LET’S GET EMOTIONAL: INTRODUCING UNDERGRADUATE PRODUCT DESIGN STUDENTS TO THE CONCEPT OF EMOTIONAL DESIGN

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ABSTRACT
In today’s highly competitive consumer market it has become increasingly difficult to distinguish products on the basis of their price, quality and technology [1],[2],[3] & [4]. Organisations are therefore challenging designers to design products, which have significance beyond their functionality and differentiate themselves in the marketplace by emotionally connecting with the user. Furthermore, new design for sustainability methodologies suggest that, rather than adopting symptom focused strategies, such as design for recycling, designers should be designing products that users can maintain emotional relationships with and that users are reluctant to throw away [5].

It is important that design students are exposed to the challenge of designing for emotion and understand its relevance in today’s society. This paper describes two workshops, which were developed to introduce undergraduate product design students to the area of emotional design and sustainability with particular emphasis on product attachment and products with personality. The first workshop introduced the concept of product attachment by encouraging the students to become more aware of their own emotions by investigating how they felt about three personal products: Favourite childhood product, favourite product that they currently own and the product they most desire to own. The second workshop focused on the theory of product personality and the idea that designing products with personalities, which are congruent to the target user group, could positively influence purchasing decisions and encourage stronger product attachment [6].

Keywords: Emotional design, sustainability, product attachment, product personality

1 INTRODUCTION
With heightened environmental concern and the recent global economic crisis a new challenge has emerged for design; to take a more responsible role and tackle sustainability more innovatively. Not only do designers of the future need to be aware of common sustainable design thinking they should also be aware of more innovative approaches, such as, how to emotionally connect with the consumer and design products that consumers want to take care of, cherish, and repair instead of replace. Despite the growth of research in the area of emotional design, the approach taken by many designers remains largely ad-hoc. This is due to the idiosyncratic nature of the emotion phenomena and mainly that emotions are personal and therefore two individuals could experience different emotions to the same product. Research by Lazarus [7] however, suggests that there are universal conditions that underlie and evoke an emotion and that each distinct emotion is brought about by a unique pattern of eliciting conditions. This means that although consumers may experience different emotions from one another towards a product, the emotions that they do experience result from a universal pattern of eliciting conditions. One area of emotional design where universal patterns can be easily identified is product attachment. Research has reported patterns of nostalgia, sentiment, status and enjoyment as the main factors influencing why consumers become attached to products [8],[9] & [10]. By considering these factors in the design process, designers could encourage product attachment, which could contribute to sustainability by reducing the number of consumer products destined for landfill.

2 PRODUCT ATTACHMENT WORKSHOP
This workshop was developed to introduce 2nd year undergraduate product design students to the concept of product attachment and to explore how design can encourage product attachment and
potentially contribute to more responsible and sustainable design. 39 product design students participated in the workshop, 20 male students and 19 female. In preparation for the workshop students were asked to identify three products: Favourite childhood product, favourite product they own now and the product they would most like to own. The students were also asked to provide reasoning for their decisions.

The rationale for why each of the products was selected was discussed in order to illustrate the differences between benefits that fulfil basic product function (utilitarian) and additional benefits that are linked to memories and self-image (reflective). The students were then able to identify the reflective benefits that led to product attachment and distinguish them from utilitarian benefits that they could potentially experience from a similar product.

2.1 Favourite childhood product
The products identified under the ‘favourite childhood product’ category were grouped under four headings and can be seen in Table 1.

<table>
<thead>
<tr>
<th>Product</th>
<th>% Of Students</th>
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<tbody>
<tr>
<td>Soft Toys</td>
<td>49%</td>
</tr>
<tr>
<td>Action Figures</td>
<td>23%</td>
</tr>
<tr>
<td>Building blocks &amp; Games</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
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</tbody>
</table>

49% of students reported that their favourite childhood product was a soft toy. The second most popular choice was action figures, at 23%. Action figures included heroic characters such as ‘Action Man’ as well as more feminine figures such as ‘Barbie’. The remaining 28% preferred games, puzzles and other toys. Interestingly, of the 19 students whose favourite product was a soft toy, 17 of them still have, and still cherish their soft toy. Examples of these soft toys are shown in Figure 1. None of the students selecting the products from the other categories were still in possession of their favourite product.

