Making as Growth: Narratives in Materials and Process

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Introduction

Research through design as an activity gives rise to new knowledge both from the creative processes and from any resulting artifacts. All creative practitioners arguably are researchers of one kind or another, whether through materials, aesthetics, technologies, ethnographies, or cultural theory. Indeed, practice-based researchers in the visual arts and design are gaining widening recognition in academia as our means of creating knowledge becomes clearer. However, by comparison to research methods in the sciences, the epistemologies that frame our research methods in art and design are still relatively new.1 Practice-led doctorates in art and design have existed for only 30 years,² and these centers have worked hard to push against the reductive and positivistic approaches that prevail in the sciences. In some cases, attributes and terms of research have been borrowed or adapted from other disciplines—particularly from the social sciences. In creative exploration, ideas tend to emerge and develop on the movesometimes impulsively, sometimes reflectively-rather than arising from the investigation of a hypothesis in controlled conditions. Research methods, we might argue, have unfolded and emerged as inquiry has deepened, rather than being invented or applied to validate academic integrity. In the focus on methods that emerge, design researchers have the means to reposition their projects to frame premeditated research questions and objectives within their work and in some cases to apply research questions after practice has taken place.3

The Research Triumvirate

Donald Schön's seminal work, *The Reflective Practitioner*, has done much to underpin the credibility of practice-based research in design and the visual and performing arts.⁴ Such discussions perhaps came to prominence with Christopher Frayling's paper, "Research in Art & Design," in which Frayling refers to a nineteenth-century distinction between tacit and formal knowledge but makes a case for practice as an amalgam of doing and thinking (i.e., the hand and the head) as equal components.⁵ John Dunnigan's essay on thinking refers to critical making as the

- 2 Louise Ravelli, Brian Paltridge, Sue Starfield, and Kathryn Tuckwell, "Extending the Notion of 'Text': The Visual and Performing Arts Doctoral Thesis," in *Visual Communication* 12, no. 4 (2013): 395–422.
- 3 Ian Lambert, "Critical Making with Aluminium Sandcasting: Design Practice into Practice-Led Research," in *Making Futures Journal* 4 (2015), see online journal at http://makingfutures.plymouthart. ac.uk/media/51098/ian-lambert.pdf (accessed January 31, 2017).
- 4 Donald Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1984).
- 5 Christopher Frayling, "Research in Art and Design," in *Research in Art and Design* 1, no. 1 (1993): 1–5.

Carole Gray and Julian Malins, Visualising Research: A Guide to the Research Process in Art and Design (Aldershot, UK: Ashgate, 2004).

"symbiotic relationship" between thinking and making, referring to embodied knowledge as that which emerges by working with your hands: "The very process itself opens up new possibilities for deep expansive thinking and the serious enquiry that stimulates discovery."⁶

This amalgam has a third component. During a recent critique of post-graduate work, Tanel Veenre, Professor of Jewelry Design at the Estonia Academy of Arts, asked of his students: "... So how has your work arisen? From the heart? From the head? From the hand? All three?" The recognition of this triumvirate is not new. In a television program called *A Potter's World*, aired in the United Kingdom by the BBC in 1961, the great potter Bernard Leach says: "I found that the craftsman is almost the only kind of worker left employing heart, hand, and head in balance."⁷ Frayling alludes to this fullness as he moves toward concluding his paper, stating that "...artists have worked just as often in the cognitive idiom as the expressive."⁸

Untangling these "artifacts" as tangible research outcomes remains a challenge. Tim Ingold, a keynote speaker at the Research Through Design (RTD) 2015 conference, has helped to unpick the tacit process of making from the viewpoint of forming new knowledge and insight. In his book, *Making*, Ingold refers to two approaches to making: *hylomorphic* and *morphogenetic.*⁹ For Ingold, hylomorphic making is making as a task, or as he puts it:

We are accustomed to think of making as a project. This is to start with an idea in mind of what we want to achieve, and with a supply of the raw material needed to achieve it. And it is to finish at the moment the material has taken on its intended form.¹⁰

However, Ingold's *preferred* position is to think of making, rather, as "a process of growth. This is to place the maker from the outset as a participant in and amongst a world of active materials... in anticipation of what might emerge."¹¹ Ingold refers to this process as morphogenetic making.¹² This clarity of understanding and insight maps onto an exploratory, sometimes impulsive or deliberately risky approach to creative practice, and it has helped to further endorse and validate making itself as an important research method.

