Dr Zoë Veness University of New South Wales

Resilience Narratives: Shifting imperatives of material-making during times of crisis

Keywords: Material-Making, Object Design, Resilience, Craft, Covid-19 Pandemic

Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. (Arundhati Roy 2020)

This paper highlights three resilience strategies that emerged in the process of teaching Object Design at the School of Art & Design, University of New South Wales (UNSW) during the two lockdown phases in 2020 and 2021. While many educators demonstrated resilience – defined as the ability to recover quickly from adversity (OED 2021) – during the quick pivot to online delivery because of these lockdowns, this paper proposes that the road to recovery lies further ahead. As indicated by the author Arundhati Roy (2020), the past is truly in the past, and the impacts of the COVID-19 pandemic on teaching and learning have permanently shifted conventional past practices.

Broadly speaking, designs created by students during this time also embodied resilience as they worked in self-isolation in the 'home' studio without access to significant on-campus resources or physical interactions with class peers and technical and academic staff. I refer to examples of student projects in Object Design created during the two lockdown phases of 2020 and 2021 to illustrate some positive outcomes that point to 1) the benefits of material-making with work-around materials that are readily available in the home, 2) the importance of drawing methods in the effective visual communication of ideas, and 3) the unexpected impact of an exercise in walking as a design method that was introduced to the course prior to the COVID-19 pandemic.

The Bachelor of Design focuses on the practice of design with opportunities for students to develop theoretical and making skills in key disciplinary areas of Object, Textiles, Graphics, Experience, Interaction and 3D Visualisation. Object Design is studied in three courses in the first and second years of the Bachelor of Design program. Students select two disciplines as their primary focus at UNSW Art & Design with the option to enrol in courses from other disciplinary areas through their elective stream. The disciplinary knowledge that students acquire in their selection of Studio areas is integrated into Design Studio and History/Theory streams.

In Object Design students learn how to create designs for different contexts using the ceramics, metal, wood workshops and digital technologies in Makerspace facilities on campus. The sequencing of the Object courses is designed to move outward in scope from a focus on materials, to culture and society, and finally to the natural world. Studio activities involve writing and making and include research and analysis of precedents and current practices in craft and design to facilitate student understanding of how to position their interests and emerging practice in the contemporary context.

In developing these Object courses in 2018–2019, I devised overarching concepts as design provocations for the assessment tasks. These concepts are intended to guide students through theoretical and material enquiries, to frame explorations of local and global concerns and preoccupations, and to highlight the significance of conceptual rigour as a critical pathway towards design innovation. In the first Object course students develop design skills through experimentation with materials, craft technologies and methods in response to the concept of holding time. In the second course students explore the cultural and social significance of objects through the concept of dining rituals and they develop skills in 3D modelling for application in design production and in the visual communication of design ideas. In the third Object course students continue to develop their digital design skills and explore how objects can bring us closer to understanding the natural world through the concept of biophilia.

The Object courses were designed to be delivered in blended-learning mode which involves in-person, also known as face-to-face classes, supported by online resources. In March 2020 my colleagues and I quickly pivoted these courses online, which remained in place till February 2021 when we returned to campus, delivering classes in dual mode¹ to accommodate students who were hesitant or unable to return to campus, both onshore and offshore. In June 2021 with the outbreak of the

¹ At UNSW Art & Design, dual-mode refers to the delivery of courses comprising both online and in-person classes, whereas hybrid-mode refers to the delivery of courses that include online and in-person students in the one class.

