Emerging Design Practice Meets Cutting Edge Curating
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This paper came about from the observation that new ways of designing and making are constantly emerging, especially within schools of design, but that design museums struggle to accommodate them. The renewed vigour and confidence of designers in recent years has been observed frequently and very many extraordinary practices and individual works have been created that challenge pre-existing notions of what a designer should be or do. We have seen the emergence of designers-as-artists, as well as designers-as-social activists, commentators, visionaries and problem solvers. Some of these descriptors have been embraced by museums, while others are more resistant to institutional interpretations.

In order to think about this issue I intend to talk in some depth about two recent projects, one a machine to draw self-portraits and the other a handmade simulacrum of a cheap electric toaster. Both projects arise broadly from the context of industrial design but neither easily fit into the ways in which museums of design generally consider industrial design, where mass-produced twentieth century goods, notably those made of plastics and synthetics, are frequently represented as the agents of progress in the period. In this sense design has been regarded as part of the story of modernism. Finished, market-ready goods are usually collected and those in box-fresh condition are privileged. The larger or more in-depth design collections may also collect design prototypes, drawings, models and other paraphernalia of the design process, and here the subject focus shifts from the social or economical role of the object to an exploration of the creative process of the designers or manufacturers.
In important ways both my case studies contradict this model of representation and extend the potential for the study of industrial design in design museums in new and challenging directions. Both projects are about industrial design and mass production, but neither is a typical result of this system. They are both commentaries, open to artistic interpretation as well as critical judgement. I have found it useful to refer to Walter Benjamin’s essay *The Work of Art in the Age of Mechanical Reproduction* as a critical sounding board for these works. In this essay Benjamin discusses how the purpose of art has shifted from being an expression of religious belief or a part of myth – he describes this as ‘cult value’ – to serving its own aims – that which he calls its ‘exhibition value’. Since both my case studies exist primarily to communicate with audiences through the medium of exhibitions, and I am considering how this may happen in the modern design museum context, their ‘exhibition value’ is a pertinent concept to bear in mind.

[SLIDE 2: SHANGHAI PORTRAIT]

Writing this essay in the 1930s Walter Benjamin was primarily concerned with the effect on art of photography and the relatively recent innovation of film. He wrote,

“It is no accident that the portrait was the focal point of early photography. The cult of remembrance of loved ones, absent or dead, offers a last refuge for the cult value of the picture. For the last time the aura emanates from the early photographs in the fleeting expression of a human face. This is what constitutes their melancholy, incomparable beauty.”

Benjamin emphasises the long cultural importance of the portrait and its close affiliation with the history of photography and the representation of human identity, which gives us a context for the first of my case studies, the Self-Portrait Machine by Jen Hui Liao, designed and made in 2009 when he was a second year MA student in the Design Products Department at the Royal College of Art.

[SLIDE 3: SHANGHAI PORTRAIT]
Jen Hui Liao, who is Taiwanese, took inspiration from several quite disparate experiences and thoughts. One strong influence was his observation of factory conditions in contemporary China. These factories are probably not exceptional in the industrialized world, apart perhaps for their enormous size and number. Throughout the history of industrialisation critics have berated the de-humanisation of factory workers in the ‘dark satanic mills’. While in Britain modern health and safety rules and labour laws have largely separated the operatives from their machines, Jen Hui Liao found this is not necessarily the case in China. Some of the footage he discovered reinforces our impressions of factories as soulless places where people are still dehumanised, subjugating their bodies, souls and even their lives to mechanisation. The rhythms of their work are governed entirely by the machines. Machines were invented to service humankind, but they always seem to reverse this relationship, requiring our sacrifice to service them. Questions of individual liberty and self-expression that we may take for granted are also more poignant in communist Chinese society where they are regarded very differently. Therefore for Jen Hui Liao, an ethnically Chinese designer, the lot of Chinese factory workers inspired an investigation into the nature of human identity.

[SLIDE 4: SHANGHAI PORTRAIT]
A student trip to Shanghai provided another, quite different, inspiration for him. He visited a street famed for its portrait painters, where he commissioned five portraits from different artists. However, he sat for none of them, as they all used digital cameras to capture his image before rendering it by hand in pencil or paint in his absence. One artist even used his mobile phone to take the image. In one sense their ability to create lively portraits under these conditions is testament to their considerable artistry, but the portraits commissioned from pavement artists the world over represent the most mechanised and industrial form of art production, a veritable production line of images. They may approximate physical likenesses but almost always lack any deeper psychological insight and individualism generally ascribed to ‘fine art’ portraiture.
In a sense, Jen Hui Liao felt, the Shanghai portrait artists are integrated into the mechanised world in a similar way as the factory workers. The artists are alienated from their subject by their mechanical capture of his image on a camera, and the subject is alienated from the artwork – his own image – by the disinterest of the artists who produce their art as piecework.

