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STIGMA: ADDRESSING NEGATIVE ASSOCIATIONS IN PRODUCT DESIGN

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ABSTRACT
Inclusive Design is the practice of providing access to a solution for as many users as possible. However, stigma can be seen as the Achilles heel of Inclusive Design, as it is possible for artefacts employed by users outside of mainstream society to carry a negative association independently of the user. This can result in mainstream users rejecting the product, which can in turn become a signifier of the stigmatised condition leading to further discrimination.

This paper details methods identified for addressing negative associations that products can carry when employed by stigmatised user groups. It is made clear from the outset that stigma is a societal wide issue and the research is not intended to try and address this; the outcome is intended to be a disassociation from the stigma for the artefacts.

Research was conducted and several methods were identified where products had become successfully disassociated from the stigmatised user, meaning that the product itself was free from any negative association. These methods were then taxonomised and evaluated for effectiveness for creating artefacts free of negative association.

It was found that it is possible to create artefacts that are free from negative association and although it may not have been the intention to address the stigma of the user, this may occur as a benefit.

Keywords: Inclusive Design, Product design, Design Methodology, Product Design Education, Learning, Undergraduate Design Education, Stigma, Negative Association

1 INTRODUCTION
A minority of society suffer from physical or mental impairments that differentiate them from what the society in which they live has deemed “normal”. Once an individual has been identified as having a mental or physical impairment, the products with which they surround themselves inevitably inherit these negative connotations through association, even when these products may have beneficial applications for users within mainstream society. The stigma attached to disability and the products associated with disability has a moral component: there is great social pressure to view those with disabilities as inferior, and for disability to be seen as a shameful burden [1].

The only true way to reduce negative stigmatisation of subcultures is through understanding and knowledge, resulting in a shift in gestalt attitudes; only then can the individuals concerned live without a feeling of inferiority, but this is a matter for society as a whole to resolve. However, the design profession is able to play an active role in these processes by considering the artefacts it produces as facilitators for people who require assistance in certain areas. Inclusive Design goes some way to addressing the issues in question, as inclusive design can be defined as: “An attempt to maximize the number of people for whom a product is accessible and usable” [2] but inclusive design only approaches the issues from a functional perspective. Covington [3] argues that People in general “want the convenience of an accessibly designed creation without the perceived stigma”. It is the authors intention to explore these issues of Negative Association of Stigma within Product Design.
2 WHERE STIGMA ORIGINATES

To understand how and why negative associations are attached to products, first we must understand how and why stigma is generated. A stigma is defined as “A mark of disgrace, stain on one’s good name…” [4]. However, within the context of this report there are three relevant definitions, as classified by Erving Goffman [5]:

1. “Abominations of the body” – physical deformities.
2. “Blemishes of individual character” – character traits that are undesirable, ranging from learning difficulties to weak will, addiction, dishonesty, extremes of political standpoint etc.
3. “Tribal stigma” – stigmas that can be transmitted through lineages and can equally affect all members of a family, for example race, nationality and religion.

Goffman then goes on to define these traits as an “undesired differentness from what we had anticipated … an attribute that is deeply discrediting (reducing the individual) from a whole and usual person to a tainted, discounted one.”

It is important to understand stigma as being subjective – they are formed dependant upon the individuals’ past experience through exposure and understanding. From an understanding of subcultures based upon social aspiration, wealth, health etc. it becomes apparent that everybody is on a spectrum, and to define a reference point on this spectrum is to choose who is to be excluded, although most individuals refer to an “average” that they expect in others.

However, some subcultures use stigma to define themselves, either using the stigma as a strong affirmation of cultural identity or as a reaction against the mainstream. Subcultures that use stigma as a means of identification and unification include any community that professes to be proud of their stigmatised status, despite the negative connotation it may have in the mainstream i.e. Gay Pride, Black Empowerment Movement etc. The stigma that is rejected by the mainstream becomes appropriated as a badge of pride.

As well as using the stigma, sometimes it is artefacts that carry the negative association that are adopted. One example being Harry Potters glasses (Figure 1). This style of eyewear were supplied by the NHS in Britain and for a long time had a negative association as being poor quality products for users that could not afford a nicer pair, but such was the desire to emulate their role model that young children were lying to their parents about having vision problems, just so they could go to the opticians and acquire a pair of glasses just like Harry’s [6]. It is through this adoption that the product loses some of its negative association, through acquiring new ones.

Figure 1. Harry Potter wearing his glasses.

