

Question 2: Define skill in the context of your own practice and the work of two artists/makers/designers from the lecture series.

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Define skill in the context of your own practice and the work of two artists/makers/designers from the lecture series.

The following essay will provide a definition of the term 'skill' and discuss the work of two differing artists that use traditional and digital methods of production.

Furthermore, this will also analyse my own skills-based practice and the comparison of these skills between said artists and my own methods. Finally, it will discuss the skills needed to function successfully as a silversmithing business within contemporary society. The artists I have chosen are the traditional hand-skills based Norwegian artist Tone Vigeland and the technical skills-based artists who use digital skills that utilize 3D printing, Jessica Rosenkrantz and Jesse Louis-Rosenberg, who are the creators of The Nervous System company.

Historically our ability to use materials to create objects with our hands can be seen to have originated from the Neolithic period, where man utilized natural materials such as flint and volcanic glass. These were then used to create weapons with which to hunt and survive and the development of this ability enabled us to change the environment in which we lived, setting us apart from the rest of the animal kingdom. 'Tool-making occurred more than 2.5 million years ago and the process may have enhanced hand/eye coordination. The manual dexterity required may also have primed the brain to make expressive gestures, allowing communications at a distance, which in turn facilitated hunting and helped to encourage bonding in tribes. Gestures are thought to be the forerunners of language and the area in the left hemisphere which was originally given over to them has subsequently developed into the language area, which is unique to humans.'p.31 (Carter, R.). This gradually gave us a heightened manual dexterity, which helped us to refine what we were making and creating.

The term skill can be interpreted in numerous ways within my practice. Primarily, it could be described as the use of physical traditional hand-skills, which are attained through my own practice through the use of hand tools that have been passed down in person, for generations and learnt and practised over years in the craft of silversmithing and goldsmithing. By its very nature, this demands a high level of precision, which is an important element of my specific skill set. Secondly, skill can also be understood as the technical ability required to work creatively with computers, such as using CAD (computer aided design). CAD is a skill that, like silver and goldsmithing, also requires both learning, patience and practice and an awareness of what restrictions the material used could have, and how it could affect the design and outcome of the finished work. Knowledge of factors such as how thick the material needs to be, speed, timings and processes that it needs to go through, can all affect the final outcome when building, for example, a 3D product.

I acknowledge that there is a place to explore through experimentation the boundaries of various materials, both by hand and using technology. My feeling is that to begin by researching and becoming proficient in the principals and the physical capabilities of materials and their restrictions, is both sensible and necessary to achieve a balanced outcome. Thus, issues such as how far a material will bend, how far it can be heated, melted, joined or push the boundaries of different materials can be experimented with and positive and negative outcomes studied.

‘The necessity to explore the balance between total control and coincidental.’

(Hillier). In contrast, the final outcome could actually be through error in the process itself, whereby if something went wrong with the machinery or the hand, it could then present a unique dilemma that could not have been foreseen. Therefore, would this be able to be recreated? We could consider that if this is accidental, would the digital

technology be able to replicate the final product and has the artist enough of their workmanship skills to reproduce the object?

Tone Vigeland's artistic training began in 1955 at the Kunsthøgskolen in Oslo. Her training as a goldsmith started in 1957 at Oslo Vocational College. Following this, she then became a member of the avant-garde artist cooperative Plus in Frederikstad in 1958. Vigeland's jewellery is made up of a large number of tiny multiples of discs, held together with small pieces of wire. "Aesthetic, adorned art testifying to outstanding craftsmanship, and, above all, they are always very wearable jewellery objects".



Fig.1 *Silver bracelet* (date)

The definition of hand-made means to be 'made by hand not by machine, especially with care or craftsmanship' Collins English dictionary. The handmade bracelet made

in silver by Tone Vigeland (Fig.1) combines intricate detailing using tiny circles or holes in many multiples, joined at the back with miniscule wires, the finished piece gives an impression of a solid item. It is comparable aesthetically to the Nervous System, Hyphae jewellery collection, which is a 3D printed construction of rhizome-like networks. 'Inspired by the vein structures that carry fluids through organisms from the leaves of plants to our own circulatory systems, we created a simulation which uses physical growth principles to build sculptural, organic structures. Starting from an initial seed and a surface, we grow a hierarchical network where nodes constantly branch and merge.'

