

NORMATIVE IMPOSITION AND PROBLEM OF BODY REPRESENTATION IN INDUSTRIAL DESIGN PRODUCTS

A.Asya Gurgun Ozdemir¹ and Cigdem Kaya Pazarbasi²

^{1,2} *Istanbul Technical University, Industrial Product Design Department*

Abstract

This study is a critical and theoretical study, aiming at describing body as biopolitical subject dominated by industry or industrial product. The main purpose of this study focuses on products from a body perspective, rather than an industrial production perspective. In this perception aims of focusing on a body oriented approach is examining and illustrating cases of products that stereotype, direct, control and separate consumer bodies because of industrial restrictions and their products. In this context, design products cannot be evaluated without the restrictions of industry and mass production. The limitation of mass production partially exerts nominative behaviors on consumers. From this perspective, industrial design products form invisible and flexible boundaries between design, domination, otherization and ignorance. It is important to analyze these boundaries by giving some examples about the concept of dominative product, may provide ground to discuss the possibility of reaching more appropriate design products which are respectful to the body diversity in the future. For that, these issues should be reconsidered as a collective memory, a matter of culture, identity and representation of our ethical world view. In the light of this idea, while the examples have been selected to show stereotypes based on mass production, at the same time they propose a different angle to industrial products and their production in line with changing conditions, technological opportunities and individual needs for more inclusive, holistic and equal approach.

Keywords: Ethic, body, design, domination, biopolitics

INTRODUCTION

In this study, the relationship between mass produced industrial items and body has been studied through critical theory. Through this study, the concepts of industrial domination and dominative object were defined. The controlling and dominating features of industrial products, designed deliberately or without such an intention, were examined via studying user practice. In this context, body is conceptualized as a biopolitical entity dominated by the industrial products and becoming the practice field of industry between invisible and flexible boundaries defined by the physicality of design, its domination and ignorance at times.

In this perspective, the aim of a body centered study is to illustrate stereotyping, directing, controlling, separating or restrictions of industry and industrial products over consumers' bodies. The main idea

behind this study is the need to evaluate industrial products as a media of collective memory and cultural production. Due to standardization, the limitations of manufacturing and aiming at reaching masses, products are designed with reference to data of a majority. Unless designed deliberately for a special group of users, products tend to exclude the bodies of the elderly, the handicapped, children, pregnant women, unusually tall and short users. These different body types are not included in user data; hence they are excluded by products. These norms come from majorities of social life. Because of these norms of normality, some body types are silently labelled as a minority. Through this critical perspective, it is argued that bodies of which limits are restated by industrial objects become subject matter of biopolitics.

Mass production provided wide accessibility of improved products at the beginning of the industrial

revolution, since dependency on human labor decreased and automated mass production developed. Because daily consumer goods or more complex products for special use became accessible and affordable by more people with different economic power, mass production was regarded to have agency for equal and democratic consumption. However, today the advanced competitive market is becoming more profit oriented than providing equal benefit for people. Variety of body types are invisible for not only industrial products, but also industrial systems. The mentioned features in industrial production and its consequences argued in this paper lies at the foundation of this study. Hence, the study re-contextualizes the standardized processes and design from a body oriented point of view by critically examining the body-object relationship indicating that user bodies are objectified for the use of industry.

In this study, industrial products which define the limits of the body are conceptualized as dominative objects. Examples were identified and presented in this article to define the presented concepts: "dominative object" and "industrial domination". To further explain these concepts, selected industrial products were examined with regard to anthropometric, ergonomic and human-centered data and discourses used in product design with reference to critical theory.

Design products cannot be immune to the restrictions of industry and mass production. Therefore industrial limitations reflected into form in physical products play a role in the production of normative user behavior. Since products cannot be immune to the limitations of industry, designers are pushed into reproducing dominative object. Analyzing products with a focus on body and giving some examples of domination may provide ground to discuss the possibility of more appropriate design products which are respectful to body diversity in the future.

In this context, the examples selected for this study show some normative imposition and problematics of body representation by indicating products designed for certain body stereotypes. At the same time through understanding the provided examples, possibilities to improve products and their design processes to address individual bodies and needs as opposed to designing for stereotypical bodies can be further investigated and even brought into industrial practice as technology develops and transforms

means of traditional mass production. In this way, the study emphasizes the possibility of a more inclusive, holistic and equal approach to design practice in the future.