In most cases the soft toys had great sentimental value, often being given to them at an early age by a close relative. The main reason cited for why they became attached to these products was that they provided great sensory pleasure i.e. many students discussed the feel of the material and the smell of the toy. These pleasures were comforting and provided constant familiarity to them as children. The soft toys were all animal figures and many of them had sad facial expressions. Some of the students described these vulnerable expressions as one of the reasons they became so attached, as they felt compelled to care for the soft toy. This is similar to Csikszentmihalyi’s [9] findings about why children become attached to baby dolls. He discusses how the association between the product form of a doll and the affection required for a baby, is obvious and intuitive. Children respond easily to the behaviour required to care for dolls and often become very attached as a result. Animals, like babies, require a lot of care and attention whilst also providing playful companionship.
The main reason cited for students selecting the action figures and other toys, as their favourite childhood product was fun and enjoyment. Few of these students expressed any real product attachment to these toys. This was evident in the fact that none of them still have these products in their possession.

In this product category, the products demonstrating mainly reflective benefits were the soft toys, which related to memories. However, in some cases the action figures also represented reflective benefits but in the form of self-image. Particular action figures were fashionable and desirable toys at that time and owning a large collection of action figures was seen as a symbol of status, even at a young age. For example, this is an account of why one student favoured her collection of Barbie dolls. “I had more Barbie doll toys than anyone else in my class at school, everyone was really jealous and always wanted to come to my house and play with them.”

Examples of products representing only utilitarian benefits were games and toy cars. The benefit described was purely fun and the students would have quite happily exchanged these toys for other products that also engaged them in fun activity.

2.2 Favourite product that they own now
The products identified under the ‘favourite product that the students currently own’ category were grouped under four headings and can be seen in Table 2.

<table>
<thead>
<tr>
<th>Product</th>
<th>% Of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer/Games console/Television</td>
<td>36%</td>
</tr>
<tr>
<td>Music player/Camera/Mobile phone</td>
<td>31%</td>
</tr>
<tr>
<td>Fashion/Jewellery</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
</tr>
</tbody>
</table>

67% of students reported that their favourite product that they currently own was an entertainment or communication device (computer, games console, television, music player, camera or mobile phone). 15% claimed their favourite product was an item of fashion or jewellery. The remaining students selected a variety of other products. All of the products selected under the category of fashion and jewellery represented reflective benefits and all related to status. One student’s response to why her Channel handbag was her favourite possession was “It is limited edition so not many people have it, it was really expensive and I would be really upset if I lost it. I have seen a few celebrities in magazines with it but have never seen anybody on the street with it.”

There was a mix of reflective and utilitarian benefits identified within the entertainment and communication devices. For example, music players were a popular choice but some students reported functional benefits such as “it allows me to listen to my music where ever I am” whilst others stated benefits relating to self-image such as “I love my iPod, it’s so cool, I bring it with me everywhere.”

The student reporting functional benefits would be happy with any portable music player and so demonstrates utilitarian benefits whereas the student describing their iPod demonstrates reflective benefits. Of the students identifying products from this category, 70% of them identified reflective benefits and in most cases, demonstrated strong brand loyalty. Examples of products selected in this category are shown in Figure 2.

![Figure 2. Examples of favourite products that the students currently own](image)

2.3 Product they would most like to own
The products identified under the ‘product that the students most desire to own’ category were grouped under four headings and can be seen in Table 3.
Table 3. Products they most desire to own

<table>
<thead>
<tr>
<th>Product</th>
<th>No. Of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car/Motorbike</td>
<td>56%</td>
</tr>
<tr>
<td>Fashion/Jewellery</td>
<td>15%</td>
</tr>
<tr>
<td>Computer/Mobile Phone</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
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</table>

56% of students desired to own a car or motorbike. All of these students identified reflective benefits. In one case these benefits were related to memories however, the remaining were all related to self-image. In the case relating to memories, the student desired to own a VW Beetle as her grandmother used to have one. An example of a self-image reflective benefit given by a student who selected a Ferrari F430 is “It’s so expensive and flash, if I owned a car like this it would mean that I was successful and had a lot of money.” The remaining students selected a mix of products (fashion, jewellery, computer, mobile phone and other) also all of these students reported reflective benefits and mainly those relating to self-image. Examples of products that the students desire to own are shown in Figure 3.

3 PRODUCT PERSONALITY WORKSHOP

This workshop explored the self-congruity theory which suggests that people select to purchase and use goods and services that are consistent with their own self-concept, including the ideal self (the person you would like to be), the public self (the image you think other people have of you) and the real self (what you really think about yourself) [6]. Furthermore, research suggests that products with personalities that reflect the self-concept of their owner positively influence consumer preference and can encourage stronger product attachment [11].