In his essay, Benjamin cites the dramatist Luigi Pirandello who ponders the strange relationship of screen actors to the camera. No longer performing for a live audience but for the disinterested mechanical device, the camera, “The film actor feels as if in exile – exiled not only from the stage but also from himself. With a vague sense of discomfort he feels inexplicable emptiness: his body loses its corporeality, it evaporates, it is deprived of reality, life, voice, and the noises caused by his moving about, in order to be changed into a mute image, flickering an instant on the screen, then vanishing into silence.” In similar ways, the sitter for a pavement portrait artist loses his sense of self at the same moment he or she has it captured.

Factory production and the nature of self-identity, therefore, informed Jen Hui Liao’s Self-Portrait Machine. This device enables an individual to draw his or her own portrait, even if they lack any artistic talent or skill. Yet they are not creating the portrait independently, and their creation is as much the product of the machine as it is their own work. The device has a strong mechanical aesthetic. It is made of polished aluminium, like a piece of laboratory equipment or a highly specialised and finely tuned appliance (which, indeed, it is). The main component is a draughtsman’s table, at which the operative sits on an uncomfortable metal chair. Beside the table, which also has the cool, objective atmosphere of a surgeon’s medical gurney, are various complex computer installations and movable lighting, evoking a life-support system. The mood is not altogether benign, but suggests a
laboratory experiment, or a medical examination, neither of which are the traditional sites of artistic creation.

[SLIDE 8: SELF PORTRAIT MACHINE / EIRIK HELGESEN]
The self-portrait machine is performative: it can only be fully understood by operating it. In order for this to happen the subject, or artist, must subjugate him or herself to the machine. He or she must sit at the desk and allow their hands and wrists to be bound to two robotic arms on its surface. Like workers in factories, man and machine become one. At a cue, the lights flare and a camera fixed across the desk takes a digital image of the sitter. Benjamin considered how the strangeness felt by the film actor in front of the camera equates to our own sense of estrangement seeing our reflection in the mirror, with the difference being that the film is a public medium but our mirrors are private. He concluded, “But now the reflected image has become separable, transportable. And where is it transported? Before the public.” The Self-Portrait Machine draws our portrait in public as a spectacle. The sitter is laid bare as the mechanised image equates to his or her mirrored self-image.

[SLIDE 9: JEN HUI LIAO LECTURING]
With a mix of off-the-peg, customised and self-written software, Jen Hui Liao’s machine captures the image of the sitter’s face, simplifies it into two tones, and generates tools to control the motions of the robotic arms. The sitter, lashed to these arms and holding two coloured pens, can do nothing but wait for the machine to act. This it does by moving each arm in broad, smooth diagonal sweeps across the paper, lowering the artist’s hand to press the pen to paper in the areas that need colouring, and raising it to pass over the blank areas.

[SLIDE 10: SELF-PORTRAIT 1]
Even though the artist only needs to hold a pen and allow the machine to do the rest, this is not as easy it appears, as the angle of the pen will radically affect the outcome, and the robotic motion of the machine’s arms requires the sitter to keep relaxed,
which is not easy under the circumstances. The sitter is utterly subjugated to the machine that is creating his or her self-image. Yet the machine cannot draw the portrait without the co-operation of the sitter, who has volunteered their image and now holds the pens.

[SLIDE 11: SELF-PORTRAIT 2]
Once the portrait has been drawn, which can take several minutes, the machine signs its signature, Gepetto, the father of Pinocchio and the famous maker of puppets who sought, above all else, their humanity. Jen Hui Liao explained why he chose to sign the portraits in this way:

“The idea is to create an end point for finishing the cooperation process, but [also] a starting point to let the user think about why and how we build our society with/as machines, then [we are] able to wonder how to seek our position in this big system. It's an individual process determined by many personal choices, I believe viewers will have to find answers by themselves.”

[SLIDE 12: SELF-PORTRAIT 3]
The portraits that result from the machine necessarily look machine-made, but are also reminiscent of Andy Warhol's silk-screen portraits. They share a bold, garish, simplified Pop Art aesthetisization of the human face, as do the more recent portraits painted by Julian Opie. Warhol’s portraits were famously the product of the Factory and Jen Hui Liao has developed a highly distinctive method of producing portraits using mechanised means. Warhol and Opie both produced portraits of public figures in the glare of publicity and celebrity, re-connecting to Benjamin's consideration of the public sphere in which film operates.