'Handicraft or handmade are historical and social terms, not technical ones.' (Pye, 1971). One of my hand-made projects used porcelain to create leaves, that have been formed into curls and folds, fired in the kiln, then test glazed with neutral and autumn colours before firing in the kiln a second time. After this I have experimented with electroplating the edges of the leaves. 'The transfer of images created by fine artists from one medium, or even one dimension, to another, is so much part of everyday life that we all take the process for granted.' Frayling, C. (2012). When a person buys something in a shop, they may not necessarily consider or realise all the processes that it has gone through to arrive there, or the work that has gone into it, or the skillset that has been acquired to produce it. As an artist I have had to consider the form, and how the material(porcelain) will react with being curved whilst plastic; waiting too long makes it dry-out and crack; if too early it can be too soft and not form the shape wanted properly, as it would be too heavy. 'In understanding the role of failure in open-ended design tasks, we draw on Kapur's conceptualization of productive failure and connect it to research on the role of construction in learning.'

Should designers be sensitive to the problems of life and to the needs of people? I consider these designers to be aware of peoples' problems and needs, they both create beautiful, similar aesthetically looking, intricate artwork. Semir Zeki, Professor of Neuroesthetics at the University of London, 'The recognition of beauty seems to be the most subjective, unquantifiable thing of all. Yet even this can be seen on a brain scan – and is no less marvellous for it.' Nervous system being conscious of budget, time and energy, and Vigeland creating refined, traditionally, hand-made, sophisticated pieces of jewellery. 'The real problem is not to adapt machine production to the aesthetic of handicraft, but to think out new aesthetic standards for new methods of production' Read, H. (1939). Both of these examples explore boundaries within the materials they use and have discovered new ways to respond, reshape, and redesign the cultural practices that surround them, by being innovative, and pushing boundaries.

Within my practice modern technology will be explored, such as; water jet printing, glass and metal forming, 3d designing, casting and printing. My reason for adding these further skill-sets to my current silversmithing skills is to allow for continued development of my future practice, to enable the practice to be a competitive business and to prevent the osteoarthritis in my fingers from stopping my enjoyment and fulfillment of working for myself as a designer/maker. Ideally future plans would also lead to incorporating tailor-made workshop teaching in the future within my practice, to enable me to share my skills with society. 'Humans lived in relatively large groups and the pressure therefore to understand, manipulate and communicate with others acted as an evolutionary pressure on the development of social skills, language and abstract thinking.' (Carter, R. 2019. Culturally and emotionally this would be a very positive outcome and the desire to get people in

society to bond more, switch off from technology, mobile phones and headphones, and interact is something that I feel strongly about. Why does the designer-maker spend hours and hours considering & making something which will often provide them with very little monetary reward? Craft is also a way of enabling society to make time to relax, enrich their lifestyles and forget about life's daily worries. Many people in today's culture have stressful lives, commuting or live alone, or live miles from their families, families split up, work or other circumstances entail. Craft skills enable stress relief and also aid in mental and physical support. This is achieved by the development of skills that combine brain, hands and eyes to work on something that is enjoyable and relaxing. Sennet, R. (2008), 'Three basic abilities are the foundation of craftsmanship. These are the ability to localize, to question and to open up. The first involves making a matter concrete, the second reflecting on its qualities, the third expanding on its sense. To deploy these capabilities the brain needs to process in parallel visual, aural, tactile, and language-symbol information.'

Furthermore, achieving the rewards of attaining new skills themselves or within a group, thus benefiting from the social skills that are needed.



Fig.2 *Hyphae Jewellery*

The Nervous System create simulations that use physical growth principles to build sculptural, organic structures which are marketed through a computer app which provides the opportunity for individualization from the customer's perspective. The company also provides a full range of digital services for a wide target market.

'Hyphae Jewelry is a collection of 3D printed artifacts constructed of rhizome-like networks. Nervous system is located in New York, founded by Jessica Rosenkrantz and Jesse Louis-Rosenberg in 2007. They write computer programs based on processes and patterns found in nature then use those programs to create unique products by generating designs with computer simulation and digital fabrication. They have a permanent collection in the Museum of Modern Art, the Cooper-Hewitt, Smithsonian Design Museum, and the Museum of Fine Arts, Boston. Using both algorithmic and physical tools to create innovative products and environments.

These systems are interactive, responding both to changes in specific variables and to physical inputs. There is no definitive, final product, instead the many designs created allow for mass customization. Their products are designed to be affordable and ethically made, using manufacturing methods that do not require large facilities or massive manual labour. They use rapid prototyping methods by which, all unique pieces can be manufactured.



