CRAFT TRADITION VERSUS INDUSTRIAL ANONYMITY IN 20TH C DESIGN

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Abstract
The paper presents a study of the role of craft tradition as opposed to technology and abstract art, for the evolution of modern design for serial production. The first half of the 20th C witnessed the exploration of different sources, with the aim to create the formal language of post-war material world: traditional craft of different regions; ‘royal’ styles of the past; avant-garde art (organic sculpture, abstract art, etc.); and the potential of technology. These directions of research resulted in different evolution lines, among them technologically-driven design of Aalto, Jacobsen, Eames; Scandinavian individualized remakes of traditional regional pieces; the study & modification of diverse functional typology (deck-chairs, traveller’s and military furniture, director’s chairs, etc.). In the search for modern form, designers found inspiration in the past (study of archetypes) or in the present day (art, advertising, new materials, technology). In the paper, this phenomenon is revealed by considering the work of Scandinavian and American designers, who followed the craft evolution logic or art and technology. Finally, anonymous design as a phenomenon of consumer society and search for competitive markets originated in replicating and interpreting work of designers active after WWII, who created the classics of the 20th C design.

Key words: technology-driven design; craft-inspired design; individual design; anonymous design.

INTRODUCTION
The history of modern-day design is centred on three basic sources: art, crafts and production technology. In its historical development, design gravitates towards each one of these sources. The industrial product is formed more or less on the basis of these three driving forces. This is due to the fact that design as a creative activity was the result of division of labour and the disintegration of craft production system (Bayley 1985). The artisan integrated a number of professions that came to be separated in the 19th C: designer, engineer, production manager and salesman. He was familiar both with the product and his client and was capable to make small changes where needed, in order to bring individual features (Jones 1985); therefore, craft form developed gradually. The craftsman kept information of the product in the form of templates and objects; he was faithful to the archetype that he replicated. The product could be made in different stages or parts by different workers; therefore, the process was not individual but a collective one, keeping features developed over a long period of time. The artisan is in a direct contact with the material used and uses expertly all its potential. The object is the final stage of his work; it comes literally out of his hands.

The designer is at the head of the chain of events of the product’s life. He creates a concept, or sign: the term “design” itself comes from the Latin “signum”, meaning sign (Risatti 2009), be it as a hand drawing or a computer rendering. He is a mediator between concept and realization. The product is alienated from the designer himself; he only makes a model or prototype. It is not made after specifications of an individual client but taking into account the generalized requirements of an anonymous group of people. By definition the designer creates the form of serial products for mass consumption, adapted to a specific function and manufacturing process. The craftsman is capable of answering individual requirements, he creates a unique object. The designer creates a range of products to satisfy different functions. The former creates a product with his hands, in direct contact with material; the latter makes a drawing of the product, which in itself brings him closer to the work of an architect or artist. These observations bring us to differences innate in the creative process of craftsmen and designers; they may throw light on different sources of inspiration as well.

20th C creators manifested different lines of development: nostalgic forms (of style origin), craft tradition (with an individual interpretation), elitist and rigorous forms (Bauhaus-based) with references to abstract art, and finally fully technology-driven design (Aalto furniture, Jacobsen furniture, Knoll...
furniture, the plastics boom of the 60-s and 70-s etc.). After World War II, mass design appeared to satisfy mass consumer needs. Historic styles co-existed with revolutionary design in the 1920s; in fact, period furniture co-existed always as a specific high-end market for clientele of means. This obvious diversity only demonstrates the broad search field for creation of material world in the 20th C.

OBJECTIVE AND METHOD

In the paper, origins of post-war design of the 40s and 50s were studied and analyzed. More specifically two directions were outlined: technology-driven design (from which anonymous design emerged as a derivative during the consumer age) and craft-inspired design. On the basis of studying different examples, a comparison is drawn, in order to understand interest in craft and the search for identity in a global world. The role of technology for the emergence of 50s design is studied by considering the evolution of design classics’ prototypes. Traditional furniture types were considered, as well as the furniture they inspired. The pieces were juxtaposed graphically in tables in order to underline visually the uninheritance of forms and ideas. Finally, conclusions were drawn of the importance of material, used techniques, shape, detail and social meaning of different types. The objective is to reveal the search for original shape. This was encouraged by the need for identity both in the consumer and the designer, expressed by attention to tradition and structural materials. As a result, the psychological meaning and value of craft form and natural materials was pointed out.