[SLIDE 13: SELF-PORTRAIT 4]
The Self-Portrait Machine is therefore a complex work referring to the nature of mechanical production, and the creation and the presentation of self-identity. The curatorial challenge is to contextualise and interpret it. For a start, what part of this process constitutes the work and where is its focus? Is the Self-Portrait Machine the
‘object’? Or should we privilege the artworks and regard the machine as just the specialist tool to create them? Are the Shanghai portraits and films of Chinese workers part of the work, or part of its design process? Is this work part of art history, or a commentary on science and technology? Is it a media device, a sculpture, a performance piece, an example of advanced product design, a robot, or an artistic representation of any or all of these? Ultimately we should also see the subject of this project as Jen Hui Liao himself, and the machine and its works as combining to be a portrait of his own sense of self-identity.

[SLIDE 14: SELF-PORTRAIT 5]
One way to consider how to interpret this work is to think about how its environment affects it. To date the Self-Portrait Machine has been shown publically three times, on each occasion relatively briefly primarily as a performance piece in a gallery setting. On each occasion it has been to a lesser or greater degree curated and has been subject to the curatorial imperatives of its site. Shown first within the context of the RCA degree show, the work was regarded as a virtuoso demonstration of the student’s technical and philosophical mastery of his subject, design. Here, the Shanghai portraits and films of Chinese factories accompanied it, but my sense is that these were shown to give it context and explain the designer’s process.

[SLIDE 15: V&A EVENT]
Its second appearance was at the Victoria and Albert Museum where it was presented in the surroundings of a sculpture gallery including many portrait busts. The mechanical aesthetic of the machine and the Pop Art portraits it produced must have contrasted sharply with the refined classicism of these conventional works of art, making the Machine into something of a novelty. It is fair to say that, in keeping with much performative, interactive digital art and design (for example most of the content of the V&A’s Decode exhibition) work like this shown in the hallowed halls of the academy can look gimmicky. The third outing for the machine was in a group show of RCA students and alumni in Milan during the annual furniture fair. In this
broad context, the machine can be regarded as an experimental cultural design exercise when compared to the largely commercial and industrial content of a furniture trade fair. (That said, the Milan event is so much more than a trade fair and has long been an arena for the exploration of advanced design ideas).

[SLIDE 16: JEN HUI LIAO]
Jen Hui Liao's ambition is to display his work at the National Portrait Gallery, where the machine itself will be secondary to the portraits it draws. In this context it will no longer be about the mechanical process, or the symbiotic relationship between artist, machine and subject, but about the process of drawing, and quite specifically the particularities of creating portrait images as signs of individual identity. The Shanghai portraits would regain pertinence here, precisely because the institution is dedicated to celebrating the portrait format. They represent a ‘low’ expression of the art form, but for this reason they become poignant because, as Benjamin observes, “The greater the decrease in the social significance of an art form, the sharper the distinction between criticism and enjoyment by the public. The conventional is uncritically enjoyed, and the truly new is criticized with aversion.”
Therefore we are free to enjoy the portraits’ conventionality at the same time as we may be put-off by the mechanical portraits made by the Self-Portrait Machine.

[SLIDE 17: ARGOS TOASTER]
When museums display industrial design they have a tendency to fetishize their design qualities by decontextualising the objects. Thomas Thwaites’ Toaster Project, however, explored the design of electrical products from any entirely different perspective. It was all about the context. Thwaites (who graduated from the RCA Design Interactions department in 2009), sought to replicate from scratch a £3.99 Argos toaster, mining the materials and making the components himself. The aim of his project was to remind us of the complexities of everyday ubiquitous products we take for granted, and to emphasise the utterly unbalanced value we place on some resources.
Thwaites meticulously recorded his process in various media, including an online blog and in film. At the outset he stated his expectations:

“After some research I have determined that I will need the following materials to make a toaster. Copper, to make the pins of the electric plug, the cord, and internal wires. Iron to make the steel grilling apparatus, and the spring to pop up the toast. Nickel to make the heating element. Mica (a mineral a bit like slate) around which the heating element is wound, and of course plastic for the plug and cord insulation, and for the all important sleek looking casing. The first four of these materials are dug out of the ground, and plastic is derived from oil, which is generally sucked up through a hole.”

His quest for these materials led him to disused mines and to numerous experts for advice. He also had recourse to ingenious ways for replicating large-scale industrial processes, quite literally in his own backyard or kitchen, for example by smelting iron ore in a domestic microwave oven. Throughout the process the futility and poignancy of his determination to make his own version of a low cost appliance is both apparent and the point of his quest. His films add a performative quality to the project, and also affect its focus, as the project is in part a portrait of the indefatigable Thwaites himself.

