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GOOD BENEFACTORS MANAGING DESIGN EXPECTATIONS

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ABSTRACT
Product design graduates can present themselves as over confident, unrealistic and even arrogant to potential clients. They seem to assume knowledge about their benefactors and have some false expectations of what it means to be a designer. Design courses should provide opportunities for students to explore their own background and experience. They need to develop an understanding the importance of social networks and be able to work with a wider range of organizations. It is vital that they understand the value of intellectual property and its central role in design exchange today. There is more than one design career route open to them and they must be able to change and adapt and be ready to take up opportunities. This paper is written from the viewpoint of a design historian and design manager, who has a fractional post teaching Contextual Studies on a Product Design course, at The University of Northampton, whilst running a specialist design consultancy. Those teaching design should learn to be good benefactors and manage their undergraduates' expectations.

Keyword: Product design, expectations, social networks, intellectual property, design ethics

1 INTRODUCTION

Pip's dream of a successful future was based on thinking his benefactor was the wealthy and eccentric Miss Haversham rather than being sponsored by an escaped convict. When he learns the truth he can adapt to the new circumstances because of his down to earth character, a strong social network and legal training.

I studied Charles Dickens' *Great Expectations* [1] in the classroom. I became fascinated with its soap opera structure. I drew a network that showed all the links between the characters in the story line. Whilst others were studying the language I was interested in the pattern of the story line, as well as the social context of the characters in the nineteenth century. I went on to study Sociology and particularly theories of social change and then an MA in Design History. The Master's dissertation [2] focused on the sociology of the gift [3][4] and studied how it was commercialized in Pip's time and 1950-1980 decades. Designers played a central role in this process in both eras. I have now been running a specialist research and design consultancy and teaching undergraduate designers for some thirty years building on this academic work.

The methodological approach underlying this paper is that of participant observation [5]. It is also a historical account and should be read alongside other accounts of changing teaching practice in the last twenty years [6]. It is about shared experience and the lessons that can be learnt from reflecting on teaching practice [7].

2 DOWN TO EARTH - KNOWING YOUR ROOTS

In higher education we aim to inspire another generation. To make sure our design graduates have great expectations which are not based however on unrealistic dreams or assumptions about their future career routes. Through my design practice I have been able to introduce young product or industrial design graduates to clients. I soon learnt that young male industrial designers [8] came over extremely badly at initial meetings. Time after time we either lost the opportunity to work with clients or the graduate on the team had to be replaced. I observed and changed my practice. Graduates trained as product or industrial designers were not introduced to new clients and were offered technical or support roles. What was the problem in giving them an opportunity? They came over as arrogant.

They did not listen to the clients' needs. They patronized experienced sales staff. They lacked knowledge of manufacturing processes and constraints. They over-valued their ideas and expertise. If they did not appear arrogant, then they lacked confidence and did not inspire managers to give them a chance at their enterprises. On the other hand, graphic designers and illustrators seemed to listen to the customer. It appeared to me that they were better trained and prepared to work more closely to answer a client's brief. They expect to be supplied with copy, images and brand information. In the textiles, fashion and clothing design specialisms there are fewer manufacturing processes and variables; the human body, clothing construction methods and dominant fashion trends, provide a shared starting point. Designers supplying images and surface patterns expect to work with art directors, graphic designers and on existing or standard products. Maybe what the consultancy was asking these product graduates to do, such as design small household products, new shapes for ceramics or plastics, structural packaging, personal accessories and toys was beyond the boundaries of their training. In some cases it seemed "beneath" their experience: craft, not Design or unworthy on some unvoiced way. The writings of Penny Spark [9], Judy Wajcman [8] on gender and design issues and the notion of craft and making in David Guantlett's *Making is Connecting* [10] have all proved valuable in my understanding of Product Design graduates attitudes and expectations. As educators we need to understand the social history of technology and how this has effected how and what we teach.
Design teaching needs to provide the skills to work in inter-disciplinary teams and in ever changing situations. In my practice, Vicki Thomas Associates (VTA), the client is often a trader or retail buyer without a design studio or even marketing team for support. As a design historian and a practicing design manager I bring a different perspective (as a sociologist, historian and as a woman running a design consultancy in the gift related industries) to the Product Design Team at Northampton. I have taught on the BSc course since it developed from an HND. The course started in 1994 and was based in within a School of Engineering and Applied Sciences, with staff contributing from aeronautical, mechanical engineering, mathematics, manufacturing and computing. The teaching staff had specialisms in engineering, plastics, recycled materials, timber and leather manufacturing. The course also drew on staff from the School of Business, where the focus in the 1990s was on training them to work be able to work outside the UK in the European Union with French language being taught. Links to the School of the Arts, where I was initially employed as a Design Historian were strong. The course emphasized sketching, drawing techniques, visual research and communication. It set out to integrate Art, Science and Business knowledge and from the outset the focus was on teaching through projects, ideally live ones from industry or competitions.
Like Pip, in the Dickens' novel who is an orphan brought up by relatives and struggles to know where he comes from a designer can benefit from have an understanding of their roots. Pip's surrogate father was a blacksmith, a skilled craftsman and metalworker. The Design History teaching has been about context of changing design practice. The first year curriculum teaches core academic research and writing skills, introduces sources of information and provides a history of the rise of the professional product designer. The blacksmith certainly has a place in that story. The module encourages an understanding of different historical approaches. It aims to develop the ability to discuss the variety of explanations of what design is and what design's role has been in society. There is a stress on the history of innovation in technology, materials and processes and in understanding how these developments have been taken up by industry and consumers to change the way we live. It differs in approach and emphasis from an Art History program. Nor does it focus on design theory, nevertheless, like any new discipline Design History [11] is informed by other academic subjects and approaches.

