



# *TRACING AFTERLIVES*

Visualising the deep time persistence of  
plastic waste

I acknowledge the traditional owners of the land this research was conducted on—the Gadigal people, for my place of study, and the Ngaro people, for the land that the waste plastics were found in and collected from. I recognise their continuing connection to this land and pay my respects to Elders past, present and emerging.

I also acknowledge the wider environments which we live in and amongst, and recognise that the decisions and actions we make today, no matter how small, will have consequences for other entities—now and into the future.

# ***CERTIFICATE OF ORIGINAL AUTHORSHIP***

I, Megan Wong, declare that this thesis is submitted in fulfilment of the requirements for the award of Master of Design (Research), in the Faculty of Design, Architecture and Building at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis. This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

Production Note:

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**Date:** 24 January 2021

# ***ACKNOWLEDGEMENTS***

To everyone who made this research possible and worthwhile, thank you.

Thank you to my supervisors Dr Zoë Sadokierski and Dr Sara Oscar, for your constant guidance and confidence in this project, and for opening my eyes to a larger world. Thank you to Danling Xiao and the people at Eco Barge Clean Seas Inc., without whom I would have never encountered the warped plastics this research was based upon. Thank you to all the participants who attended my workshops, and who were so supportive of its endeavours. I really appreciate your efforts. Thank you to Isabella Sanasi, a web superstar, for making the online portfolio possible. Thank you to my copyeditor Jennifer Worgan, who speedily corrected the spelling, punctuation and grammar errors in this thesis. Thank you to my friends for always being curious, and giving me the confidence to talk about my research more. Thank you to my partner, Allen Huang, for being the sponge who listened to my existential rants. And of course, thank you to my parents, whose continuous hard work and sacrifice over the years has granted me the opportunity in life to pursue a Master's degree.

To all those above, thank you. This project would not have been possible without you.

# ***FORMAT OF THESIS***

This thesis is comprised of this written document and a portfolio of experiments. This portfolio is included in Chapter 3 in an interactive Portable Document Format (PDF). For best viewing of the interactive elements of this chapter, please open this document in Adobe Acrobat. The experiments and content of this portfolio will also be replicated into an online portfolio, which can be viewed at [www.tracingafterlives.com](http://www.tracingafterlives.com) after the completion of this thesis.

# ***PREFACE***



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**Figure 1**

Warped plastic collected from Eco Barge.



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**Figure 2**  
Warped plastic collected from Eco Barge.





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**Figure 3**  
Warped plastic collected from Eco Barge.



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**Figure 4**  
Warped plastic collected from Eco Barge.

This research began in 2018, while I was volunteering for artist Danling Xiao. Xiao was in the process of creating an exhibition, *Wasteland* (2018), that displayed plastic waste found in the Great Barrier Reef. These plastics were obtained through Eco Barge Clean Seas Inc. (Eco Barge)—an ocean clean-up organisation located in Whitsundays, Queensland—during their regular expeditions of the area.

Sorting through the plastics from Eco Barge, what I found was plastics with warped forms (Figure 1, Figure 2, Figure 3 & Figure 4). The warping of these plastics demonstrated the slow material changes that can occur to plastic waste over time—changes that highlight how long this plastic waste had spent in the ocean, and the longevity of plastics overall. Such changes include the presence of marine growths on the plastic, as well as the melting and warping of the plastic's form. I collected 14 of these warped plastics during this volunteer session for further exploration, and later travelled to Eco Barge to collect additional samples.

The presence of these plastics confirmed my own ecological concerns about the longevity of plastic. Their warped forms highlighted the continued persistence of post-use plastic. Their very existence provides evidence that plastic waste does not disappear, but continues to exist after disposal. They illuminate that plastic waste has a life after humans; an afterlife. From this, I hypothesised that identifying and tracing the afterlives of these warped plastics could be used to challenge the ease of use in which plastic is normally consumed and discarded. This shaped the basis of this research project. What follows is an account of how I—specifically as a designer—explore how to communicate these ideas about the warped plastics both to and with other consumers.

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## ***ABSTRACT***

This research proposes that engagement with, and exposure to, warped plastics found in the Great Barrier Reef can facilitate understandings of the longevity of plastic waste, as they provide direct and witnessable evidence of how plastics persist after humans. It argues that the slow material changes to these plastics—such as warping, melting and clusters of marine growths—can be interpreted to form stories that visualise, communicate and open up conversation about the longevity of plastic. Using a Research through Design methodology as a sense-making and articulation tool, this thesis adopts multiple methods of experimentation to explore how these stories may be generated. Methods including photographic documentation, material play, speculative storytelling and participatory methods draw on creative precedents that deal with plastic as well as the ecological arguments of theorist Jane Bennett, among others, to materialise these stories. This research proposes that generating these stories can, for both me as a designer and for my participants, stimulate dialogue about our human understandings of time, and open up ethical consideration about the wider effects of plastic consumption on the world. It argues that storytelling can successfully stimulate these conversations and shifts in perception about the persistence of plastic waste. To confirm this hypothesis, participatory design workshops are engaged as final experiments which test, communicate and observe how *creating* these stories inspires a dialogue about the deep time longevity of plastic. The outcome of this inquiry—a portfolio of experiments that critically documents and presents this process—demonstrates how stories can be generated to encourage ecological understandings about the existence of plastic in these post-disposal spaces. It also demonstrates how warped plastics can provide a point of access to comment on plastic waste on a larger scale, and prompt conversation about the ever-continuing afterlives of plastic.