

The Centre for Sustainable Design

# Accelerating Sustainability in the **Creative Economy and Creative Industries**

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Ellie Ashton Film Sustainability Advisor

Marc Carey CEO, Evolution Music

Martin Charter
The Centre for Sustainable Design (CfSD), University for the Creative Arts (UCA)

Kyle Devine
Department of Musicology and School of Environmental
Humanities, University of Oslo

Eliza Easton
Deputy Director, Creative Industries Policy and Evidence
Centre, Nesta

**Trevor Davis**Managing Director, Trevor Davis Associates

Rick Casson

Business School for the Creative Industries, University for the Creative Arts (UCA), Epsom, Surrey, KT18 5BE, UK

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# Immersive Reflections on Future Living - Study Case

Ravi Deepres

Artist and Professor of Moving image and Photography

Birmingham City University.

United Kingdom

évY Dutheil

Eco-designer and Senior Lecturer Sustainable Product Design

evy-design and Falmouth University

United Kingdom

### Context

### Global context

"one vast uncontrolled experiment" Margaret Atwood (2003).

The project is a reflective case study drawing out the findings and conclusions, on a visual creative expression of a current - future - based on the trilogy of MaddAddam. Margaret Atwood is a popular author and has written an extensive list of book. MaddAddam, is particularly centred on prospective future scenario which could envision our 21st century and sustainability acts. The commissioned project delivers an experimental immersive dance performance piece offering new ways of exploring Atwood's themes within an unfamiliar hybrid of mediums.

Creative economies and industries are currently portraying a range of players, from traditional to contemporary backgrounds, from artist to established companies, with different forms of project outputs. They also form an important part of the economy, culture enrichment, and future financial stability. In the UK, they now constitute a major impact on generating income.

This project explores new perspectives by looking at how sustainability could be embedded in an art/dance based performance project for a worldwide collaboration commissioned by The Royal Opera House and National Ballet of Canada. The use of ground breaking research driven immersive performance and spectacle together with sensory and reflective impact opens a new way to disseminate research ideas and discussions outside of traditional academic normalities.

In collaboration with choreographer Wayne McGregor, Margaret Atwood and the award winning creative team behind the Royal ballet's Woolf Works, the motive is to push the boundaries, to explore and create new forms of art and design language through reactive creative collaboration. Much of the same thought and perspective should and can be given to embedding sustainability into all forms of production whether art, business, social or science and most importantly seeking new ways to bring awareness to important and pressing issues outside of traditional forms of communication.

## Team

The project team including film maker, set designer, dramaturg, 3d animation, sound, architect and eco-designer are led by choreographer Wayne McGregor in order to create a unique body of work which will evolve outside of the theatrical space. Wayne Mc Gregor as choreographer is renowned for original collaborative statement pieces, challenge audiences understanding of the world around them,

promoting innovation, adaptation and new ways of delivering powerful messages and explorations which demand our attention.

# **Project**

## Research process

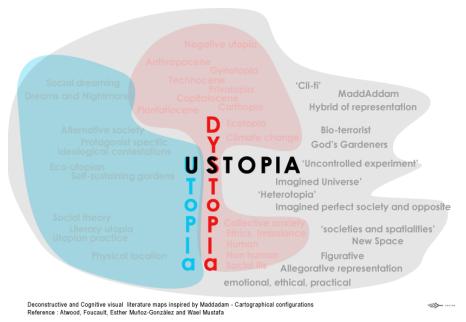


Figure 1: ©Evy Dutheil, Deconstructive and cognitive visual literature maps inspired by MaddAddam

# Ustopia visual cartography medium

The dance process and output respond to the spaces we exist in now, reflecting Atwood's concept of Ustopia, an existence of both utopian and dystopian spaces side by side and creating a hybrid of representation. This approach finds synergy to experiment on how to be creative in an ambiguous and uncertain world where the concept of sustainable space, virtual and real is constantly challenged.

'Atwood shows an increasing interest in the metaphorical potential of maps. She employs cartographic tools to reveal her ustopian plots and stories. Different approaches of cartography and spatiality are presented to strengthen the interdisciplinary dialog between Atwood's trilogy and cartographic representations.' Wael (2021)

Rather than operate within set guidelines, outcome and system, greatly enforced currently through screen addiction and distracting static process or administration, ways can be found to break imposed boundaries of real, imagined, virtual and real mapping which we all find ourselves operating in, and develop more flexible, heightened sensory awareness and connection to our environment.

#### **Inner voice Narration**

This creative industries is rooted in tradition from different part of the world. Culture have developed form of performance to showcase, stories, beliefs and skills in a unique format for people to not only enjoy but become immersed within and reconnect with heritage and societies.

Atwood suggests an inner narration and perspective from characters. A narrative "space", diagetic, an interior view of a world, "a form of play with possibilities and a practice of moving geographic thought in new directions" (Cameron, 2012, p.585).