EXPOSITION

Craft production is synonymous in our mind to lost quality. It is not possible, though, to return to a craft-based economy (as the example of William Morris proved). Today, “we lust craftsmanship we can’t afford and disdain the industrial products we can” (McGuirk 2011). The design of Wegner, Finn Juhl, Kaare Klint is familiar to people; even though we may admire purely functional and technological design, we perceive it as alienated and elitist. The example of US furniture home market demonstrates that ordinary people prefer traditional pseudo-period furniture for their homes, while corporate interior usually adopts ultra-modern, but sterile and devoid of any human character design. Craft form evokes memories from the past. The great migrations of people from one side of the planet to the other brought about the loss of ‘roots’, of home landscape and surroundings, leaving its traces in the subconscious. Nostalgia is the origin of eclectics: we look back to forms that reveal a strongly idealized past (reminiscent of the Morris Company ideology). This is based on human ability to ‘forget’ or eliminate negative phenomena from the past, leaving only the good; from there the present is rejected: “a post-industrial longing for pre-industrial forms” (McGuirk 2011). Whether it is only phraseology or natural fatigue of the industrial world, craft ideal remains a discernible trend, and different designers show interest towards it (Fig. 1). After mass production, individualized design and ultra-modern technology will flourish (Toffler 1992). Following the year 2000, contrasting tendencies of individualism and anonymity masked as minimalist style are present simultaneously; these tendencies exist side by side and shape the image and marketing of manufacturers from different sectors. Globalization made accessible to ordinary people both ideas and objects from distant geographic regions, as well as overproduction and overflow of goods on the market.

Craft-inspired furniture pieces differ from technologically-driven ones in the predominant use of solid wood versus all other materials, such as laminated wood, steel tubing, particle boards, plywood, furniture boards, formed plywood shells, moulded synthetic materials, chrome-plated steel, cast aluminium, etc. Wood corresponds better to humans, because it is a ‘living’, natural material. The amount of hand labour that was needed to make an object is visible; the number of constituent parts is greater in traditional than in mass-produced pieces. An example is Hans Wegner’s Rocking Chair from 1944 (Fig. 2.e). The detail, an inseparable feature of craftsmanship, is manifested in joints, caned seats, comb or fan backs, and armrests. Charles and Ray Eames’ LCW Lounge Chair (Fig. 5.c), on the other hand, is no less complex a shape, its constituent parts being the inverse shape of the press-form used to produce them; in essence, they are shells, mounted on a clear bearing structure, a kind of ‘spinal structure with legs’ with a narrow shape. The structure of Charles and Ray Eames’ DAX Chair of 1948 rests on metal legs, the seat and back are shaped as a single fibreglass shell. In spite of its very comfortable form, the plastic material feels differently and brings connotations of disposable objects. An abstract ‘organic’ sculptural form is married to strict function and cold white surface. A major source of organic design of the 50s was modern sculpture with flowing shapes, of artists such as the British sculptors Henry Moore and Barbara Hepworth. Although inspired by nature, these forms are abstract and act on us as abstract art does – they represent ‘alienated’ Nature. Hans Wegner himself changes his material from solid wood into formed plywood in his Three-legged Plywood Chair (1963); or Ox-Chair (1960), where he switches to metal and plastic. From the ‘Wegnerian’ form in
wood we can only recognize the typical low, wide and very inclined seat, demonstrating that ergonomic aspect was the only common feature left. The use of shells for seat and back, the bent shape and strip legs, are of the same logic as Eames’s. Since with industrial form minimalism takes command, things change drastically visually.

![Timeline with the lifetime of studied designers, ordered in relation to the post-war period (1945-1955)](image)

**Craft Evolution**

Interest toward craft evolution is typical of both European and American design. In 1927, a Shaker rocking armchair with ‘cushion rail’ back “found its way to Denmark, where it caught the eye of one of the most important figures in the Scandinavian modern movement, architect Kaare Klint” (Becksvoort 1998). The Shakers’ Rocking Chair (Fig. 3.d) was used as a model for Wegner’s analogue J16 Rocking Chair, 1944 (Fig. 2.e). The redesign considerably lowered the height of the seat, the type of the back (a fan), runners and armrests, with care for ergonomics typical of the 50s. Wegner’s PP50 1947, (Fig. 2.g), inspired by Windsor chairs, became an example of a successful recreation by modern design. It was also called also called Peacock because of the fan-shaped arrangement of spindles in the back (Baroni, d’Auria 1985).