METHOD AND METHODOLOGY

The selected product examples in this study represent industrial design for stereotypical bodies. Based on product features of these examples which are outputs of industrial design and design discipline are discussed with a sociological perspective. To do that, sociological readings, and observations based on these readings were studied with critical theory.

As mentioned in the introduction part, industrial systems and industrial products have some effect on bodies, like stereotyping, directing, controlling, separating or being restricted. These effects constitute the main idea of our concept.

The reason for selecting critical theory is being able to approaching data holistically, criticizing and proposing change for betterment because through critical theory the potential value of different realities than the norm can be highlighted. Critical theory is also used to analyze other theories with different points of view in the analysis of social relations (Horkheimer, 1974; Geuss, 1981).

Through critical theory, construction of social relations is examined to discuss their fundamental problems of ideological delusion. When analyzed with critical theory other realities and theories with different point of view can be revealed (Bakiz, 2004; Demirtas and Ozer, 2015).

In this sense, critical theory provides liberal expression, as well as giving opportunities to using data from different areas due to its holistic perspective. Combining different data from different areas serve to better understand the conditions. If conditions are framed precisely a basis for critical view is provided. Therefore, this method was used in this study.

This study held in a socio - economic and socio - cultural frame, discusses the place of industrial products in a social plane as semiotic data, expression of social values and symbolic place as a matter of culture. While shaping this frame, some other data about industrial products such as marketing values, productions methods, cost analysis and marketing

strategies were not included within the limits of this study, making this study focused on the sociological perspective of industry and industrial products. In other words, the “dominative object” and “industrial domination” concepts were derived from a sociological study of products with critical theory.

Normative Impositions

Mechanization to improve people's quality of life, legitimate use of human to enlarge the machinery industry, bodies altered by microchips, encoding programs, social media networking in virtual bodies and their identification, genetic changes in food must be considered when studying the effects of mechanical invasion on the body.

Technological and electronic progresses consciously or unconsciously perform conditioning, control and exclusion practices over bodies. These concerns are decisive on the rights of the body and hence bodies exist as a biological state of biopolitical reflection.

Examining industrial objects with a body oriented perspective is demonstrated by some basic examples. For example, in the market, most of products are designed for right handed people because they are in majority. The few products designed for left handed people, are not only expensive rather than products for the right handed, but also they are hard to find it. Research shows that, right handed people are % 90 and left handed people are % 10 in population of world (Seddon & McManus, 1991). Moreover, another research argued that, in the future this rate will not be change. Ozdemir & Soysal (2004) illustrate this data in Table 1 with their study.

Table 1- Left Handed and Genetic Transition, (Ozdemir & Soysal, 2004).

Father	Mother	Left Handed and Genetic Transition
Right	Right	% 10,4
Right	Left	% 22,1
Left	Right	% 18,2
Left	Left	% 27,0

As seen in Table 1, if there is industrial domination for left handed people now, this domination could continue for the new generation in the future. As pointed out in this example, mass produced products

are designed and produced for majority, in that way, they serve for a common denominator (Heskett, 1980; Buchanan, 2001). This fundamental fact about industrial domination via normative imposition on different body types is highlighted on some products shaping the concept of dominative objects. Some of them are basic right handed objects like, pen sharpeners, tea pots, knives, scissors, musical instruments and so on. In this study, these objects defined are as dominative objects because they coerce some bodies to fit into their product form, they prefer some body normality and they have some expectations from users' bodies. In this framework, dominative products can be diversified.

Another example for a dominative object is a conference room chair, a product for common use. The object of chair, taking place in a social setting as a conference chair suggests a uniform, standard and restricting use on certain bodies and in most cases makes the chair unusable for these user. The arm rest attached on the right arm of the chair was designed to write with the right hand. The left hand of the user who works with the right hand is left without rest in void, becomes idle and hence is regarded as useless. From this point, it is possible to consider that left-handed users were not regarded within the target user group because they use a limb that is regarded as useless. The conference room chair which is an object for common use, can be used by for left-handed users only by changing the form of their bodies. While using the conference room chair, not being able to use this industrial product in a way that is ergonomic and suitable to human body causing changing the sitting position, leaning the spine forward to write on the lap, sitting sideways on the chair to be able to write can be regarded as features appropriate to define the concept of the dominative object.



