A HYBRID PRACTICE - BETWEEN DESIGN AND CRAFT

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1. INTRODUCTION
This paper draws on the experience of practice-led research that makes hard surfaces soft. The project is a collaboration between a textile designer and an architect and is driven by a critique of the built environment, asserting that most components that make up the built environment are designed only to meet technical specifications and not to address a human interface.

The project, in its fourth year of development, has led to patented technologies that allow textiles to be embedded onto the surface of precast concrete, resulting in tactile finishes. The project is currently within an analysis phase to better understand and exploit the altered characteristics of precast concrete surfaces— which overcome the grey, cold, acoustically harsh and ‘unfriendly’ characteristics of concrete to become colourful, warm, acoustically soft and user friendly.

The development process has revealed many challenges, not least those of bringing together two culturally diverse industries of textile and concrete. We have also had to consider whether the resultant hybrid products fall within the category of design, art or craft. As trained designers we determinedly remain within the territory of design as opposed to art but we have become increasingly interested in the values that craft brings to the process. Where design is aligned to multiple production and can remove itself strategically from the process of making; craft speaks of limited numbers and occurs within the act of making. Where design is associated with the thinker, craft is defined by the maker yet paradoxically over 50% of our process is done through digital manufacturing. The paper will further examine the relationship between craft and design based on the experience of this project, and identify ways in which design and craft can be reconceptualised to develop products crafted with care for the end-user.

2. PROJECT DESCRIPTION
From the beginning, the collaboration behind the Tactility Factory project aimed conceptually to make hard things soft and more specifically, to mainstream tactility in the built environment, by applying a textile approach to the design and manufacture of built environment materials and components. Tactility Factory focuses on combining concrete with textile technologies by designing innovative processes to deliver beautiful and sensorial engaging surfaces.
It took three and a half years of research and development to identify and refine the correct constituent materials and technologies that can be used to combine textile and concrete manufacturing processes to create pre-cast concrete surfaces with an integrated and permanent textile surface. The textiles are specifically designed to include voids, meaning that surface patterning is created as much by the concrete as by the textiles. Interestingly, the resultant surfaces also convey a hand-crafted, antique feel, despite being created using some digital technologies and processes.

This ‘fossilisation of textiles is most notable achieved in the following two techniques

1. ‘linen concrete’: Varieties of linen weights and colours are used. Voids are created through which seeps the concrete, leaving an integrated and robust surface of concrete and linen. Linen is chosen since it is resistant to the alkalinity of concrete.
2. ‘stitched concrete’: A variety of technologies is used to allow stitched surfaces to remain on the surface. Yarns in a range of colours, weights etc can be used to create endless variations in pattern and design.

Tactility Factory has also crafted a context for itself; emerging from a feminist/inclusive critique of the Built Environment that seeks to reintroduce a more human-centred approach to the architecture, not only the spaces, but also of the elements and materials that define those spaces. Tactility Factory understands itself within the ongoing relationships and discourses of ‘textiles and architecture’, ‘architecture and technology’ and ‘ornament and crime’. This deliberation and ‘crafting of the context’ allows us to understand that not only is the product distinctive but also the intent, and whilst that combination brings difficulties it also brings clarity and intensified engagement.

The project is now in the early stages of a spin-out company.

3. HYBRID PRACTICE
In its early stages, Tactility Factory was driven by a singular collaboration between a textile designer and an architect. This remains at the core of its development but has progressed to
include collaborations with pre-cast concrete specialists, mould makers, digital textile designers, weavers, embroiderers, graphic designers, marketing consultants, business advisors and patent attorneys.

Whilst many of those who contribute to the project do not come from identifiable ‘creative’ professions, they all contribute through their expertise and efforts to the application of creative ideas and to the resolution of operational problems.

Within Tactility Factory therefore we work hard to recognise and give credence to the personal motivations of all involved. Some are motivated by the wish to experiment with a familiar technologies; others, by holding true to a work process.

Finding the balance between personal motivations and direction of the company starts with an understanding of the strengths of each person. For example it is understood that the textile designer brings a wealth of knowledge and established track record in the textile design industry. She offers:

- Profound technical skills, a natural curiosity and a confidence to experiment within new and unfamiliar technologies.
- An acute sensibility in creating rich tactile surfaces.
- A fastidiousness about the fabrication of the aesthetic; trialing, testing and ultimately crafting and controlling each technical move to ensure quality outcomes.
- An ability to lead in trend sensitive markets

By comparison, the architect / academic brings:

- A strategic clarity to complex process
- A conviction in linking the conceptual, theoretical intention to the visceral, lived experience.
- Skills in communicating across ‘languages’ and cultures i.e. from visual to verbal, from conceptual to operational, from artistic to engineered.

The intensity of learning around collaboration has been due in no small part to the hybrid nature of the project. Bringing concrete and textile cultures together in one project is a continuous challenge. Whilst much is written about the strength of working collaboratively across cultures or professional disciplines (Paulus and Arian, 2003), less is said about how to cope where cultures appear to be almost antithetical to one another, such as concrete and textiles.