Delta COVID-19 variant, classes returned to online mode only. At the time of writing this paper, we at the School of Art & Design are delivering courses in multiple formats – online, dual, hybrid and face-to-face modes

Resilience strategies

I am interested in three insights or takeaways that the design domain has learned from this experience that I contend are reflective of resilience. I refer to a selection of creative outcomes by Object 1 students created before the COVID-19 pandemic in 2019² as well as projects from Object 1, Object 2 and Object 3 developed during the lockdowns of 2020 and 2021. The first strategy is the resourceful use of materials employed by students to create the jewellery component of their Object 1 course. Normally taking place on campus in the jewellery and metal studios and with a predominant focus on metal, the jewellery component saw students explore the potential for jewellery to embody and carry meaning by creatively transforming materials from the everyday in their home studios, which were often their bedrooms. The second strategy reflects on the students' exceptional visual communication skills that developed due to the availability of more time in lockdown, and their advanced computer skills in 3D modelling, measured drawing and rendering. The final strategy refers to the walking exercise that we retained in the first week of Object 3. Initiated before the COVID-19 pandemic as a starting point for design development, we retained the activity for its value in sustaining students through restorative exercise that alleviated the anxiety of online learning and screen fatigue during the COVID-19 lockdowns of 2020 and 2021.

Examples of Pre-COVID-19 Student Projects

Object 1 was first delivered in blended-learning mode in 2019. With an emphasis on the ethos of the Object Studio to prioritise the practices of making and the notion of 'thinking-through-making' posited by British anthropologist Tim Ingold, design students engaged with design-led craft and reflective processes. As Ingold states:

[In thinking through making] knowledge is not created through an encounter between minds already furnished with concepts and the material world

² At the time of writing this paper, only Object 1 has been delivered in blended-learning mode. Object 2 and Object 3 were first introduced in 2020 and due to the first COVID-19 lockdown were delivered online, therefore there are no examples of projects from these courses in the ideal and intended mode of blended-learning.

already populated with objects. But rather such knowledge grows from the crucible of our own practical and observational engagements with the materials, beings and things all around us in the very processes of thought. So, this is a knowledge that doesn't wrap things up from the outside, taking things and enclosing them with our knowledge. But rather it is the kind of knowledge that grows from the inside of being in the unfolding of life. (Ingold 2013)

Ingold's writing about thinking-through-making facilitates student understanding of how to create new knowledge through direct engagements with materials and processes. The two student works below exemplify the thinking-through-making ethos with material, form and conceptual enquiries explored iteratively across multiple designs. The work by Siann Boustead (Figure 1) explores the concept of holding time in a series of coiled ceramics inverted on timber frames. Time is embodied in the hand-built layers of the coiling process and in the iteration of design forms.



Figure 1: Siann Boustead. Object 1 Project, 2019. Ceramics, wood. Photo: Siann Boustead

Kirsten Faulkner explored the concept of holding time through her juxtaposition of new and upcycled timber in which she embedded three simple cylindrical metal rings (Figure 2).



Figure 2: Kirsten Faulkner. Object 1 Project, 2019. Ceramics, metal, wood, found object. Photo: Kirsten Faulkner.

Both projects were deemed extraordinary outcomes for Object Design and were subsequently selected for the exhibition 'Bright Start' at the Australian Design Centre in 2019.³ Their exceptional level of resolution as physical prototypes, however, also intimidates students who may not yet have developed adept making skills. The objects can therefore dissuade students to think expansively and develop skills in conceptual approaches to design and in communicating their ideas. Shifts away from the making requirement of physical prototypes due to the shuttering of on-campus workshops witnessed new conceptual possibilities and an emphasis on alternate methods to effectively communicate ideas.

The benefits of material-making with work-around materials that are readily available in the home

The COVID experience of 2020 and 2021 by necessity shifted the thinking-throughmaking ethos of Object 1 to the exploration of alternative materials sourced from and transformed in the home studio. To our astonishment, and I will preface this by declaring my bias as a contemporary jeweller, the quality of the students' designs retained a luminosity we did not anticipate with the constraints of the pandemic. In

³ https://australiandesigncentre.com/object-space/bright-start/

Rosie Vanderveer's ring design (Figure 3), for example, the conventions of the circular ring form were pushed sculpturally to invoke associations with the rings of stones or trees that record time. These evocative forms are reminiscent of geological or biological formations balancing precariously on the wearer's hand.



