

4<sup>th</sup> Global Summit and Expo on

# Multimedia & Artificial Intelligence

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## Layers of meaning: Exploring artistic impressions and imperfect realism in virtual reality

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Cultural heritage commonly utilizes laser scanning, CGI, 360-degree imagery and photogrammetry aiming to create photorealistic and accurate representations of historical environments. The goal of being as accurate and realistic as possible has not been fully accomplished yet, but considering the rate of improvement, virtual environments and augmented extensions will become indistinguishable from reality. A countermovement of artists and researchers create artistic impressions of virtual environments, not aiming for photorealistic perfection but to add an interpretation to the debate how the deeper meaning beyond the visual representation can be best represented. Philosopher Merleau-Ponty quotes Rodin, "It is the artist who is truthful, while the photograph lies; for, in reality, time never stops." This research project investigates the possibilities of impressionism in virtual reality by exploring and comparing the effect of stylized interpretations to photorealistic representations to attempted but failed photorealism in virtual reality environments. I propose that the meaning of heritage is not just the form of a heritage site but could be understood as different layers. Interactive and immersive applications, such as augmented and virtual reality applications, enable us to explore alternative layers beyond the basic image acquisition. These layers are commonly understood as additional information layers, from superimposed text providing more detailed information to animated CG characters performing a relevant historic scene inside the virtual environment. Layers of meaning could also be interpreted in a more artistic sense by creating impressions rather than photorealistic representations. These artistic impressions utilize animation, laser scanning and photogrammetry to create representations on an abstract interpretation level, aiming to create a sense of atmosphere and trigger a stronger emotional response.



Figure 1: An artistic interpretation of the tropical Yunnan Garden by Elke Reinhuber.

### Recent Publications:

1. Secret Detours: A Garden in Singapore. Reinhuber, Seide, Williams, IEEE VR Reutlingen, Germany 2018 (Film Screening)
2. The Scale of Immersion: Different audio-visual experiences exemplified. Reinhuber, Seide, Williams, Conference Electronic Visualisation in Arts and Culture, London 2018 (Film Screening)
3. Secret Detours: 360° immersive film. [C]Screen Festival Screendance, Museu d'Art de Cerdanyola, Cerdanyola del Vallès, Spain, 2018 (Film Screening)
4. Secret Detours: 16:9 film. Visualisation Matters 2017, EPICylinder, UNSW Art&Design, Sydney, Australia, 2017 (Film Screening)
5. Secret Detours: 360° immersive film. Grote or Lebui"nus Church, Deventer, Netherlands, 2017 (Film Screening).

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## **Biography**

Benjamin Seide has an expertise in Animation, Visual Effects and Virtual Reality. His visual effects work as animation practitioner contributed to international feature films such as Roman Polanski's *Oliver Twist*, Wim Wender's *Don't Come Knocking* and Martin Scorsese's *Hugo*. His research focuses on interdisciplinary collaboration of art and technology, immersive media experiences such as 360° films, 3D stereoscopy and Virtual Reality.

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