Increasingly, "the doing" (the process) seemingly yields more new knowledge and insight than "the done" (the outcome), as can be seen in Max Lamb's work. His hexagonal pewter stool, cast in the sand on a Cornish beach, has gained fame through an online video of the making process.¹³ Marcus Fairs summarizes this perspective, and the stool's significance, in the online design magazine, *Dezeen*. "The video is as much the cultural artifact as the stool itself...," he notes:

- 6 John Dunnigan, "Thinking," in *The Art of Critical Making*, ed. Rosanne Somerson and Mara L. Hermano (Hoboken, NJ: Wiley, 2013), 98. See also Matt Ratto, "Critical Making: Conceptual and Material Studies in Technology and Social Life," in *The Information Society* 27, no. 4 (2011): 252–60.
- 7 Bernard Leach, A Potter's World, produced by John Read (aired January 23, 1961).
- 8 Frayling, "Research in Art and Design," 4.
- 9 Tim Ingold, Making: Anthropology, Archaeology, Art and Architecture (New York: Routledge, 2013), 20–22.
- 10 Ibid., 20.
- 11 Ibid., 21.
- 12 Ibid.
- See the stool at http://maxlamb.org/ 031-pewter-stool/ (accessed October 21, 2016). The video can be viewed at https://vimeo.com/9498805 (accessed October 21, 2016).

Despite being a comparatively simple object, the Pewter Stool is rich in narrative. Tin mining was once the main industry in Cornwall, and sand from local beaches was used in the casting foundries. The mold can only be used once, making each piece unique, and the unpredictability of working on a beach means that imperfections become an inevitable part of each object's charm.¹⁴

In the video of Lamb at work using local materials, the making of his stool becomes the delightful and informative element of what otherwise might be regarded as a crudely fabricated object. The making process not only is inspiring, but also is easily understood by the audience. Sharing and distributing processes on the Internet is commonplace today, but the use of narrative brings an additional dimension to the outcome, while increasing the currency in the process itself. It brings us closer to making and provides further insight to and reflection of our material world.¹⁵ The making is inextricable from the resulting artifact, a consideration that connects with Ingold's ideas; in *Lines* Ingold describes paths and places as co-existing necessities:

To be a place, every somewhere must lie on one or several paths of movement to and from places elsewhere. Life is lived, I reasoned, along paths and not just [in] places.... It is along paths, too, that people grow into a knowledge of the world around them, and describe this world in the stories they tell.¹⁶

This notion is easily transposed onto making, in which artifacts are places, and the processes are the paths, and the inextricable coexisting artifact and process are embodied in Lamb's video. Lamb is not a researcher working in a conventional academic context, but he is one of a growing number of professional practitioners who takes an exploratory approach to practice. His work and practices attract interest from commercial parties (so enabling him to make a living), but they are not commercially initiated or driven.

Studio Swine takes a similar approach.¹⁷ (Indeed, SWINE is an acronym for Super Wide Interdisciplinary New Explorers.) They approach their practice almost as independent academics offering deep contextual narratives, such as in their piece titled the Sea Chair. The opposite of a commercial work, the Sea Chair is a polemic against ocean-plastic pollution, one of the biggest environmental problems of our age. The Sea Chair uses plastic retrieved from the nets of a fishing trawler and is symbolically made on the deck of the boat while it is still at sea. Again, video is used to convey the agency, environmental circumstances, and time involved in developing an otherwise crudely fabricated object. In a recent interview, Alex Groves (one half of Swine) describes the final object as just one part of the project.¹⁸ The Sea Chair is not