The Shakers, a religious community in the USA, originated from Manchester emigrants. Mother Ann Lee founded the first communities in New York, Hudson, Connecticut and Massachusetts, later in Ohio, Kentucky and Indiana; they obeyed strict laws of responsibility, pacifism and brotherhood. The ideal was a utopian union of farmers and craftsmen. The aim of the community was not only to manufacture chairs for their own needs, but also to be able to sell them. In 1874, at Mount Lebanon a real industrial facility emerged with its own catalogue”(Baroni, D’Auria 1985). The Shakers produced furniture pieces that were „objects with simple form, not without some elegance and functionality”(Baroni, D’Auria 1985). They produced chairs of the Windsor type, brought to America by the English tradition. In the South of the States, rocking chairs were used during the afternoon siesta.
after heavy labour. Shaker rockers were simple, with high ‘ladder’ back, with arms ending in ‘spoons’ with a flat disc on top (Fig. 3.c). These chairs are of a collective design and follow existing archetypes from 18th C England.

Windsor chairs (Fig. 2. a, b, c, d.) were a favourite design source. They had vertical spindles of the back and legs, jointed from above and below into the seat. The back legs do not run through the seat into the back stiles. Usually, legs are turned (http://collections.vam.ac.uk). Sometimes Windsor chairs have cabriole front legs, ending with a club foot ¹. Windsor chairs are an evolution of a medieval type of three- or four-legged stool with turned legs, jointed into the solid seat. A fan-shaped back was eventually added on top with the same joint into the seat. In the 18th C, such chairs were used for the garden, in such case they were painted for moisture protection. Windsor chairs were produced in great quantities in the 19th C. They were easy to manufacture, low-cost, with light structure and easy to move ². Windsor chairs incorporated steam-bent parts from around 1750, like the bow of the back, or the ‘hoop’ of armrests. The so-called ‘ladder-back chair’, one of the regional types, created in the 18th C, was for domestic use of workers and craftsmen (http://www.wycombe.gov.uk/).

Windsor chair originals (top) and personalized design based on Windsor chairs by authors of the post-war period

Other functional craftsmen-produced types, such as military furniture, traveller’s furniture, folding deck chaise-longues, collapsible chairs, also evoked interest. These types caught the attention of Scandinavian designers, such as Kaare Klint. His Deck Chair of 1940 (Fig. 4.a) comes in this line, as well as his Safari Chair; the Director Chair by Mogens Koch, 1932 version (fig. 4. b), Ole Knudson’s Saw Chair, a collapsible chair of 1958 (Fig. 4. d); and finally, Hans Wegner’s Folding Chair P 512,

¹ Windsor chairs are made in England from the beginning of the 18th C, craftsmen in different regions have specific shapes and decoration. The pattern of leg turning usually identifies individual workshops. These chairs were made in different villages in the Thames valley (the town Windsor, to the west of London), with the aim to be near to distribution itineraries (the Thames river) as well as to raw materials (beech, elm, ash and yew being the used wood species) (www.collections.vam).

² Towns of production were Windsor, Berkshire, Boston (England), High Wycombe. Furniture trade in High Wycombe was developed as a result of the activity of chair craftsmen, who made the town a world capital of chairs in the 19th C (www.wycombe.gov.uk).
1949 (Fig. 4.c). These examples prove that Scandinavian designers never lost from sight archetypal models with history, which were light, movable, with solid wood X-structure with one or more axes of rotation.

Another example is the life and work of George Nakashima, a Japanese-American artisan and architect, who worked with a joint knowledge of Japanese crafting techniques and Windsor chairs. His “Straight Chair” was edited by Knoll since 1946 and demonstrated his personalized attitude toward craft furniture (Fig. 2.f).