3 A STRONG SOCIAL NETWORK - RECOGNISING BENEFACTORS

When the course was written the second year Contextual Studies had a marketing emphasis and looked at the designers' role in contemporary western society. By 1999, our teaching at all levels had widened and the second year Contextual Studies was altered to encourage discussion of key areas of current practice such as cross-cultural design, sustainability, the global market, the effects of digital technology and knowledge transfer issues. We linked these topics for undergraduates with an exploration of ethical and legal issues. The aim was to generate awareness and provide a space in the curriculum for them to think through and discuss these issues among themselves. The focus of teaching had moved from expectations of design careers within the European Union primarily with industrial manufacturers and practices to preparing them to work with global partners in a wider range of creative industries and social enterprises. The studio projects were raising ethical issues and as staff

we felt it was vital for their future careers that they reflect on their practice too and in the types of projects they tackled. An early graduate joined a firm designing gambling websites in Cyprus, one with Dyson at the time when production was shifted to the Far East, as well as others with local sign and plastic firms.

In the decade 2000-2010 the institution's structures changed as it moved to full University status in 2005. Theory, history and business were no longer outsourced from other schools. My line-management shifted to Product Design Course leadership and Contextual Studies became Design in Context. It was even more closely integrated into the course and linked directly with research and live projects. I was now an employee of the School of Engineering. Technological change was swift with hardware, software and the Internet all having an effect on delivery of our teaching and how we expected students to learn and work. Computers were also changing what was happening outside the University and expectations of designers in industry and business. The design process remained the same but the tools were different.

A Common Academic Framework was introduced across the whole of the institution splitting all courses into modules the expectation was that students would select modules from across disciplines. The Product Design course team felt strongly that the integrated nature of the course should be retained. Students could not opt in and out of individual elements. The course was redrafted into the required modules on paper but these were not open to any other students within the institution. For example, a business studies undergraduate could not opt for the Design in Context module, although this kind of cross-disciplinary work would have had its benefits. The teaching of the design process could not be split into parts and the context teaching was directly linked to projects when ever possible and was responsive to changes in emphasis.

At the end of the University wide changes these separate modules now described on paper, provided the underlying structure of a redraft of an Architectural Technology course and a new BA Interior Design Course. Trials were made periodically to share business and contextual modules but then a more tailored delivery was favored and the groups were taught separately once again. At a higher level, Faculties and Schools were renamed and rearranged. Engineering, Computing, Leather Technology and Waste Management became a School of Applied Science and Product Design moved to an extended School of Art and Design - the only BSc - and were later joined by English, Media and Film courses, to become a School of The Arts.

Along with University status, academic research became important. As a design historian I had regularly given papers at conferences of my peers. Founded in 1977 Design History Society was mainly made up of lecturers teaching Design History at schools of Art and Design or on specialist BA or MA courses in the subject. By 1985 Design History was becoming more interdisciplinary drawing on the work of curators, business historians, social anthropologists and designers reflecting on their own practice.