Product designers are unlikely to be able to cater for all of the stigmatising conditions; there will always be some conditions with negative associations, but we can look at the three dimensional artefacts that act as learning tools, assistive or adapted technologies and re-evaluate their position from the users’ perspective, not only through function, but also through the semantics that the products possess and the messages these communicate to others in relation to any form of stigmatising condition that the user may be subject to (Figure 2, Figure 3).
3 PRECEDENTS

3.1: De-stigmatisation through Education

One of the finest methods of de-stigmatisation that has been demonstrated by product designers in the past has been the use of products as a tool to educate users. There are three approaches to this:

1: An aid in redefining where the boundaries of “normality” lie

An example of this first approach is Philippe Starck’s “TeddyBearBand” (Figure 4). The bear could be interpreted in two ways. The first is that the bear has brought along its friends to play. The second is that the bear is teaching children that there is no set format that we should expect people to come in.

![Figure 4. Philippe Starck’s “TeddyBearBand”](image)

Another approach that is similar is the emergence of Organic or Naturalistic design [6]. These are approaches to design that embrace a non-technical and non-threatening approach to forms. Typical features are asymmetry and natural finishes (Figure 5).

![Figure 5. The Zanussi OZ23 fridge-freezer and the Cannondale F2000.](image)

The OZ23 fridge-freezer by Zanussi (Figure 5) is quite an organic form that appears slightly bulky and uses a rollerball foot on the door. This gives the appearance of a fridge that needs the equivalent of crutch for support, but it doesn’t have a negative association. The fridge also uses an irregular, fluidic asymmetrical form. Another example of this approach is the “Lefty” fork designed by Cannondale for their mountain bikes (Figure 5). The fork breaks with tradition; it only has one leg connecting the front wheel to the rest of the bike. Although a little more abstract than other methods, these examples have
the potential to educate users that perfection in form is not necessarily equal to perfection in function. As three dimensional organic entities, our relationship with the world around us teaches us a great deal from an early age.

2: An implement that lets subjects experience the stigmatised perspective
This approach employs purpose made tools to place an individual in the position of the stigmatised, so they can be perceived as a stigmatised individual themselves, and be subject to the same attitudes, conditions and reactions. Examples include “fat suits”, weighted jackets to simulate heart conditions, special glasses that simulate vision disorders and headset and earpieces that form a schizophrenia simulator. Pastalan [7] referred to this technique as “Empathic Modelling” when he simulated age related visual conditions with a group of architects by using specially adapted glasses to allow them to appreciate the difficulties of navigating with impaired vision.

3: Using negatively associated products to simulate the position of the stigmatised users
A number of disability awareness groups advocate the use of existing assistive technologies such as wheelchairs, white canes etc. that allow able bodied individuals to be placed in the position of the stigmatised, through the association of the product (Figure 6).

Figure 6. How applying a negatively associated product to a mainstream user alters perceptions of others

3.2: De-stigmatisation through Technology
The service that certain products have provided have remained, whilst the physical embodiment has evolved through advances in technology and taken the association of the product away, as the physical object either becomes miniaturised or evolves into a different product. An example of a product that has become miniaturised is the hearing aid which has evolved from a very apparent accessory to a discreet intra-aural device. Spectacles have also completely disappeared for some users due to the adoption of contact lenses or through undertaking laser eye surgery.

3.3: De-stigmatisation through the Application of Mainstream Characteristics
This type of product breaks down the negative aspects associated with the functionality through the application of mainstream characteristics. When dealing with taste it must be stressed that subculture analysis dictates that tastes vary across different segments of society. The types of products that consumers choose to surround themselves with has been referred to as TasteSpace [8], which reflects the image that the consumer wishes to portray. However, there are common elements that transcend subcultures, so mainstream taste is defined here as the more common elements (Figure 8).

Figure 8. A needle of the type traditionally used to administer insulin and a modern “pen” type needle

3.4: De-stigmatisation through the Adoption of Stigmatised Characteristics
The “Do Add” series of furniture, designed by Jurgen Bey, comprises a set of pieces that require the addition of other artefacts for them to function – in themselves they are incomplete. Firstly, the pieces are disabled, they posses a feature that prevents them from functioning perfectly on their own, and secondly, the use of materials and accessories is taken from traditional medical aids, for example the chair (Figure 9) has the metal legs and grey rubber feet from walking sticks / crutches.
3.5: De-stigmatisation through Functional Desire
These products use a functional element designed to aid users who require physical assistance, yet have a proven appeal within mainstream society due to the advantage that the functional element provides. This increased functionality may be due to the fact that when designers apply their thought to a specific functional problem, an innovative solution may well follow. The IKEA 365+ bread knife is an excellent example of how a product intended for a stigmatised user group (those with dexterity issues) can be adopted by the mainstream due to increased ease of use.

