006) as a foundation of personal and collective identity; and found everywhere, not just in national history museums. While significant growth in the number of museums, historic sites and conservation zones over the recent past supports the importance of heritage in quantitative terms, even more importantly, it can be argued, the ‘scope of what is deemed worth preserving has also expanded dramatically, extending now to environments, artefacts and activities that, in the past, would have been considered beyond the scope of historical attention.’ (Hoelscher 2006, 201). It is on these two scores –of the proliferation of heritage and the diversification of cultural forms– that the speculative designs produced by students engaged in the 2016 instalment of the Culturescape programme have something to contribute to the developing discourse around digital cultural heritage.

Exemplifying a commitment to ensuring that its students are equipped to engage fully as “global citizens” in their chosen fields, MADA (Monash Art Design and Architecture) conducts a regular series of study abroad programs at the university’s key presence in Europe: the Monash University Prato Centre, located just outside of Florence. In this distinctive setting, the cultural legacy of the Italian Renaissance is brought into sharp relief with the “culturescape” (Appadurai 1996) of the present day. This conjunction offers unique opportunities for conducting intensive studios where art and design students can be challenged to develop their critical and creative faculties in response to the juxtaposition of the past, present and imagined futures. (Figure 1) Culturescape (CS) is one such programme. Delivered
project that will be elaborated upon shortly drew inspiration from the exhibition, *A World of Fragile Parts*, curated by the Victoria and Albert Museum (V&A) as part of its newly established partnership with the Venice Biennale. By engaging with the exhibition in an immediate and highly situated manner, the students were challenged to act in response to the threats facing the preservation of global heritage sites and how the production of copies can aid in the preservation of cultural artefacts by looking, thinking and doing, interpretively and imaginatively.

Before proceeding further, it may appear that the terms “Culturescape” and “culturescrape” (or “culturescraping”) are being used interchangeably in the account that follows. Briefly, as a point of clarification: Culturescape refers directly to the curricular framework and programme related aspects of the study abroad course itself; whereas the term “culturescrape” designates the creative brief that was undertaken as part of the immersive research studio conducted in association with the Biennale Sessions programme as part of the 15th Venice Architecture Biennale.

*A World of Fragile Parts* proposes that in a world where material culture is fragile and increasingly at risk, digital copies can aid in the preservation of cultural artefacts. (Figure 2) Historically, the V&A took the lead in advocating for the practice of copying as part of its founding mission and is best exemplified by Sir Henry Cole’s ‘Convention for promoting universally Reproductions of Works of Art for the benefit of Museums of all countries’ of 1867. (Figure 3) As the museum’s founding director, Cole advocated for a pan-European museum-lead commissioning programme to collect and produce reproductions of artworks, in the form of plaster casts, electrotypes and photographs. The V&A’s iconic Cast Courts are an enduring manifestation of the nineteenth-century museum’s idealized vision of the copy. Built in the 1870s (and currently undergoing major capital redevelopment), these galleries still display many of the museum’s most magnificent plaster casts including Michelangelo’s David and the Trajan’s Column. Originally conceived...
as pedagogical tools for public education and the training of art and design students, the perceived value of facsimiles fluctuated dramatically during the twentieth-century, when copies became viewed as increasingly anachronistic, decorative affectations lacking in substance or “auratic” value. Today, instigated in large part by advances in digitalization and fabrication technologies, copying has taken on new relevance to the service of conservation, as well as cultural, social and political activation. (Latour and Lowe 2010; Cameron and Kenderdine 2007) To this end, architect/artist Jorge Otero-Pailos’ practice of “experimental preservation” imparts an ethical value on processes of reproduction by materializing time, turning otherwise overlooked traces into “a historical document [that] places them in a new vision of architecture.” (Battistella 2009, 118)