Fig.3 *Gold Choker* (2003)

According to Carter, culture started around 80,000 years ago, with language, facilitating the development of self-reflection and the ability to imagine future and distant worlds, and therefore to plan and innovate.' (Carter, R. 2019). The above image shows a sophisticated and delicate gold choker, based on the local Thai flower 'Dok Peep'. It was hand-made by master craftsmen using the historical and traditional technique of medieval Thai goldworking, both were tutors at the Royal College of Goldsmiths in Bangkok; The woven-gold that was used to make the meshed collar was historically practised at Ayatthaya (the previous capital of Thailand) between the mid 14th and late 18th century. This highly skilled, lost craft was revived in the 1970s by a group of goldsmiths. In order to further develop and

progress, lost arts should not be 'lost', but rescued for future generations, so historical traditions are not left behind, i feel that there is a place for the cultural, traditional physical and modern digital skills in todays society and within my future practice.

In conclusion, the future plan that I envisage in my practice is to encompass both traditional and modern technology to facilitate the business. It would welcome one-off bespoke commissions, for precious jewellery, made with traditional hand-tools, as in the example of Tone Vigilands' work. To be a part of the continuation of silversmithing skills that have been developed since the stoneage, from items made for practical use in survival, leading to agriculture, and moving forwards to todays modern culture for items of beauty and adornment would be very fulfilling and rewarding. It would provide a sense of well-being and achievement, to be a part of the continuation and combination of keeping and passing down traditional skills to future generations, with selling my work and growing small teaching workshops. In comparison, the intention is also to progress the practice and to explore the exciting new digital world, by incorporating modern digital technology skills. To explore the possibilities available to my practice, to improve my physical and digital skillset through studying how to incorporate and combine the use of digital and traditional values within the work created. This can be achieved by exploring the use of CAD, within my designs. Another business method would be to sell my individual designs within a design directory, such as online with The Guild of Jewellery Designers. Either by learning the process myself, working in a collaboration, or sending off ideas to be designed, all would depend on costings, the skill level required, timescale and the nature of the work, for which the design is intended. CAD can be used to create a specific file that is necessary to print from 3d printers, waterjet cutting, plotter

cutting etc, as per the example in the work of Jessica Rosenkrantz and Jesse Louis-Rosenberg of The Nervous System. Product will be designed and made with skills that have been studied and practised, to obtain high quality workmanship, whether that is through the digital hand or the physical hand or a combination of both. Pieces will be well designed so that they will last, creating heirlooms that can be passed down through the generations, as with the new phrenologists, I am determined that my work will 'stand the test of time'.

Bibliography:

Sennett, R. (2008) *The Craftsman*: [London] Penguin Group

Pye, D. (1978) *The Nature and Aesthetics of Design*: [London] Herbert Press p11

Frayling, C. (2011) *On Craftsmanship towards a new Bauhaus*: [London] Oberon Books Ltd

Wenger, E. (1998) *Communities of Practice Learning, meaning and identity*: [New York] Cambridge University Press

Flusser, V. (1999) *The Shape of Things*: [London] Reaktion Books

Lockheart, J. *The Hand and Skill*

Dormer, P. (date)

Chambers Mills, R. and Tigerman, B. *Beyond Bling, Contemporary jewellery from the Lois Boardman Collection*

Vigeland, T. Necklace, (1982), silver, gold, gilded silver, rutiled quartz, nephrite. *Beyond Bling*, [California] Los Angeles County Museum and DelMonico Books M.2016.21.75p.190

Zellweger, C. (date) *Foreign Bodies*:

Grenier, F. (2010) *Pewter Designs and Techniques*: [Marlborough] The Crowood Press

Fig.1 Vigeland, T. (1985) silver bracelet [jewellery] (viewed: 15 December 2019) Available at: https://www.925-1000.com/no_vigeland.html (Accessed: 15 December 2019)

Fig.2 Rosenkrantz, J. Louis-Rosenberg, J. (2019) Bracelet [Hyphae jewellery]
collection location: Viewed: 15 December 2019. Available at: <https://n-e-r-v-o-u-s.com/>

Fig.3 Wongchan, S. (2003) Gold Choker, [jewellery] (Museum no. IS.221-2006).
Collection location: Viewed: 17 December 20-19. Available at: (Accessed: 17
December 2019).

Viewed: (16 December 2019). Available at:
<https://www.collinsdictionary.com/us/dictionary/english/handmade>

Viewed: (15 December 2019). Available at:
https://moodle.uwtsd.ac.uk/pluginfile.php/327364/mod_resource/content/1/Week%208-The%20HAND%20%20SKILL%20.pdf

Viewed:(17 December 2019). Available at: <https://www.kindle>

Carter, R. (17 December 2019) Mapping The Mind: Phoenix p31

Harvard Reference. Viewed: (12 December 2019). Available at:
<https://www.sciencedirect.com/science/article/abs/pii/S1871187117301839>

