Choreographics:
Animating space over time with video projection mapping

This specialisation will explore how video projection mapping can be used to animate interiors spaces and transform built structures over time. In the process, we will make custom-made animations, videos and motion graphics, and investigate how they can be applied to generate atmosphere and modify spatial dynamics over time.

The aim of these investigations will be for students to design a projection mapped video installation for the annual winter Dark MOFO festival run by the Museum of New and Modern Art (MONA) in Hobart, Tasmania.

The specific space for your installations will be the same as that used in previous years. It is a space temporarily occupied by the festival and through which festival-goers continually wander. Each student's installation will be situated in and animate a particular part of this space.

"Cosmic Two-Wheeler" – by Jean Poole
A projection mapped corner installation as part of
MONA FOMA 2016, Hobart, Tasmania.
Photograph by Rémi Chauvin

This subject will be particularly relevant to those interested in event and installation design, and will build upon Sean's experiences working with MONA over the last 4 years, and pursue formal explorations of multi-planar projection mapping, within the creative limitations and opportunities provided by the MONA festival setting.

What project is proposed?
Develop a projection mapped video installation for a venue at MONA's DARK MOFO festival
- build a physical model
- generate video material
- choreograph 1 minute of video projection onto physical model

What are the techniques, approaches, strategies for spatial production?

Site analysis
Technology analysis
Budget analysis
Development of control system and interface
Storyboarding of light colour and movement over time
Development of motion graphics
Exploration of projection mapping techniques for multi-planar animation
Animation and subsequent testing upon mockup models, refining
Documentation

How does the project relate to interior design, interiority and spatial practice?

- exploration of colour and light on surfaces, materials and geometry
- exploration of mediated spaces, and the shift from screens to integrated and embedded media
- exploration of the temporal dimension of space
- exploration of audience perspectives
- exploration of site and architectural transformation
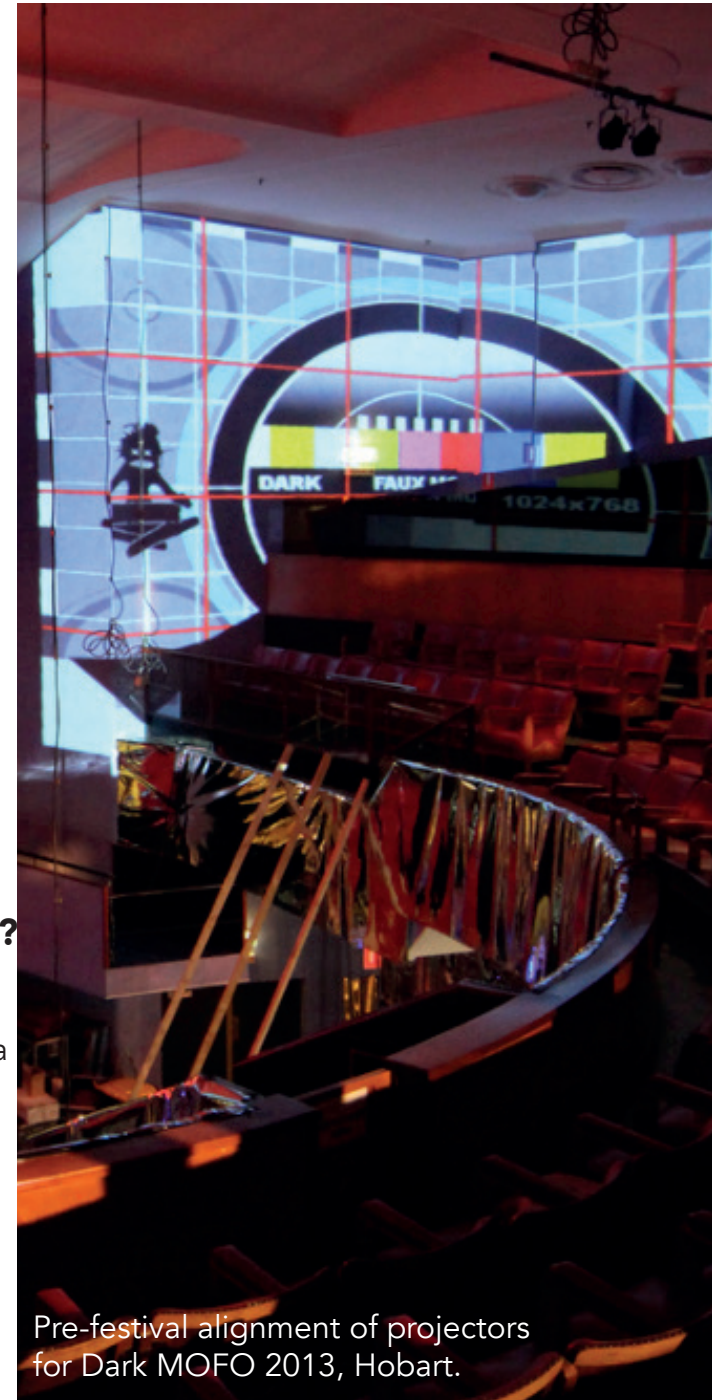
Pre-festival alignment of projectors for Dark MOFO 2013, Hobart.