Otero-Pailos’ exemplary practice-based research provides an intriguing demonstration of the dynamic interplay that can exist between the residual past and presence. Otero-Pailos draws upon conventional conservation practices to realize spatial artworks that reveal the history of buildings and objects through painstakingly removing built up layers of dust using sheets of latex, as commonly used in restoration work. A quintessential example from his ongoing Ethics of Dust project was an installation staged in the V&A’s Cast Court. This intervention was commissioned as part of the exhibition, All This Belongs to You (2015) and entailed exhibiting a formidable latex “cast-of-a-cast” adjacent to the “original” cast of Trajan’s Column. In this case, rather than choosing to reproduce the battle scenes that spiral around the exterior of the column, Otero-Pailos instead chose to cast his attention to the internal brick structure supporting the column itself. Through engaging in this act of “reverse restitution”, Otero-Pailos quite literally inverts conventional understanding of the cast as a form of reproduction by revealing the production process of the object instead; returning the thing itself to the origins of its own making. In the process, this intervention subtly reveals how the Museum’s enduring civic commitment is in turn reflected through the duty of care it takes towards the conservation of the public collection. A related example, Scrape: the Ethics of Dust (2009) was the product of spatial research involved in harvesting the built up pollutants from a wall behind the second floor loggia of the Doge’s Palace off Piazza San Marco in Venice. Included in Making Worlds: the 53rd International art exhibition of the Venice Biennale (2009), the title of this work informed the portmanteau “culturescrape” as it was applied to CS2016’s design brief.

**Immersive research studio**

In addition to the inspirational example provided by Jorge Otero-Pailos, central ideas motivating the curatorial theme of A World of Fragile Parts were translated into CS2016’s immersive research studio: a week-long series of integrative creative research activities whereby participants were challenged to think and act upon the questions and issues precipitated by this exhibition in response to cultural creation and preservation issues. This student-focused activity was incorporated into the Biennale Sessions program, and a seminar convened at the Arsenale in the Sale d’Armi to explore contemporary themes related to digital cultural heritage and how the imaginative processes of artists and designers can be applied to the creation, interpretation and activation of cultural artefacts. The dedicated seminar facilitated a critique of the exhibition and the implications to digital cultural heritage practice.
we can begin to detail a “slice” through future society – the product of multiple trends, actors, agents, technologies, and “thick” meanings’. (Superflux 2011, 7) Jain makes an important clarification about the way that futurescaping can be used to support how design works with existing structures, cultural content and social values when stating that ‘when we talk about the future, this isn’t something that comes at the expense of the present’. Rather, she continues: ‘When we talk about the future, we are expressing our interest in the processes and dynamics that shape the present moment: in the tools and products we use, the things we experience, the ways we think about ourselves, and the world we inhabit’. (Jain 2012)

Introduced as part of an initial briefing hosted in the inspirational surrounds of the chapel of the Casa Caburlotto, the students were issued with the challenge to develop concept designs that imaginatively preserve a chosen site in Venice. Working in groups, initial placemaking activity was undertaken to identify an object, locale or situation that would serve as the inspirational basis for their design intervention. This exercise might be considered an analogue form of “webscraping” – a term that encompasses a variety of methods used to collect or “data mine” information from across the Internet. Once a site was duly identified, members of each group were challenged to develop a creative concept with the objective of activating historical evidence or intangible experience as a dynamic, immersive and psychologically engaged “open work”. The creative inspiration underscoring this exercise drew upon the following convergence of ideas: In 1964, the International Council on Monuments and Sites formulated an International Charter for the Conservation and Restoration of Monuments and Sites. Known thereafter as the “Venice Charter”, this document codified internationally accepted standards of conservation practice relating to monuments by setting out principles of conservation based on the concept of authenticity and the importance of maintaining the physical context of a site along with conserving its historical evidence. The Venice Charter