Technology

“Technological achievements have always comprised the powerhouse behind industrial society” (Dunas 1966). The 19th C witnessed the adaptation of familiar traditional form-building for industrially manufactured objects. These techniques eventually lead to the inventing of a new formal language by emancipating form from ideas of style and beauty. Mass production of low cost goods was the social aim of modern movement architects; contrary to the interest towards pieces made of valuable materials and high labour cost. Although the language of industrial form had to be invented, this did not happen in the 19th C, the age of Industrial Revolution. It happened not earlier than the 1920s, with the founding of Bauhaus school, where teachers and students worked in their craft workshops to create the clean abstract forms of new objects. Therefore, Bauhaus demonstrated a paradox: their pieces were visually close to manufacturing; yet they were only made as prototypes by hand. Their final adaptation for serial manufacturing technology happened after the end of WWII,
when their serial production was launched, due to the renewed interest towards what we call today the design classics of the 20th C. This paradox demonstrates the bi-fold nature of design and its two sources: craft and technology. Therefore, both sources are present in serial products and influence form-building and understanding and accepting design by society. Because of the ‘time-lag’ of ordinary thinking, craft design is better understood; abstract art, on the other hand, has always been an enigma. The link of organic design with abstract art is clearly demonstrated. Alvar Aalto, an early example of invention of organic form, was influenced by such abstract artists, as Fernand Léger, Jean Arp, Alexander Calder, Laszlo Moholy-Nagy, whose works inspired the design and architecture of the great Finnish architect. The Savoy vase for Iittala factory was a brilliant symbol of early Finnish organic design (www.designmuseum.de).

Aalto’s furniture for Paimio sanatorium, manufactured by Artek, is an example of specific approach to form, based on technology, on the one hand, and artistic invention of form, on the other. The name Artek (i.e. art and technology) proves the validity of those two sources for Aalto’s work. Paimio Armchair (Fig. 5.a) demonstrates Aalto’s philosophy of materials. Originally, Aalto and his wife Aino intended to use the cantilever metal chairs of Bauhaus; they owned Breuer’s Wassily Chair. Eventually they changed their decision in favour of wood, because “much of this nickel and chrome-plated steel furniture seemed to us to be psychologically too hard for an environment of sick persons”3. In Finland, birch wood is traditionally used for making skis. After some research of the exceptional bending properties of this wood, Aalto introduced this technology for the production of solid frames. This technology consisted in bending and pressing of plywood veneers, glued and stacked, and then cutting them into strips of the necessary width. Later, they managed to simplify the production by dry bending with hydraulic presses with improved glues. These glues were developed in aircraft industry and were used by Aalto and his friend, the furniture manufacturer Otto Korhonen (Sembach, Leuthäuser, Gössel 1991).

With art inspiration, but without the technological support, were the pieces by the Danish furniture designer Finn Juhl, inspired by the sculpture of Henry Moore, Barbara Hepworth and Erik Thommesen. These works define him as an exponent of Danish organic modernism. His major work, the Chieftain Chair, has organic details reminiscent of tools of indigenous peoples and represented an important breakthrough of Danish modern in the USA (http://designmuseum.dk 2012). The American Charles Eames, together with his wife Ray, created the LCW model (Lounge Chair Wood, Fig. 5.c) in 1945. The shape was created first as a single three-dimensional plywood shell, when he took part, together with Eero Saarinen (Fig. 5.b), in the competition „Organic Design in Home Furnishings” in 1940. Charles and Ray Eames started to work on an inverse chair shell in July 1941 that had to be heated with electric heating elements; they covered the shell with several layers of veneer, the fibres running in alternating directions, and between each of these they placed a foil made of hot-melt adhesive. A bicycle pump was used to press a membrane against the veneer layers so that these clung to the inverse shell and melted the adhesive. Within four to six hours, the pressing procedure

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was finished (Dunas1996). When removed, the formed part showed cracks (Fig. 5. h), these parts were cut out and the whole had to be upholstered. That is why later, instead of cutting out openings, the Eameses changed the shell with several separate parts with individual functions and thus came to the LCW chair in 1945. Legs, seat and back were individual modular parts, connected with elastic rubber shock mounts, welded to the wood. Form-building had to leave the original unique mould and arrive at separate functional parts.

Fig. 5.
Design based on art and technology by authors of the post-war period
It was fibreglass chairs that kept the original single shell concept: the Eameses created the DAX model (Dining Chair with X-Base) in 1948, made of fibreglass, round steel bars, rubber; as well as La Chaise model from 1948 (fibreglass, iron rods, wood, Fig. 5 d). La Chaise Chair (word play: meaning ‘chair’ in French and the name of French-American sculptor Gaston Lachaise) demonstrates the influence of openings in Henry Moore’s sculpture, by literally applying it to a furniture piece.

