

EGU21-3208

<https://doi.org/10.5194/egusphere-egu21-3208>

EGU General Assembly 2021

© Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.



Catching a Wave: the Ripple Effect of Transdisciplinarity

Shona Paterson¹, Hester Whyte², and the Catching A Wave collective*

¹Brunel University London, London, United Kingdom of Great Britain – England, Scotland, Wales

(shonakoren.paterson@brunel.ac.uk)

²MaREI, the SFI Research Centre for Energy, Climate and Marine, University College Cork, Ireland (hester.whyte@ucc.ie)

*A full list of authors appears at the end of the abstract

Generating social behavioural change in the face of increasing variability in our planet's climate remains one of the biggest challenges of our time. In a world of constantly shifting biophysical and social realities, we face an ever-evolving need for new and innovative ideas around sustainable development.

The philosophy and nature of the Catching A Wave project has the liberty and potential to generate, and inspire, shifts in social perceptions in ways that science and data alone currently do not. Catching a Wave acts as a catalyst to shift individual and collective mind-sets towards climate action and consideration for the people who live, work and interact within at-risk coastal spaces. Using a transdisciplinary approach to overcome barriers in language, discipline specific jargon and siloed thinking, the project team are exploring ways of integrating voices of coastal and island peoples and communities who are often marginalized into a multi-media sea level rise installation.

Extensive 3D digital mapping of actual waves by CaW researchers has enabled the creation of glass wave sculptures at various scales as a mechanism to demonstrate the synergies between art and science. While the glass art acts as a visual interpretation of the oceans' complexity, the inclusion of soundbites of coastal people as well as sounds of the ocean itself is another way to communicate and connect with our audiences. In addition to interviews with coastal communities, we are working with a music composer and singer to 're-map' our digital wave data to the sonic parameters of pitch, volume, spatialisation and audio filtering (Riding the wave). Despite in person activities being curtailed by the COVID-19 pandemic, we are engaging in several on-going digital initiatives. We have launched the virtual Planetary Wave project to demonstrate the connection we all have in different ways with the ocean.

CaW aims to ensure that the visualisation and realisation of solutions and pathways to sustainability become more reachable for all, from local to global scales and is a partner in the United Nations Decade of Ocean Science for Sustainable Development. Catching a Wave represents a collective of transdisciplinary researchers from five universities based in the USA, UK and Ireland, combining expertise in environmental, social sciences and the arts.

Catching A Wave collective: Shona Paterson (Brunel University, UK), Martin Le Tissier (UCC,

Ireland), Hester Whyte (UCC, Ireland), Lisa Beth Robinson (East Carolina University, USA), Kristin Thielking University of Wisconsin, Stevens Point, USA) and Mrill Ingram (University of Wisconsin, USA)