Figure 1. Conference room chair. Photo: A. Asya Gurgun Ozdemir, 2017

Other examples of industrial domination are seats and handles used in public transportation. To be able to adapt to the seats and handles in public transportation, leaning the spine forward, changing the body shape accordingly or leaning backwards are results of being subject to an object that is not suitable for some bodies. It has been observed that these results cause children to slide on the seat or struggle to sit down and stand up, tall and large people not to fit in the assigned area and hence get squeezed, short and slender people to be driven away or to slide from the seat unless they are supported by other bodies next to them and certain parts of the body to be forced to become suitable to the space available. Manufacturing handles for certain body sizes cause similar effects.

The users who have to make an effort to become suitable to stereotyping products to reach the best use performance according to the conditions of different their bodies overlook, accept, ignore, get accustomed to the domination of the object or develop a positive perspective.

In a way, this causes the domination to be passed on to the future generations. Taking users who continue to use products that are hard to use or those who adopt to domination of objects unconsciously, the mentioned adoption can be further investigated and interpreted. From this perspective; it is possible to propose that the standardization of subway seats adopted by users unconsciously reflects the expectation of a perfect and standard body.

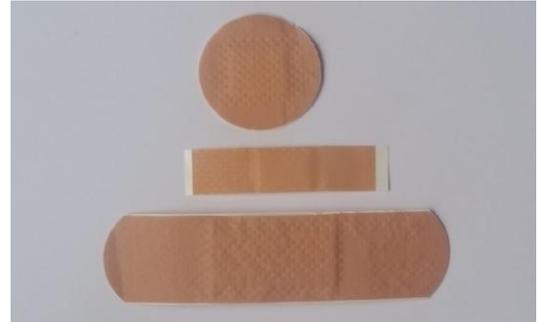


Figure 2. Band aid for fair skin. Photo: Cigdem Kaya Pazarbasi, 2017.

Another dominative object can be a band aid, used frequently in daily life. Band aids, unless the product is designed with prints on the surface points at a body feature by assigning color. These bands are most of the time designed for fair skin color. This product feature describes a certain kind of body and disregards other bodies as users except those with fair skin. It is possible to state that the band aid is an object of domination because of this disregard. Other products manufactured with fair skin color code with the aim of being least recognizable on the body can also be regarded as dominative products.

CONCLUSION

In this paper the concepts of industrial domination and dominative object via normative imposition are described through some industrial design product examples. How these industrial design products can become dominative objects is explained.

Industrial design products cannot be evaluated without technology and economical factors.

In the light of this fact, the discussion about industrial domination and dominative object ongoing in this study can be improved by including and benefitting from data coming from economy, technology, user-centered design, ergonomics or different tools of mass production with critical theory.

For further studies, these concepts create a platform for critical argumentation like body representation by and in industry, future possibilities for holistic ways of product design, by critically examining relations between user-centered design and norms. In this context, examples selected from the most basic industrial products effecting bodies were reconsidered from a different perspective in line with

changing conditions, technological opportunities and individual needs for body diversity in the future.

REFERENCES

Bakiz, B., 2004, Frankfurt Okulu ve Eleştirel Teori : Sosyolojik Pozitivizmin Eleştirisi. Sociology Journal, 12-13, 135-158.

Buchanan, R. (2001). "Design Research and the New Learning". Design Issues, Vol.17, Issue 1, page 3-23.

Demirtaş, H., & Özer, N., 2015, Eleştirel Kuram Açısından Eğitim ve Eğitim Yönetimi. Journal of Teacher Education and Educators, Volume 4, Number 2, 2015, pp. 206-227.

Feenberg, A., 1995, Technology and the Politics of Knowledge. Indiana University Press.

Feenberg, A., 2005, Critical Theory of Technology: An Overview Tailoring Biotechnologies Vol. 1, Issue 1, Winter 2005, pp. 47-64.

Geuss, R., 1981, The Idea of a Critical Theory: Habermas and the Frankfurt School. Cambridge University Press.

Heskett, J., 1980, Industrial Design. London: Thames and Hudson.

Horkheimer, M., 1974, Eclipse of Reason. Vol.1, Bloomsbury Publishing.

Özdemir, B. & Soysal, A. Ş., 2004, Yaşama Farklı Bir Açıdan Bakış: Sol Elim. Türk Tabipler Birliği Sürekli Tıp Eğitimi Dergisi, C.:13 S.:4.

Seddon, B. M., & Mcmanus, I. C., 1991, The incidence of left-handedness: A meta-analysis. Unpublished manuscript. Department of Psychology, University College London, London.