Figure 3: Rosie Vanderveer. Object 1 Project, 2021. Paper Maps. Photo: Rosie Vanderveer.

Another example of expansive approaches to the materiality of jewellery during the pandemic lockdowns of 2021 is Lana Marshall's ring studies (Figure 4). Exploring what is possible with a hot-glue gun, Marshall embodied the concept of holding time during the COVID-19 lockdown by creating patterns that resemble pathogens or a virus made with glue. Her iterative experimentation with the materiality of glue was extensive and she improvised with a flatbed scanner to produce strangely floating images that expressed the experiences of social isolation. As we look to the future, I am questioning how to bring the two approaches together, the traditional metal-making skills with the inventiveness of students' experimental transformations of alternative materials.



Figure 4: Lana Marshall. Object 1 Project, 2020. Glue. Photo: Lana Marshall.

The importance of drawing methods in the effective visual communication of ideas

The second resilience strategy we observed at the School of Art and Design entailed how students responded to the task of creating design drawings that visually articulated scale, perspective views and construction sequences. Students have the option to create drawings by hand, as demonstrated by Annika Karsken's handrendered vessel design in Figure 5, or to develop digital drawing methods using 3D modelling software, as shown in Figure 6.

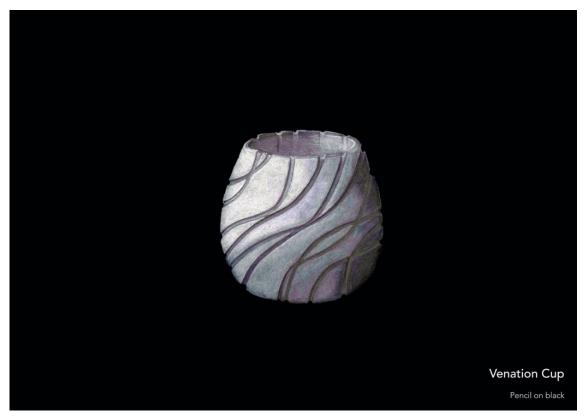


Figure 5: Annika Karskens. Object 2 Project, 2020. Pencil Rendering. Image: Annika Karskens.

In 2018, UNSW Art & Design invested in the development of new teaching resources and digital supports for student learning. A series of step-by-step videos were created to support learning of 3D modelling, which is critical for contemporary design and visual communication. During the 2020 and 2021 lockdowns, these modelling videos provided opportunities for students to strengthen their computer skills as more time was available to focus on this task. As a result, students that explored the digital supports showed a marked improvement in skill development, which was evident in the quality of both the detailed visualisations and the conceptual provocations of the designs.

Responding to the Object 2 project theme of dining rituals, Yanning Yan developed a series of speculative utensil designs based on traditional crab eating tools from his homeland of China. These proposed designs incorporate interchangeable parts, including found objects that are effectively visualised in the rendering (Figure 6). Due to the lockdown experience and the shuttering of campus workshops, students like Yan thought expansively and beyond the limits of their competency with making skills. This specific case highlights the need to reconsider the imperatives of the physical prototype to enable students like Yan to thrive.



Figure 6: Yanning Yan. Object 2 Project, 2021. Digital Renderings. Image: Yanning Yan.

The second example of how lockdowns shifted my understanding of drawing and visual communication as a conceptual skill is exemplified in a chair design by Jessie Sucker-Walton (Figure 7). As a response to exploring our relationships with nature via biophilia, Sucker-Walton referenced a Voronoi pattern found in the natural world. Students such as Sucker-Walton benefited immensely from one-to-one online meetings with workshop staff to discuss and refine technical issues, construction possibilities and fabrication processes. This contact during lockdown was a positive development in 2021 and supported the well-being of students undertaking the material-making courses of Object Studio.