Everyday we stereotype what personalities people have based on their appearance and this assessment influences everyday decisions which we make, such as, who to sit next to on the bus or who to ask the time. Our assessments are often largely based on facial features, hairstyle, and clothing etc [12]. The workshop was conducted with the same students as the product attachment workshop. It began by introducing the concept of product personality by firstly asking the students to visualise a stereotypical character based on a personality trait, which they were assigned; happy, boring, lively, easygoing, dominant or gentle. They were given a template, shown in figure 4, which had an empty face to which they had to add facial features and a hairstyle. The template also had a series of questions which they had to answer about their character such as what was their name and what was their job. On each template, the question “People describe me as…” was already answered. This was the only information that the students had to base their character on.

Figure 4. Character template
Once the students had developed their character they were asked to design a kitchen utensil that they felt embodied the personality of their character. Two examples of characters created and the utensils designed can be seen in figure 5 and figure 6.

My Name is: **MIKEY**  
People describe me as: **EASYGOING**  
How old am I? **26**  
Where do I live? **Bondi Beach, Australia**  
What are my hobbies? **Surfing, running, BBQ-ing, flip flops**  
What type of clothes do I wear? **Board shorts,** **flip flops**  
What is my job? **Manages a bar on the beach front**  
How do I move? **Slowly and with confidence**  
What music do I listen to? **Reggae**  
What is my goal in life? **To own the waves**

**Figure 5. Example of character Mikey and bottle opener wave**

Figure 5 shows the character Mikey who is an ‘easygoing’ surfer from Australia. The student chose to design a bottle opener as Mikey manages a bar. The form of the opener is a wave which is inspired by Mikey’s love of surfing.

My Name is: **MAUDE SUMMERS**  
People describe me as: **GENTLE**  
How old am I? **31**  
Where do I live? **Blueberry Farm**  
What are my hobbies? **Flower pressing & Dog walking**  
What type of clothes do I wear? **Flower print dresses**  
What is my job? **Vets Assistant**  
How do I move? **Quietly**  
What music do I listen to? **Wildlife CD’s**  
What is my goal in life? **Adopt all the abandoned puppies**

**Figure 6. Example of character Maude and the salt shaker squeak**

Figure 6 shows the character Maude Summers, a gentle Vets assistant who lives on a farm and enjoys flower pressing and dog walking. Her goal in life is to adopt all of the abandoned puppies in the world. The student designed a salt shaker to capture Maude’s personality. The aesthetic of the salt shaker has been designed to characterise a mouse. This not only signifies Maude’s love of animals but also represents her gentle nature and her quite movement.

4 **DISCUSSION**

The product attachment workshop was successful in providing an opportunity for students to review their personal product choices and product attachments. Objectively discussing the rationale for these attachments and choices in a group gave insight into common trends and provided clear objectives and rationale for more responsible design.

Students were able to identify sensory and aesthetic product qualities by reflecting on personal consumer behaviour and were able to link this design attention to significantly contributing to product attachment. In addition, the benefits identified through association with memories introduced both the value and the difficulty in achieving this. It was discussed that although it may be difficult to achieve an association with memories perhaps one way, to achieve it, would be to design products which could be given as gifts, as it was often products that were given by loved ones that created this sentimental behaviour.

The reflective benefits relating to self-image were discussed and identified as occurring most frequently in products that appeared expensive or popular, however, as the global economic crisis grows, consumer behaviour will change and conspicuous consumption is likely to decline. The
possibility of designing simpler and more honest products was identified as a design opportunity and a more responsible solution. Students also recognised that as the population becomes more environmentally concerned, products that are visibly more environmentally friendly could achieve self-image reflective benefits.

The products with personality workshop provided the students with the opportunity to explore the self-congruity theory. It also introduced the concept of products with personality as a new approach to human factors which considers objects as living objects which people have relationships with as opposed to just tools with which people use to complete tasks [3]. By providing such minimal information to base their characters on, students had to use their creative skills to really animate their character, often through humour and exaggerated stereotypes. As a result the students created very believable characters which provided a basis on which to inform their designs. Describing the characters in detail through the questions provided greater opportunity to replicate human characteristics or behaviour in the design of their utensils.

Both approaches were found to be a successful way to introduce undergraduate product design students to the concept of designing for emotions and product attachment. The role of the designer is becoming more and more important in today’s society and it is important that design students realise their potential in contributing, more innovatively, to a sustainable future. Designing products with personalities and considering product attachment are interesting approaches to sustainable design thinking and should be explored further in design education.

REFERENCES

[2] Dumain, B. Design that sells and sells and…. after years of ferocious competition on price and quality, many companies believe superior design will be the key to winning customers in the Nineties. Fortune Magazine, 1991, March 11, pp 86-94