As the Product Design team we had formed a small Design Research Centre led by Mark Wilkinson. We started bidding and responding to leads generated by the University's Knowledge Dock to collaborate on the Government funded Knowledge Transfer Partnerships (KTPs) starting with our first in 2002 with Datapride. This company wanted to set up in-house design capabilities and their initial project focused on an information/data booth for railway stations, a product now made redundant by 3G and 4G mobile telephone systems. For the next decade the team worked with on a wide range of projects under this scheme. Two housewares companies dealing with the design of imported products were introduced through my own practice networks. Three KTPs [12] had links with play and toy design. This led to further research and a successful impact case study in the Research Excellence Framework.

These play projects not only had external impact but they were valuable at an undergraduate level [13]. The benefactors and benefits were numerous. The grant income helped the firms innovate and provided a salary and vital experience for the KTP Associate, a graduate providing the conduit between the external organization (retail arm of Sue Ryder, a charity) and the University. The Associate provided a role model and mentor for undergraduates. Some Associates based themselves at the University one day a week sharing knowledge and research with staff. They worked actively with students on live projects from their partner organizations. The practice and knowledge transfer process was a reflective one. The educational experience was reported through publications. [14]

Many of these projects involved production in the Far East particularly China. This provided an opportunity to consider the ethics and practicalities of this sort of production. One or two projects

ended early, in part because of changes in global trade. For Creative Tops (a melamine tray and placemat firm) United Kingdom ceramics import quotas were lifted making the need for new melamine and plastic innovation less of a priority for the company, as they could now provide ceramic products to complement their existing products. They reverted to a previous practice of offering different surface pattern on existing products rather than developing new shapes. In another KTP, a key railway carriage tender was won by another European country resulting in the closure of the UK manufacturing train-seating company who was The University's partner. Designing for a global market can be problematic. Live projects that do not run smoothly can also provide valuable experience.

Three of the KTPs were linked to the toy manufacture and play activities: Sue Ryder, John Crane Ltd and BCE (Distribution) Ltd. Designing playthings proved to be key to creativity and beneficial on a number of levels [15]. The undergraduates were involved with live projects, being able to share the experience of the Associate and working directly with the charity and company staff often at the highest level [16]. Designing for children made students think about designing for the future and for another generation. The safety standards for children's products are higher than those for adults so the importance of considering health, safety and appropriateness for the user was accepted without question. The importance of any story, meaning or values conveyed by any design could be understood as relevant to its successful marketing. They considered educational needs and intergenerational play. They sought out green and sustainable solutions. They played and through play became more adult in their design questions. They saw themselves as previous users and having something valuable to contribute from their own experience. The projects took them well beyond a brief to design an educational toy, which is often a standard task on product design courses.

Design research methodologies and processes are increasingly focusing on the social and having an understanding of human behavior and interaction [17] [18]. The business advisor from the funding organization of the John Crane KTP [19] asked whether more time should not be spent observing and playing with children. Being able to observe, listen and involve potential users at the generative stages of projects is seen as vital in much of the literature. Surprisingly in Sue Ryder and John Crane projects it was the adult user/consumer/purchaser who was key for the organizations involved. Toys are bought by parents and grandparents for children. It is about sharing time and experiences with their younger family members. Understanding the role of memory and the meaning of toys and play for different generations can be seen as important as observing how a new generation plays. Product designers need to learn to listen to the user but also to the client. They need to develop the skills of a social scientist and a trader as well as an engineer. Or they need to be prepared to work with them and understand their focus. The outcomes can be seen in some of the strongest final projects this year; a toy that helps communication between a deaf child and a hearing parent, the re-envisioning of a pond yacht and vivarium that improves the quality of life for the pet and a new business opportunity for the graduate. Specific data on the value to the graduate of this approach should be collected.

The students' drew on their own experience and reality of their own upbringing. The same is true of Pip in *Great Expectations*. He is given the opportunity to move to a different career in the City of London, but it is to his home-based networks that he looks for support. It is his misreading of the role of Miss Haversham in furthering his career that causes him to think he has higher expectations. Opportunities to work with benefactors through live projects or work experience is important. Pip’s view of his future was based on assumptions rather than knowledge. We have to create students with confidence of their own life experience and abilities. Expectations should not be focused on assumptions of their prospects of design careers in industry and consultancy practice.