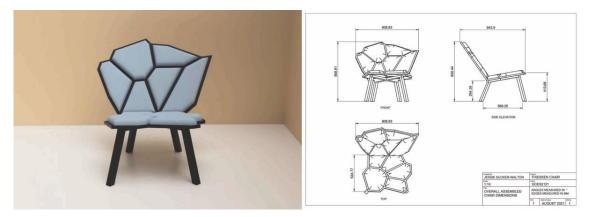


Figure 7: Jessie Sucker-Walton. Object 3 Project, 2021. 3D render and measured drawings. Image: Jessie Sucker-Walton.

An exercise in walking as a design method

Finally, I shall now discuss an exercise in walking as a design method that is explored in Object 3 that builds on digital design processes learned in the previous course. With the aim to introduce the concept of biophilia, or affinities with nature, we invite students to begin the design process by immersing themselves in nature through a walking exercise. Students document their walking experience with observational and reflective notes, sketching and photography. Ten photos are selected to form the basis of a series of drawings and three-dimensional models to further explore biophilia and what nature means to them.



Figure 8: Lachlan Chang. Object 3 Project, 2020. Photographic documentation of nature walks for design inspiration. Photos: Lachlan Chang.

Since teaching the subject during lockdowns I have reflected on the benefits of the walking exercise as two-fold. Firstly, framed as a design method and source of inspiration, walking intersects object design with biology and science. Secondly, walking is a restorative method for alleviating the stress of studying online and the screen-fatigue that results from long periods of concentration aptly described as 'states of attentional depletion' (Joye & Dewitte 2018, p. 2). Therefore Object 3 has the potential to further strengthen theoretical connections between design, psychology and well-being, with notions of well-being effectively looping back into the biophilia theme.

The impacts of the COVID-19 pandemic on material-making courses in art and design programs around the world have been significant. I propose, however, that reflecting on these three resilience strategies provides insights into positive aspects of what has been a difficult if not traumatic experience for educators and students alike. Over the course of 2022 my hope is that we can now develop further strategies for resilience and apply them in the physical design studio. In that way we can develop safe learning environments for friendships to form and opportunities to seed future design collaborations.

Acknowledgements

I would like to acknowledge my academic colleagues at UNSW Art & Design, Bic Tieu and Melinda Young, who have significantly contributed to the transition of the Object 1 course from in-person to online delivery. I also acknowledge Object Design tutors during 2020–2021: Marcia Swaby, David Edmonds, Harriet Watts and Bronwen Williams and the UNSW Art & Design technical officers: Petra Svoboda, Karam Hussein, Thomas Whelan and Emily Copp.

I thank the following students of Object Design, UNSW Art & Design, for providing images of their work: Siann Boustead, Lachlan Chang, Kirsten Faulkner, Annika Karskens, Lana Marshall, Jessie Sucker-Walton, Rosie Vanderveer and Yanning Yan.

Together we have done something quite remarkable. We've had to think quickly and creatively to deliver the Object Design material-making courses, to learn the various delivery platforms – Zoom, Microsoft Teams and Blackboard Collaborate. We've rewritten courses to accommodate online demonstrations of making processes and made every effort to provide support via screen-based learning. In many cases the student outcomes during this time are the result of mutual forms of resilience between educator and students and an overall dedication to the practice of making in the field of Object Design.

References

INGOLD, T. 2012, 'Thinking through Making', *Tales from the North 2012*, Institute for Northern Culture, online video, accessed 26 October 2021, https://www.youtube.com/watch?v=Ygne72-4zyo.html

JOYE, Y., DEWITTE, S. 2018, 'Nature's broken path to restoration. A critical look at Attention Restoration Theory', *Journal of Environmental Psychology*. vol. 59, pp. 1-8, DOI 10.1016/j.jenvp.2018.08.006.

OED Online, Oxford University Press, December 2021, accessed 10 January 2022, https://www.oed.com/view/Entry/163619

ROY, A. 2020, 'The Pandemic is a Portal', *Financial Times*, April 4, accessed 26 October 2021, https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca.html