3.6: De-stigmatisation through Alteration of Ritual
One of the features of the newer insulin pens now available (see chapter 3.3 – De-stigmatisation through Application of Mainstream Characteristics) is that as well as the form of the product being altered, the ritual has too. Whereas previously the action of injecting medication was something to be done in private, because of the revealing of flesh and use of medical needles, the new pens can be used through clothes and into most parts of the body. This is very important, as it removes a very apparent element of an otherwise imperceptible condition, and what isn’t evident can’t be stigmatised.

3.7: De-stigmatisation through Disassociation
De-stigmatisation through disassociation is an approach that is based upon repositioning the perception of a negatively associated product through its brand. One example of this method is the car manufacturer Skoda. Prior to being bought by the Volkswagen Audi group in 1991, Skoda was a manufacturer of budget automobiles and had a reputation for being poorly engineered and under-funded. Since 1991, after a massive amount of investment, their fortunes have changed and they now have a reputation for reliable and stylish cars. The stigma of driving a Skoda was because of the association with a financially poor lifestyle, but with their new found investment, engineering improvements and contemporary styling they are in a much better market position. In 2000 Skoda launched a campaign to change consumer perceptions, aiming to reinvigorate the brand with the tagline "It's a Skoda. Honest.” Sales increased by 34 per cent.

3.8: De-stigmatisation through Association
This method is based upon the application of positively perceived brand values to a product, to enhance its status. An example of this is the Smart car (Figure 30). The vehicle was designed and developed by the relatively unknown Micro Car Company, in conjunction with the Swiss watch manufacturer Swatch. The vehicle was not taken seriously until the concern was bought by the Daimler-Chrysler, and the first Smart’s launched in 1998. For Consumers, this meant that they could enjoy the benefits of a vehicle affiliated with a major brand i.e. a good dealer network, experienced mechanics, good customer service etc. whereas previously the car was not a success, perhaps due to lack of brand awareness of the Micro Car company and Swatch’s lack of experience in the automotive industry.
4 CONCLUSIONS TO PRECEDENTS

To quantify the success of the different methods, the author has taken the approach of whether they succeed in removing the negative associations, rather than their intended purpose or commercial success.

De-stigmatisation through Education is very powerful but the best time make lasting impressions is through childhood as individuals develop, so this approach would be best applied to toys, which could be evidently educational or not, whereas Empathic Modelling using specially developed products and existing negatively associated products would be best used for adults, who can appreciate the stigma and social exclusion issues relating to the products.

De-stigmatisation through Technological advances that have enabled some products to disappear through evolution cannot be predicted, but the transfer of existing technologies can. This approach would benefit from an analysis of existing technologies currently utilised in the mainstream and evaluating which could be matched to existing assistive technologies.

Factors affecting De-stigmatisation through Mainstream Characteristics include compromise of functionality, appropriateness of semantics (no disguising potentially dangerous products) and reliance on contemporaneous styles.

De-stigmatisation through the Adoption of Stigmatised Characteristics is a very rare approach, and so quite ineffectual, as the exposure it gets is very small. It also relies upon an altruistic attitude and proactive willingness to engage with these types of products within the user.

De-stigmatisation through Functional Desire by appropriating technologies from stigmatised users’ aids is a very effective tool, as it truly breaks down the negative association between the stigmatised and the assistive technologies they require because the mainstream will be using the same artefacts. However, it can only work where the function is of some benefit to the mainstream, or the mainstream already utilise a similar product.

The approach of De-stigmatisation through the Alteration of Ritual is quite successful as it distances itself from the negatively associated act that people associate with the stigma, but it may be reliant upon external forces, such as technological developments.

De-stigmatisation through Disassociation is a valid method of removing negative association, because it is the product itself that stigmatises or is a contributing factor to the stigma. This technique is usually done in the best interest of the organisation and not the end user. It is also a long term solution, relying upon new users to have no knowledge of the brand’s history, as well as requiring enough time to build the new brand.

De-stigmatisation through Association is a method that should be considered valid for the same reasons as Disassociation; the product itself is what causes, or is a contributing factor to, the stigma that the individual has had applied to them. It differs from De-stigmatisation through Disassociation because it relies upon the application of an existing brand. The application of positively perceived brand values has a lot of potential as a solution that could work very quickly and effectively, but it requires the brand in question to be known to the targeted user group, be perceived as possessing positive characteristics by the targeted user group and be successfully transferred to the product.

REFERENCES