- 14 Dan Howarth, "Dezeen Book of Ideas: Pewter Stool by Max Lamb," Dezeen, https://www.dezeen.com/2012/11/28/ dezeen-book-of-ideas-pewter-stool-bymax-lamb/ (accessed August 20, 2016).
- 15 Lambert, Critical Making with Aluminium Sandcasting.
- 16 Tim Ingold, *Lines: A Brief History* (New York: Routledge, 2007), 32.
- 17 See http://www.studioswine.com (accessed October 21, 2016).
- Alex Groves, interview by lan Lambert, June 30, 2016.

a solution to the problem of ocean plastic; instead, the video seeks to raise awareness in a non-depressing way. Groves goes on to say that, having been told that plastics should not be mixed, he and partner Azusa Murakami do so all the same, and the process becomes a series of "empirical truths," proving the need for makers to test things for ourselves: "It's good to approach a project with a certain amount of research and knowledge, but also an element of naivety."¹⁹

Two prominent exhibitions at world class museums also have recently focused on making. The Power of Making exhibition at the Victoria and Albert Museum in London was accompanied by a book of short essays on making as thinking, with contributions from, among others, Frayling and Daniel Miller.²⁰ In the Making, at the Design Museum in London, brought making processes to the public eye by "suspending objects in mid-production."²¹ Both exhibitions exposed a degree of provenance in material possessions. This sense of provenance was also communicated strongly in Amy Twigger Holroyd's work, presented at RTD 2015, which is about openness in "folk-fashion"—a form of homemade and repurposed fashion and an explicit counterpoint to the indulgent, resource-intensive, mass-produced, fast fashion.²² Twigger Holroyd's research through workshops enabled a sharing of knowledge and skills that empowers open-source maker communities.

The new permanent Art and Design Gallery at The National Museum of Scotland (NMS) gives over an entire floor to Making.²³ Indeed, in 1860 the Industrial Museum of Scotland, as the NMS was then known, focused on manufactured objects and making and had as its logo an open hand with an eye in the palm, signifying making and insight. That NMS hosted the RTD conference in 2017 was thus highly fitting. With a museum as the conference venue, we also had an opportunity to place current design-led research outcomes alongside the human-wrought artifacts of the past and explore a historical trajectory of our understanding of making things.

- 19 Ibid.
- 20 Daniel Charney, Power of Making: The Case for Making and Skills (London: V&A Publishing, 2011).
- Edward Barber and Jay Osgerby, *In the Making* (London: Design Museum, 2014),
 2.
- 22 Amy Twigger Holroyd, "Re-Knitting: Exploring Openness Through Design," in Proceedings of the 2nd Biennial Research Through Design Conference, Cambridge, UK, March 25–27, 2015; DOI: 10.6084/ m9.figshare.1327993.
- 23 See http://www.nms.ac.uk/nationalmuseum-of-scotland/ (accessed October 21, 2016).
- 24 Jane Norris, "Making Polychronic Objects," in Proceedings of the 2nd Biennial Research Through Design Conference, Cambridge, UK, March 25–27, 2015; DOI: 10.6084/m9.figshare.1327941.

The Making of a Different Conference

Several academic conferences explore practice-led research, but central to the RTD conference series is the focus on the actual artifacts or processes, presented to participating delegates who are assembled around tables in "Rooms of Interest." The tactility and tangibility of the artifact and/or narrative gives rise to a different type of debate around the knowledge in doing, and this difference was very much in evidence at RTD 2015. Jane Norris's Polychronic Bowls explored the combination of different materials across historical eras—for example, felt and plastic or PLA, starch and shellac.²⁴ Norris describes the bowls as "the material driver of the research," and her "aleatory" strategy resonates strongly with

Figure 1

Jane Norris's Polychronic Bowl, Concrete + Nylon + Rubber. Image © Jane Norris.