4 LEGAL TRAINING - INTELLECTUAL PROPERTY

The emphasis used to be to prepare product designers to work in manufacturing industries or design companies. The professional practice modules on courses often centered on managing design companies not owning and running a broader range of businesses. Today designers are involved in a wide range of enterprises. The Mega Lab [20] study of consumers in US, UK and Australia indicates quite clearly describes a shift in manufacturing and consumption. Their study argues that there are two types of consumers "traditionalists" that look status and a good deal and the "NEOs" (New Economic Order) that look for value. The NEO's and the companies that serve them that are driving design innovation and economic growth. There will be a need for some designers to create mass produced products that make our lives function smoothly but this study that growth will come from more

thoughtful products that are sought out and valued by their owners. We need to train designers to adapt to this new economic order and the firms that adopt this approach.
Designers need to be able to work in different cultures and countries with government agencies, social enterprises and charities. They need to be able to start their own businesses with the confidence to put ideas and research into product solutions that change lives. The University is an Ashoka U Changemaker Campus and leads on starting and managing social enterprises. This ethos can be seen in the students' projects in Product Design that repeatedly seek to improve the quality of life for the disadvantaged. New members of staff have questioned our industrial links and compared our teaching with other Product Design courses. Some courses have very strong links with international brands and major volume producers. We do have a hinterland of engineering, but it is specialist - lift engineering, motor sports, machine tools and model engineering. The leather industry is still internationally significant. Our studies of the toy industry [21] indicate the vital role the region played in the development of plastic production in the post-war decades. The region remains a key hub for production and distribution of a wide range of products from beer to signage. Understanding and developing social and physical networks are vital to a designers training today. As a design historian I have been using Latour's Actor Network Theory [22] to understand the role of design change in the past and the key difference that objects as well as people can make to a network. In the local context a rotary plastic molding process and tools developed by John Orme [23] made a whole range of new products possible from the road cone to the plastic football. Understanding networks and generating connections and collaborations on a local and national and international level is a key design skill.
Pip's chosen career was the law rather than that of a blacksmith. Product designers must have an understanding of the law too. Yes, for standards safety and regulations. They must be able to set up companies and draft agreements and contracts. They can buy in expertise but they have to understand what it is that they are delegating. They have to have their own ethical standards. In the last forty years the designer has increasingly seen themselves not as a craftsperson or a technician but a professional with all codes of behavior and accreditation that that involves.
What do the design-led manufacture; creative industries, knowledge transfer and global brands all have in common [24] - valuable intellectual property (IP). In the thirty years I have been managing design projects it has been increasingly important to for us to understand IP. We now license our work rather than sell it. We add value to brands. The World Wide Web is encouraging sharing and collaboration and the sharing of IP. The music industry has been changed fundamentally music is shared for free on line and income generated through performance. Similar changes occurring in publishing books are all on line at a fraction of the cost of print and in education we are moving to on-digitized content. Consumers are buying books and music different formats. It is what they value that is affecting their choices. Products designers like drugs companies can make a huge investment developing their IP they cannot share or give it away without some recompense. Some firms are offer young inexperienced graduates offering freelance design posts and internships with no consideration for their IP. Some buy design outright offering a nominal fee and a credit when they know the work has a higher value in IP terms. Undergraduates and designers take short cuts and only use the Internet for research and self-publicity, without being aware of what they are using without permission and what they are giving away for free. In light of this commercial experience the Product Design Staff have responded to a funded scheme for the Higher Education sector, run by the Intellectual Property Office, to encourage graduates to learn more about IP.
The proposed project is to work with a Disney licensee in China, a vintage property in the UK and innovative design. The Disney Licensee's business is based on fashion accessories and leather goods, which link with the University's expertise. Issues of knowledge exchange will feature, with student being able to consider production in China for their home market. They will also create products for export to the rest of the world, particularly to countries where British brands are valued. They will gain valuable experience of developing and protecting IP as well as learning about the best way to use the work and property owned by others. Whatever the outcome of the bid IP will remain a central part of the contextual teaching at the University.

5 CONCLUSIONS - BENEFACTORS AND EXPECTATIONS

We have great expectations for our graduates but they must be realistic ones based on knowledge. It is a challenging and changing world and many will have to adapt to the needs of unexpected patrons like

Pip's benefactor, the convict Abel Magwitch or in our case a Disney Licensee. Not everyone they will deal with now or in the future will share their values. Magwitch was a generous rogue and they will come across and have to learn to deal with clients and suppliers who have different expectations and attitudes. Judgment of character comes with experience and it is important that students have the opportunity to work with others, not only in design teams but also with a junior staff through to managing directors of major international corporations.

Good benefactors come in all shapes and sizes - from universities, through funding organizations to local suppliers. Graduates need to be confident about where they are coming from and have realistic expectations of their future. We have graduates working in a wide range of businesses, industries and social enterprises, as well as going into teaching and research; engineering knowledge and design skills provide only a starting place for a successful career.

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