The synergies between narration and performance creates a unique temporal narrative space. The dance piece operates through each of the creative teams individual approach being critical to the other. The individual members explore Atwood's themes through their own research and medium and then start putting it together in the later rehearsal stages where relationships begin to naturally and unexpectedly influence in each. It is based on a reactionary and fluid way of working which produces original content and resonance for an audience.

### Sustainability heart

Not many productions address sustainable futures at the heart of their subject and message as a measured appeal for audience. Sustainable themes are often represented as veneers with mass and simple function limited both in ideas, expression and materials used for the design. By introducing complex sustainability topics in a sphere which usually doesn't tackle these subjects, a ripple effect will be produced to change the way the industry is leading and most importantly, reach new audiences in new sensory ways for maximum repercussion impact.

"MADDADDAM" is just the kind of bold, imaginative assertion of classical ballet's potential evolution that is most likely to woo new audiences and ensure the art form's survival" Toronto Star, 2022.

In this context, working with a contemporary author, debating and speculating on these questions brings new challenges for a traditional audience and impacts beyond the performance space sphere. Message considerations in terms of articulation with awareness, and the sensibility to creativity accommodate change, demand and will power.

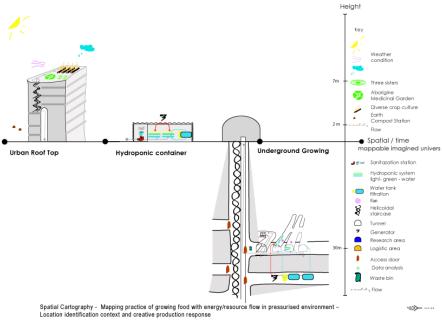


Figure 2: ©Evy Dutheil, Spatial Cartography - Mapping practice of growing food with energy/resource flow in pressurised environment. Location identification context and Record of creative potential response

# Creative deconstruction/reconstruction cartography spatial research process

In reference to Oryx and Crake, (The first book in Atwoods trilogy), Their location is a self-sustaining garden hidden on the outskirts of the pleeblands'.

God's Gardeners (a group of characters in the books), have a physical place where people live "a better way of being," Research undertaken at Ryerson University's urban farm shows us how nurturing and re-employing historical concepts from native Canada can create a new design model moving forwards. Indeed, looking at producing food in unique and unusual locations such as Ryerson/TMU roof tops high in the heart of Toronto City, an urban pilot agricultural farm which values diversity of culture and origin, with traditions in farming and culture in Canada. The project starting point was as a medicinal garden, valued highly for health and spirit, and rooted in the native aborigine community. And it utilises the natural weather and placement creating also its own soil and mini ecosystem, fostering direct engagement as a social and nutritional cycle for the local students and inhabitants.



Figure 3: ©Ravi Deepres, Ryerson University and Growing Underground, UK,

This environment was visually captured through point cloud, which helps to recreate a past/contemporary and 3d with 4d-4 dimensional space-time- environment where the audience can feel as immersed as much as the dancers.

This can be contrasted and compared to an artificial environment such as recreating farms in a container in an arid or remote area, through hydroponic systems 'Rocket Greens' started at The Churchill scientific research centre provides local food using this technology where it is well known that the soils in this area are very challenging for growing human food. Compare this again to a disused air raid shelter in London such as Growing Underground initiative, which grows more commercially and is also involved in incredibly high levels of sanitization and air and water extraction, plant growth monitored through data technology. While food miles is reduced to minimum, freshness of product available in pressurised urban environment, a city reinvents their space advantageously with well regulated water usage and production flow across seasons. However what impact this has on the quality, safety, overall energy or smart production of the food management eco-system. This will be interesting to see over the coming years.

The way people historically used the land and design, changes our relationship to it and values that culture, in reaction to fast food and the genetically modified consumption environment we live in today. Visually and sensory dramatic, Ryerson urban farm is a significant beacon and shows the possibility of natural food production influencing regenerative design and living, in contrast to the opposing mechanisms that current cities employ in mass food culture, and society.

"This group opposes the dominant system by attacking the machinery that maintains it." Wael (2021).

Two avenues of tackling green living and food scenarios, and embracing the future have challenged the way the filming and equipment were chosen to produce unique immersive visual quality valuing these dialectic approaches. They also give new perspectives to the sustainable future business to embrace creative industries in the heart of their business model in order to thrive. Indeed these sustainable companies in the current context, most living from university funding and the other from government grants.

#### Visual research

The visual research is about identifying companies and institutions at the fore front of sustainable and technological change through creative collaboration and exchange. Creating unique material valuing the sustainable practices in a context which is outside of their business, normal outreach, and presentation in order to consider further the value of the natural and living world in a more direct form. New forms of photographic and filming approaches can benefit to reflect their practice towards embedding creative sustainability subjects through a more engaging and direct relationship to audience.

Immersive environments could enhance Biophilia when linked to an "innate tendency to focus on life and lifelike processes" Dr. Edward O. Wilson.