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Design Concepts

Ultimately, the immersive research studio resulted in a series of design proposals that imaginatively translate a chosen site-specific encounter or distinctive experience associated with Venice. Drawing upon the integrative mix of field research experiences (placemaking, fieldwork, exposure to a variety of exhibitions), the resulting creative concepts activate historical evidence or intangible social practices as dynamic and engaging mediated interventions or recreations. It is, of course, worth reiterating that the students responsible for creating this set of diverse conceptual responses were largely unfamiliar nor conversant with the weight of issues broached by cultural heritage. Therefore it should not be surprising that the creative orientation of these representative projects approached their heritage purpose through communication strategies ranging from simulated recreation on the one hand to documenting otherwise inconsequential, ephemeral experiences on the other. In the main, landmarks were approached as performative sites rather than as historical subjects in their own right. Perhaps because they were not inclined to approach the brief as a strict conservation exercise, their designed interventions privilege the subjectivities associated with a contemporary experience of culture and heritage more broadly, rather than striving to record or capture physical artefacts or sites in a more objective, empirical or scientific fashion. Instead, these projects opt to embrace the confluence of heritage, tourism and auto-ethnographic modes of interpretation that “perform” the process of cultural heritage. (Kidd 2011) Drawn to ‘processes and conditions rather than products’ (UNESCO 2017), their design intentions range from presenting informational content (for example, highlighting the implications of climate change) to multi-sensory encounters that exist at the more experiential end of the spectrum. After all, our human experience of the world is shaped by our senses. This phenomenological orientation inspired a number of the resulting design proposals. For example,

provides the following approved definitions:

Article 1. The concept of a historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or a historic event. This applies not only to great works of art but also to more modest works of the past that have acquired cultural significance with the passing of time.

Article 2. The conservation and restoration of monuments must have recourse to all the sciences and techniques that can contribute to the study and safeguarding of the architectural heritage.

Article 3. The intention in conserving and restoring monuments is to safeguard them no less as works of art than as historical evidence. (ICOMOS 1964)

In that same year, celebrated Italian writer and semiotician Umberto (Eco 1994a) wrote ‘Apocalittici e integrati’ (translated into English as ‘Apocalyptic and Integrated Intellectuals: Mass communications and theories of mass culture’), which analyzed the emerging conditions of mass communication from the sociological perspective of the “culture industry”. During this formative period, Eco would develop his ideas on semiotics and the “open text”, subsequently writing a number of highly influential books and speculative essays on these subjects; including amongst these, an essay entitled ‘On the Impossibility of Drawing a Map of the Empire at a Scale of 1 to 1’. (Eco 1994b)

The more speculative aspects of the creative brief were situated pedagogically by the urgent, real-world issues raised by *A World of Fragile Parts*, while the Venice Architecture Biennale encouraged meta-learning by exposing the students to a plethora of inspiring projects demonstrating the integration of theory and practice. Having their own creative motivations at the forefront of their minds meant that certain projects encountered at the biennale were identified as useful precedents. These exemplars helped the students to visualize ways of realizing their highly propositional concepts.
Aptly illustrated by these abovementioned projects, it is through appealing to our senses that we become fully immersed in heritage environments; in the following section I take the opportunity to represent two further design concepts that engage with the notion of “experimental preservation” in more detail.

**Acqua Alta**

Developed in response to the environmental issues that threaten Venice’s rich cultural history, Acqua Alta is conceived as a speculative design for a museum of the not-too-distant future dedicated to the sinking city. The term “acqua alta” refers to the exceptional tide peaks that occur periodically in the region and engulf Venice itself on a regular basis. The overall spatial design leads the visitor sequentially through a series of discrete experiences that relate the past, present and (impending) future of Venice at the mercy of this seasonal flooding. (Figure 7)