Ingold's notion of making as a process of growth.²⁵ One technique centers on "historical mining," where layered strata of time are rolled together before being "drilled through them to retrieve a marbled core of options."26 An example of this materialized core is the concrete+nylon+rubber bowl (see Figure 1), where materials from c.300 BCE (concrete), the sixteenth century (rubber), and the twentieth century (nylon) are fused together in an unlikely combination. Other strategies explored by Norris include a system of "perverse partners," using "dissonance to highlight the strangeness of the material combination."27 A paper presentation is no substitute for a critique led by the handling of these fascinating research outcomes and for experiencing the texture, temperature, and juxtaposition of new and old materials, which form the very premise of this work. The making process, although described, is not shown, but it is very much embodied in the artifacts themselves and their very premise.

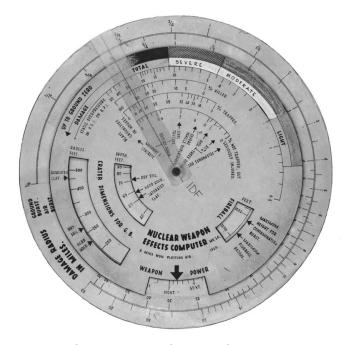
However, the RTD conference is not just seeking to isolate and locate new knowledge in the creative process. Important and powerful contextual constellations inform and enrich our practice and enhance our understanding of the way in which we encounter and use objects, our attachment to them, and their place in society. One of the projects at RTD 2015 exploring such material and extended social relationships was Mark Selby's Earthquake Shelf, which was created to vibrate in real-time to earthquakes that took place in Wellington, New Zealand.²⁸ In seeing a precious vase on the shelf, our first thoughts as the shelf shook might have turned to the care of the vase, rather than to the safety of those whose lives might be at risk. This piece gives rise to the eponymous "experiential making"—using experiences that were "...emotionally significant (and hence memorable) that would have an associated resource of data, and that had a clear effect on material things."29 The outcome is a destructive process in the lifecycle of an artifact arising from a natural calamity that affects the viewer emotionally to generate a sense of helplessness. The piece is both artifact and performance but also a response to a very real catastrophic force.

- 25 Ibid., 2.
- 26 Ibid., 6.
- 27 Ibid.
- 28 Mark Selby and David Kirk, "Experiential Manufacturing: The Earthquake Shelf," in Proceedings of the 2nd Biennial Research Through Design Conference, Cambridge, UK, March 25–27, 2015, http://doi. org/10.6084/m9.figshare.1327994 (accessed April 26, 2017).

²⁹ Ibid., 5.

Figure 2

Nuclear Weapon Effects Computer, c. 1960 (NMS Collection). Image © National Museum of Scotland.



RTD 2017 at the NMS in March placed the artifacts of contemporary design researchers alongside historical objects with which the museum curators identify social, material and technical connections. Appearing as uncanny neighbors, the juxtaposition of the old and sometimes mundane relics of previous lives with the evocative materializations of recent research through design recovers the investigative processes that lead us to make things, and in turn to understand the world by living with them. Indeed, Selby's Earthquake Shelf, with embedded technology and interpretation of information sent almost instantaneously from the other side of the world, has an ancestor in the museum's archive in the Nuclear Weapons Effect Computer (see Figure 2), an analogue device that tries to predict the force of a manmade calamity (rather than responding to a natural one).

Between these simultaneous histories and futures, RTD suspends any determinism toward a contemporary definition for design and instead offers points of entry to the making of narratives—narratives that manifest as objects that become coordinates in Doreen Massey's "pin-cushion of a million stories."³⁰ Our task as designer–researchers is to provide environments that allow objects and their makers to redraw the geographies of design, and that allow new locations for inquiry to be identified. RTD is one such context.

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³⁰ Doreen Massey, Doreen Massey on Space, interview by Nigel Warburton, Social Science Bites, http://www. socialsciencespace.com/2013/02/podcastdoreen-massey-on-space/ (accessed October 10, 2016).