Given that this is a multi-layered project, the chance of experimentation across the material technology of concrete moulds, concrete mixes and multiple textile techniques means that the potential for diversion, confusion and ultimately error is multiplied many times over. Communication and documentation is therefore key. We aim where possible to build diaries, schedules of materials and recipes, tables of trials and critiques collectively and over time we have renamed processes and products in a third language, specific to Tactility Factory and non-discipline centred. The development of this ‘third’ nomenclature seems a necessary outcome of hybrid collaborative practices that stretch across diverse cultures.

Naming is also part of the categorization and critique of the resultant prototype surfaces. All collaborators in Tactility factory regardless of their role take part in this critique and it is at such moments that we witness what Cross (2007) describes as the ‘co-evolution of problem and solution’, where ‘Designing appears to be an ‘appositional’ search for a matching problem-solution pair, rather than a propositional argument form problem to solution’.

Tactility Factory did not start out to address a defined need in the marketplace so this act of ‘crafting’ the problem, categorizing and re-categorizing the potential solutions relates not just to making a product but also defining an as-yet unrealized market-scape. As we categorize
and name we also ask: why would anyone need this product? what purposes could it serve? what other issues does it relate to? The design process therefore appears to be in flux, almost uncertain of its own rationale.

4. DESIGN OF CRAFT?
Design as a process has at different times in its evolution been considered as a gift but more recently as a skill or at least, as Cross (2007) tentatively asserts, “Designing is a form of skilled behaviour”. However the fact that design is taught (albeit often in a vague, almost osmotic manner) and that it improves through practice, is a clear signal that it is indeed a skill. Design evolves and is tested between the thought and the act of representation. It is cerebral and strategic and only becomes tangible through the art of drawing. Interestingly as Lloyd Thomas, (2007) observes, in respect to architecture, only the form and layout of the design of a building is conveyed in drawing form, whilst the material nature and its performance is communicated through associated written text. She goes on to postulate that this might in fact be the cause of the architecture’s historic drift away from materiality; an issue that Tactility Factory seeks to rebalance.

In contrast, craft has always been associated with manual skill; evolving and finally mastered through the hands. Increasingly though craft is also being reconceptualised. In the publication ‘Thinking through Craft’, Anderson examines art practices that overlap with craft, offering an analysis of craft as more than skill-based but also as ‘an approach, an attitude, or a habit of action’. This echoes Mark Jones, Director of Victoria and Albert Museum in the Crafts Council current strategy document, where he is quoted as saying ‘Craft is… thinking with hands as well as head’. The UK Craft Council also sees craft as a way to unlock economic potential in the creative industry sector by, offering ‘an intangible contribution …as a ‘core creative field’. In this way craft is seen less as a sentimental echo of past values and more as a re-framing of vernacular knowledge and skill within a holistic, applied and innovative economic framework.

5. CONCLUSION
In the early days of Tactility Factory, the outcomes were often viewed as art works. We struggled with this perception and were exercised to understand why. In the end it seemed that people encountered the work simply as aesthetic one-off pieces that had no function other than to be decorative. As designers, even when trialling techniques, it appeared we unwittingly imbued the work with an unconscious aesthetic. The perception of it being one-off was reinforced by the fact that the technology we had developed was not exact – so even when we were repeating the same piece, the resultant pieces differed. At the time, we were not aware of how interesting it was to achieve one-off pieces from what was essentially a mass production process – precast concrete. As we progressed we persistently rejected the word ‘art’, stressing instead the word ‘design’ to reinforce our pursuit of replicability and applicability.

As we have crafted the problem and in turn identified applications for the surfaces and as our technology has begun to deliver more consistency, the products are firmly understood within the concept of ‘design’. However we ourselves have gradually moved on to think of the outcomes within the concept of craft since they look and feel ‘crafted’ and substantially ‘material’, not because they are worked by hand but because they are considered through detail and with a sense of hand. In this our work echoes Peter Rice’s (1994) insistence to “…make real the presence of the material in use in the building, so that people warm to them, want to touch them, feel a sense of the material itself and of the people who made and designed it.”
Through using a combination of digital and analogue manufacturing processes we are able to interweave the fabrication and design processes to the point where they exist in parallel; informed and formed by the other. This closeness of thought to ‘real’ artefact (not representational) resonates strongly with craft. And in addition whilst the final results may involve complex, hybrid technologies we determinedly insist that they must speak as textiles do - in an intimate and personal way to those who encounter them. No matter how digitally complex or theoretically informed the designs are; or how efficient or innovative the manufacturing processes become; the single most important characteristic of the surfaces Tactility Factory produces is the quality of the user experience they offer. That for us is the essence of craft.

Cross, Nigel 2007. Designerly Ways of Knowing. Birkhauser Verlag AG, Basel