**S-Squared**

Conceptualizes a full sensory experience of being in Piazza San Marco by re-activating elements associated with the five human senses. The design for this immersive and participatory museum installation draws upon the full range of senses—of sight, hearing, taste, touch and smell—to aid our memory of time, activity and place. Notionaly reproduced at a 1:2 scale, the exhibition arena is demarcated by a variety of spatial environments. Combining both expansive spaces alongside more intimate enclosures, the installations recreate visual aspects through large-scale projection, replicate the tactility of physical surroundings, expose the visitor to tastes and odours, as well as a variety of acoustic experiences (from highly focalized sounds to enveloping, atmospheric soundscapes). This panoply of sensory experiences is connected together by employing digital mediation in the form of a location-aware mobile guide. While an audio playlist is designed to guide individual experience within the installation, this visitor-centred mode is disrupted and over-ridden on an hourly basis by the sound of a bell tower. This event signals a simulated “flood”: an audiovisual experience that envelops the entire installation in a simulated recreation of the flooding that consumes the square during the “acqua alta”. Drawing upon a similar experiential approach, the Touchpoints project highlights the sense of disorientation one inevitably encounters on first visiting Venice. Developing from the experience of five different students, this concept emphasises sight and touch as means of navigating the maze of Venice. Recreating five divergent routes, distinctive objects and textures are relied upon as cues that assist personal wayfinding between Dorsoduro and L’Accademia. Rather than collecting impersonal information and artefacts, this exhibition opts instead to re-collect highly subjective memories. In terms of design, the project seeks to create conditions for an intimate experience by relying upon lighting, scale, media, materiality and temperature along with highly personalized accounts that relate these punctuated sensory experiences (described as “touchpoints”) to individualized journey maps.
A description of the experience design proceeds accordingly: After being introduced to information about the environmental threats facing Venice, the visitor enters a gently curving tunnel lined with LCD panels displaying video footage that depicts travelling along the Grand Canal towards Piazza San Marco. Further amplifying the sense of visual immersion, sound effects and an artificial breeze reinforce the sense of being carried along the watercourse. At the end of the tunnel the viewer arrives in a small gallery featuring a hyper-realistic, scaled model of the Basilica di San Marco. While the model itself is the dominant element of the room, an otherwise innocuous black strip runs continuously around the walls at approximately eye-level (this line signifies the fact that the floor of the crypt found below the basilica has dropped by 168 cm since the ninth century). This gallery is connected to an adjoining cinema room in which a high-definition video of the basilica’s ornately detailed interior spaces is presented on a 360-degree screen. From here the visitor enters a second tunnel zone in which, this time, imagery of a typical Venetian street lines the walls, while underfoot, a reactive surface of clear Perspex flooring is laid over a shallow channel of water. At the end of this tunnel, the audience reaches the final gallery dedicated to the iconic Campanile. Standing as an important symbol of the hardship that Venice has withstood over centuries, its reconstruction following collapse in 1902 was guided by a conscious effort to retain its heritage value, encapsulated in the credo, “Where it was and as it was”. In this installation, the belltower will be recreated as a virtual projection onto four-sides of an imposing freestanding planar structure rising from the centre of the room. At regular intervals, the space descends into darkness for a programmed audio/visual show depicting the tower slowly disintegrating and sinking completely.

**Watermarked**

As with the preceding project, *Watermarked* serves as a call to action promoting the urgency of working towards a sustainable solution in response to the issue of global warming. The design concept is for a distributed site-specific installation and mobile experience. Overlooking the Grand Canal from L’Accademia and Rialto Bridges at either end, two temporary architectural structures anchor augmented reality experiences foreshadowing how Venice might appear in the future when devastated by the effects of flooding. At night, a route through the labyrinthine streets connecting both locations is marked at key junctures by environmental projections onto buildings creating the impression of flooding occurring along the route. (Figure 8) The journey ultimately leads the viewer to a designated building in which an immersive spatial experience is staged that depicts a simulated scenario of a family home affected by the floods. Audience members can enter this domestic space (which will be filled with water and scattered furniture) and interactively control aspects of the environment using smart devices.
technologies. Upon reaching the upper level of the apartment, a series of projections will be triggered to play throughout the environment showing time-lapse footage of “home movies” designed to create an empathetic portrayal of a “real” family affected by this apocalyptic scenario. This immersive narrative extends to other supplementary sites along the designated route where a number of smaller installation sites—modelled using actual houses, shops and restaurants that passers-by can look into. An important feature of this proposal is the role played by an integrated mobile app, whose features include a navigable map (or “trail”), a “live feed” (supported by screens found in locations dotted along the route to promote public engagement) and augmented reality content, plus additional information pertaining to the underlying public awareness and fund-raising campaign.