In stark contrast to the mint condition and box-fresh perfection generally expected of industrial products in museum collections, Thwaites’ toaster never functioned, and was seriously compromised. He described it as “a very imperfect likeness to the ones that we buy - a kind of half-baked, hand made pastiche of a consumer appliance.”
Since its first showing at the RCA, the project has been displayed in various international gallery settings in Lancaster, Dublin, Rotterdam and Tokyo, most often in galleries dedicated to science and technology rather than to art and design. It occupies a middle ground between all these disciplines. It is *about* science, technology and design but does not stand alone as an example of any of these. It is a commentary upon the realities of industrial production without being industrially produced. I am inclined to think of it most as a media event and to think of the core of the project being the films documenting Thwaites process, rather than the lumpen malfunctioning outcome. It is as if the awful toaster Thwaites managed to make is intentionally a weak simulacrum of the real thing. It necessarily must be so, in order to create the sense of critical distance from the ubiquitous original artefact and all the issues surrounding its production and use.

As Thwaites comments, “So are toasters ridiculous? It depends on the scale at which you look. Looking close up, a desire (for toast) and the fulfillment of that desire is totally reasonable. Perhaps the majority of human activity can be reduced to a desire to make life more comfortable for ourselves, and has thus far led to being able to buy a toaster for £3.99 [among other achievements]. But looking at toasters in relation to global industry, at a moment in time when the effects of our industry are no longer trivial... I think our position is ambiguous - the scale of industry involved in making a toaster [etc.] is ridiculous but at the same time the chain of discoveries and small technological developments that occurred along the way make it entirely reasonable.”

These case studies have many similarities and curatorial problems. Both comprise relatively large scale multimedia installations, two- and three-dimensional documentary archives, and delicate mechanisms. Both projects require considerable contextualisation and explanation to make sense. Both projects are
about industrial design but are not of it and are commentaries upon its nature. The Self-Portrait machine requires highly specialised expertise to operate it, that can only be supplied by its originator, Jen Hui Liao, who acts as Gepetto to this Pinocchio. The results of the Toaster Project are more autonomous but need Thwaites’s description of his incredible journey to make them meaningful. Both projects have in-built weaknesses that compromise their longevity. For the Self-Portrait Machine it is the inevitable obsolescence of its software, coupled with the volatility of the inks and papers used for the portraits that will lead to their inexorable degradation. Meeting no agreed standard for production, Thwaites toaster is already past the state of self-destruction normally applied to museum collection objects, and will only degrade further, as the homemade synthetic compounds within it act upon one another. In the museum setting these are serious issues, and collecting policies may conspire against objects with in-built obsolescence and self-destruction.

Perhaps the only reasonable curatorial response is to host these works as temporary insurgents into the academy, but this inevitably makes it more difficult to consider them with the critical distance and depth of objects integrated into the cannon of design and collecting. The danger is that they are presented as conceptual art installations rather than within the context of design discourse where they are most meaningful. Perhaps the most radical way to curate them is to remove them from the academy altogether, reinserting them into different, more critically vibrant contexts.

To date the two works have only been seen in museums and gallery settings emphasising what Benjamin described as their ‘exhibition value’. There is another context that changes the meaning of the Self-Portrait machine once again. This would be to commercialise the experience of drawing one’s portrait. Imagine the Self-Portrait Machine installed back stage at a music festival, in the VIP room of a night club, or at an Oscars party. Here it could be the contemporary equivalent of Warhol’s silk screen portraits, creating the images of the rich and famous as a tool of
celebrity media culture. In this context the machine would cease to be part of a consideration of the creation of identity or the production of art artefacts in an academic context, but would create commodities for consumption on the open art market, that flatter the vanity of the commissioning patrons, at the same time as they are rendered as mechanical products – Pinocchios – themselves.

The Toaster project would gain real currency if it were installed alongside shelves of toasters and other appliances in a department store, since its real purpose is to make us reflect on the impossible cheapness in real terms of these consumer durables. Thwaites has considered this, but unsurprisingly commercial retailers have resisted this idea. To see the toaster so displayed would have to become a guerrilla act, which was not Thwaites’ intention: he is not the Banksy of product design, however critical of the consumer system his work may appear to be. Most powerfully, the Toaster Project operates as a media event, signalling an original and insightful way to reconsider not only the processes, choices and compromises that go into the manufacture of toasters, but the ways in which all manner of manufactured goods and services arise. It is a model for a way of thinking about designed products.

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3 Interestingly, a sixth portrait commissioned from a pavement artist in Leicester Square turned out to be cheaper than the Shanghai portraits, but of poorer quality too.
4 Op cit., p.222.
5 Ibid, p.224.
6 email correspondence with the author, 11 May 2010.
7 Ibid, p.227.
8 For example, a recent exhibition of products by the great German designer Dieter Rams, held at the Design Museum, displayed his projectors, radios, record players and other electrical devices designed for the manufacturer Braun, in teutonically precise arrangements, but omitted references to their users, explanations of their
obsolete functions, and even the messy power leads that would once have powered them.

10 Ibid.
11 Ibid.