RESULTS AND DISCUSSION

The reason for the attraction of craft design is that its features are inaccessible for the consumer of mass-produced furniture.

The first one is the use of natural materials, valued for surface tactile qualities, such as smoothness, texture, and colour, among them wood, leather, stone. ‘Natural qualities of wood are semantically appropriate for a dwelling. Burls, texture, fibres – all these are metaphors of wrinkles and stains of the skin. Wood, when worked, has a tactile, live, warm surface; a material that can be easily worked in a scale measurable with humans (Jencks 1985). Wood demonstrates warmth, softness, organics; it has natural marks such as branches, fibres; therefore it is used in dwellings, where people come in close contact with the building (Jencks 1985). Wood has a memory and individuality as a material; it moves, takes in moisture etc., i.e., it is alive and influences the environment.

Sculptural form as a result of quality craftsmanship bears the traces of human hand; it embodies poetry and love with which it was made. Fluid, organic, soft shapes, typical for Scandinavians in the 50-s, 60-s and 70s, originate both from nature and art, imitating nature. Wood carries a coded memory of birth place, of mother presence, wooden ceilings, soft ‘female’ atmosphere, where one can rest and knows he is at home, that this object is his own, as though emitting his own frequencies.

Presence of detail is important (not even the ornament that post-modernism craved), such as joints, hinges, locking mechanisms, seat canings, turned legs inserted in the seat, rounded edges, surface patina; details tend to be lacking due to reduction of constituent parts in industrial form.

The authors of craft-inspired furniture ‘go back’ to the state of a 19th C craftsman with the knowledge of a 20th C designer, particularly the ergonomic. As craftsmen, they follow traditional form strictly. As 20th C authors, they reconsider dimensions in accordance with ergonomic requirements of the time. Shapes change minimally, e.g., a different back style, the general proportions with a low centre of gravity, different length of runners, arm support piercing the seat to the stretcher, different ending of armrest, to quote Wegner’s ‘Rocking Chair’. Technologically, the model is re-worked in order to be adapted to serial manufacturing, thus producing a hybrid that inherits positive features of both sources; the process could be summarized as ‘humanizing of machine-made objects’.

Reductionist abstract art was substantial for the quest for new forms, appropriate to be adapted to technologic processes and for the emergence of post-war organic design. Even though intended for long series, the models of Aalto and Eames are recognizable individual images. The advent of the anonymous industrial form became widespread in the second half of the 20th C; it is not always a negative phenomenon; but caused the logic of disposable objects with ever shorter lifespan of usability. Anonymity here means both anonymous designers and anonymous consumers, which could be read as ordinary people. In a pejorative sense, though, it was due to low tech equipment and materials; and the tendency to copy commercially successful pieces. Serial production, being in large quantities, hungers for ever-new and more eye-catching modern shapes. This phenomenon is well known today when illegal copies of all levels of design are manufactured globally. This is the mechanism of debasing the originals, or better their concept; it is the modern „power and weakness” of mass production and the fate of every design with pretence: the original individuality is lost eventually with substitutions of materials and technology. A growing tendency in the beginning of the 21st C is a renewed interest in the vintage period of 1950s. If the remake is not literal, it is at least interpreted with advanced technology and materials. Karim Rashid has a re-design of an Eames’ chair (Kareames Chair for Magis company, 2000), but in polycarbonate. Individualized design follows closely after mass production. Nostalgia for the vintage-culture of the 1950s exists, but it also demonstrates a tendency towards individualism and creativity, two features of the post-war period.

CONCLUSIONS

Modern designers inherit past experience of generations of craftsmen. In their striving for long-lasting aesthetic results, they turn to traditional values of classic design masters from the past centuries. Changing and upgrading archetypes, they bring personal style and creative logic. Remakes and modifications are all too well-known for anyone who ever worked for manufacturing. Even craft objects are anonymous, although they carry traits typical of a given region. Both individuality and
anonymity are innate for modern products and make up the history of man’s material world. Anonymous design is the ordinary design for ordinary people, just like them, it made the history of 20th C world of objects. Originating in the brilliant artistic and ‘classical’ period of the 1950s, design entered the commercially-required stage in the second half of the century, only to be attacked by individualism once again at the beginning of the 21st century, with the advent of more advanced technology and materials, as an expression of a cyclic development pattern.

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