Projections at MONA FOMA 2015

Concert Visuals for Hermitude, 2015

Animation and live projections at the Sydney Opera House, for the Elefant Traks record label and The Graphic Festival, 2012.

Dr Seuss Meets Elefant Traks

Projections onto Car wrecks, Alice Springs

About The Tutor

Sean Healy is a video producer who specialises in audiovisual relationships, camera motion, and hybrids of moving image that combine custom animation and cinematography - specifically purposed for use in live events and installations.

His work encompasses livetriggered video set designs for theatre productions, audio- responsive animations for concert backdrops, or projection mapped installations for festivals and events - and he has shown work at most major music festivals in Australia, as well as performing in Mexico, Italy, Turkey, Germany, New Zealand and Indonesia. He has also toured with Gotye, developed custom concert visuals for Hermitude, and performed at ACMI and the Sydney Opera House.

He currently works with several music and theatre groups in Melbourne and regularly contributes to MONA's festivals in Hobart.

http://skynoise.net/projects

Professional practice dimension (WIL)

Specialisations are part of the Interior program's professional practice stream and need to fulfil criteria for what the university refers to as 'work integrated learning' (WIL). This means their content and learning outcomes needs to relate directly to the 'real world' of professional practice one way or another.

This specialisation will focus on : Event specific installation

Conventions for 'event specific installations' include:
- client briefing
- site analysis
- technical analysis
- storyboarding and concept development
- onsite testing and client liaison, iteration and feedback
- developing control mechanisms or interfaces for live operation/performance.

Learning Outcomes

1. design and construct temporary installation environments for public reception and interaction.
2. understand how to work in a real world context; with its opportunities, limitations
3. Apply skills in video projection and digital mapping software In a spatial context
4. In a spatial context use video projectors as a light source.
5. Test and evaluate proposed full scale designs at model scale

Student Capabilities

Students will learn:
+ Analysis of site, technology and budget
+ Storyboarding of light colour and movement over time
+ to generate light rhythms with animation and motion graphics
+ to design mediated spaces
+ projection mapping techniques for multi-planar animation
+ to integrate embedded media within explorations of space over time
+ to analysis projected colour and light on surfaces, materials and geometry
+ to design site-specific video suited to particular structures
+ to choreograph atmosphere design for experiential spaces
+ to prepare an installation proposal for a major festival

Assessment Breakdown:

Brief 1 – 35%
Brief 2 - 60%

Readings:

"After the screen : Array aesthetics and transmateriality", Mitchell Whitelaw, accessed Feb 2017,
http://teemingvoid.blogspot.com.au/2011/04/after-screen-array-aesthetics-and.html

"Survey of Alternative Displays", Blair Neal, accessed Feb 2017,
http://blairneal.com/survey-of-alternative-displays/

References :

Course links end notes posted weekly: http://www.skynoise.net/edu/choreographics/
Museum of Old and New Art, website, accessed Feb 2017, http://mona.net.au
"What is projection Mapping?", accessed Feb 2017, http://projection-mapping.org/whatis/

Precedents:

"A Forest of Projects: projects and installations that involve projection, light or interactivity",
accessed Feb 2017, http://aforestofprojects.tumblr.com
"Sound+Visual+Movement: audiovisual interactive systems and hypersensory immersive media",
accessed Feb 2017, http://s-v-m.tumblr.com

Weekly updates: http://skynoise.net/edu/choreographics/

CALENDAR

Month 2017	Week Starting Date	TEACHING WEEK	WEEKLY CLASS CONTENT	ASSESSMENT
	27 Feb	1	Semester 1 classes begin. Class introduction + course overview to students	
March	6 Mar	2	Video Editing and Composition	
	13 Mar	3	Video Editing and Composition 13 March Labour Day public holiday (Monday)	
	20 Mar	4	Introduction to animation and motion graphics	
	27 Mar	5	Assessment #1 Due	
April	3 Apr	6	Project feedback	

Month	Week Starting Date	TEACHING WEEK	WEEKLY CLASS CONTENT	ASSESSMENT
	10 Apr	7 (start)	Introduction to Projection Mapping	
			EASTER BREAK 13 April – 19 April	
	17 Apr	7 (end)	Classes resume Thurs 20 April	
	24 Apr	8	More animation 25 April Anzac Day Public holiday (Tues)	
May	1 May	9	Projection Mapping + Animation	CES SURVEY
	8 May	10	Overview of real-time software possibilities	
	15 May	11	Installation + Project feedback	
	22 May	12	SPECIALISATION – FINALASSESSMENTS Friday 26 May Digital archive submission due	