This produces a well-being effect especially important for audience engagement and memory. This specific public would be disconnected from the living world as many people now live or are surrounded by urban design which are built on an engineered and man made environment where little place is given to green, referred as 'Mineral City' 'Concrete city' 'Static City'. Most performances are built in the same formats. Opera settings do not escape from this. Some exception such as the Ópera de Arame, Curitiba or Teatro Verde in Venice where nature is built around the performance and building aim to be in osmose with natural structure.

Distinctive visual environments can be created through exploring radical ways of living in symbiosis with urban living and vegetal. These along with contemporary visual technology open opportunities to question the creative approach where altitudinal perspectives can be captured from around 8 meters above the ground - Ryerson- to 33 meters below the ground as well as through 360 degrees 3d interpretations from laser scanning techniques. This challenges the approach of filming different dimensions and spatial environment at the same time and/or medium. The visual research intends to create new sustainable forms of absorbing that visual information.

This should strongly resonate with the audience as a powerful tool of change. By feeling something rather than observing it through screens or pages, the experience aims to stimulate several senses, connecting us to nature, and activates memory of the spectator to be a catalyst of positive action. This challenges the approach of the industry of using the natural world to generate unique material.

# Key Findings Sustainability methodology and creative industries

Opera use physical sets which are usually an integral part of the performance, and touring internationally with the show. Dematerialising the set through using projection screens is an alternative way of making the production sustainable in terms of transportation and easily reproducible. Some current practice to make performance with a sustainable approach are advocated by the Theatre Green book or organisations such as Julies Bicycle. This is beginning to infiltrate and be adopted by more productions.

Creative industries are also under pressure, in terms of funding, time, and increasing demand to output. More innovative and original visual approaches and execution have shown a rise in the way they help to immerse audiences in a dynamic and varied environment. Many synthetic and computer generated visual approaches are becoming prevalent with the impact of AI – Artificial Intelligence - now very much also on the rise, however these can also further spatially disconnect to the current reality.

Gathering and outputting visual material in new forms of articulate experience could directly influence sustainability in the practice, if informed and driven by appropriate and meaningful research. Thanks to the approach towards the themes within Atwood's trilogy, creative visual material can be generated from eco-friendly existing creative social practice and collaboration to develop sustainable sensory content.

By promoting and questioning behaviour, and delivering message in new ways, this project aims to accelerate environmental and social issues in the creative industries. It creates a unique debate on a current topic and challenges a questionable future living ideology to empower people to think in new ways based on sensory, inner space, as well as academic considerations.

Powerful creative sustainable avenue of working and messages exist in this work in representing what is happening now in our current world and emphasise where we are heading, influenced by impacts of climate change, societal behaviour and abuses of power. An apocalyptic vision of the future is being played out now which could create a poor ecosystem without sustainability at its foundation.

Questioning themes of the four dystopias - corporatopia, privatopia, ecotopia, and gynotopia - such as mass media or consumption, conditioning, normalisation of acts of atrocity, surveillance, genetic mutation, scarcity of land and food or sustainability washing, automated system, voice depletion, would be needed to be addressed sustainably.

The unique approach of this project could impact the way in which landmark organisations address and cultivate visual or design material through responding directly to the source of research themes rather than merely representing them in ways which might be described as veneers or seductive interpretations of subject matter.

# Conclusion

Research and questioning literature and contemporary themes from MaddAddam were central to nurture the project and the creative social collaboration inner voice. Engaging with Ustopia – Utopia and dystopia - along current sustainable themes are not delivered through traditional academic forms, but produced through a multi-layered discipline output involving art design and performance. These themes are to be absorbed in different, more sensory forms, and be accessible to much wider audiences in a sphere where these topics are not usually present.

The message and how it is delivered is aiming to empower people, audience, and creative industry to embrace and challenge green and living as a subject matter. This is achieved by visiting unique visual with cutting-edge technique, aural spatial experiences and response to current sustainable environment and representation. Spatial cartographical research process in resonance with the authors approach created unique way of capturing perspectives and translating them into an immersive language.

Reaching new audiences for creative sustainable initiative such as Ryerson urban farm, Rocket Farm or Growing underground, could give new opportunities to their business to embrace creative industries collaboration. This can open new ways of thinking, imagined universe and addressing future collaboration.

Produced in a contemporary way and reducing the imprint by dematerialising the set, this has the potential reach wider audiences and travel spatially through different representation networks.

This bridges the audience between academic, creative industry, society and community and widening the message to cultivate sustainability. Case studies such as this create ripple effects in this industry and help to prompt a shift in processing and actioning change. New forms and approaches such as this can prompt potentially useful data if used correctly.

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For more information, please contact:

Professor Martin Charter

Director

The Centre for Sustainable Design  $^{^{\circ}}$ 

Business School for the Creative Industries

University for the Creative Arts

Falkner Road

Farnham

Surrey

GU9 7DS

UK

t: 00 44 1252 892772 CfSD website: cfsd.org.uk UCA website: uca.ac.uk Follow me: @mcharter1

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