Conclusion

It has been noted that different measures are needed to safeguard intangible cultural heritage from those established to conserve the physical state of monuments, sites and natural spaces: ‘For intangible to be kept alive, it must remain relevant to a culture and be regularly practiced and learned within communities and between generations.’ (UNESCO 2017) The application of digital mediation towards creating the kinds of interactive communication experiences associated with “public interactivity” (Balsamo 2016) and the ways in which this media form manifests cultural value and performs cultural work should not be discounted in this regard.

Taking account of the political, cultural, and social usage of the past, Steven Hoelscher identifies a number of key features and premises that exert an influence on contemporary heritage. Of these, the design proposals produced during CS2016 most closely align with the qualities he notes alongside heritage experiences applying to “place” and “time” in particular. Heritage displays operate at dramatically different physical scales, ‘from the body to a building to a street to a neighbourhood to a city to a region to a nation to the globe.’ (Hoelscher 2006, 204) In deference to the highly influential work of Pierre Nora, “sites of memory” are both materialized in concrete ways, as well as through non-material expressions. In his effort to describe sites of collective identity, Nora defines their existence between history and memory as complex: ‘At once natural and artificial, simple and ambiguous, concrete and abstract, they are lieux—places, sites, causes—in three senses—material, symbolic and functional.’ (Nora 1997, 14) Likewise, temporality presents its own paradoxes, particularly reflected in efforts striving to stabilize history in contrast to cultural heritage’s more elusive, lived constitution. While heritage may look old, upon closer inspection, it is more than likely that contemporary concerns will reveal themselves. When approached from this perspective, heritage most clearly exhibits its “processual” nature as a “social process that is continually unfolding, changing and transforming.’ (Hoelscher 2006, 206) The concepts developed as outcomes of this “culturescraping” process are designed to activate cultural heritage across these dimensions.

In his curatorial statement for A World of Fragile Parts, Brendan Cormier (2016, 136) writes:

Galleries, Libraries, Archives and Museums are time-honored institutions that we entrust to collect, care for and communicate our cultural history. The use of emerging digital technologies to activate, engage, and transform this cultural legacy runs parallel with transformations happening in the way these institutions are safe-guarding our collective past through digital formats. Broadly speaking, Digital Cultural Heritage is concerned with the curation, critique and evaluation of museums and heritage work at this pivotal moment when the relationships between cultural material, knowledge, society and technology are radically changing. Moreover, it entails the creative and critical application of digital technologies towards the investigation, interrogation and imaginative exploration of the relationships found within cultural complexes.

And so, it is with the final assertion of Cormier’s statement that this account of CS2016 and the
Culturescrape project will be drawn to a close. What these creative outcomes reveal—especially through applying curatorial design as a mode of contemporary curating that extends the narrative and communicational possibilities of cultural experience by drawing particular attention to the mediating role of the exhibition between artwork, viewer and postdigital environment—is that heritage representations, whether objects, images, or events, are not mute, impassive containers, but rather “active vehicles” (Hoelscher 2006, 203) that play a part in sharing meaning and producing knowledge of, about and through engaging with the past, here, in the present. Whether expressed as creative interpretations or representations that draw upon more empirical forms of knowledge, grounded in fact or animated by fictional flights of imagination, heritage, as a mode of understanding, is inseparable from the ways we choose to create it.

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