
Designing for the Land of Affluence: The Postwar American Dream through Synthetic Fabrics

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ABSTRACT

After World War II, overproduction and overconsumption overshadowed the ascetic period 1940-1945, as new commodities such as houses, new technological house equipment, cars and other vehicles, travel, frozen food, fast food, but also plastics realized the dreams and expectations of middle class Americans, fulfilling their purchasing desires. Synthetic fabrics constituted a great part of this new socioeconomic and cultural phenomenon and symbolized the US's emergence from years of deprivation, austerity, depression and war. In the 1950s and 1960s the American market was flooded with man-made materials such as nylon, acrylic and polyester, the 'miracles of Du Pont's chemistry laboratories' which replaced traditional natural fibers such as silk, cotton and wool, suggesting a, new, colorful, modern clothing.

This article aims at exploring the effect of man-made fabrics mainly invented during the 1940s or before, on the social and cultural theater of the US as new technological achievements in the fields of fashion and home interior design. The article also aims to shed light on their historical background and unprecedented behavioral qualities which fascinated the postwar American consumer audience by altering their sense of taste and purchasing choices.

Keywords - Synthetic fibers, nylon, acrylic, polyester, man-made fabrics, postwar America, overconsumption

1. Introduction

The postwar period in the US was marked by a series of major political, social, cultural and economic changes that established a new status quo within which subsequent generations were nurtured. The start of this new season focuses on the cessation of war and the subsequent repatriation of thousands of fatigued American soldiers, who, as veterans, struggled to rebuild the life they left behind before departing for the front. These men, who demanded not only jobs, but much more, such as houses, cars and appliances, were the first substantial consumer targets of a new order of things based on the country's policy of intense mass production that marked the post-war decades (Sivulka 1999: 264). Bombarded by press, television and radio, but most of all by the advertising strategy of the Madison Avenue sales industry, American consumers followed the sweeping path of advertising, buying more and more products. The basic, but at the same time mandatory, need for American citizens was spotted in the housing market.

The tendency of Americans to flee from large urban centers to the suburbs or even the countryside, in an effort to have greater security and tranquility in family life, was sweeping and intense. As the social ferments became more intense, the need to find affordable housing, but also household goods began to become more and more imperative, which triggered important developments in the design and production

of architecture and objects (Tsoumas 2019: 18). This was supported by new technologies, as well as by the new materials invented during the war, which further helped free design from the remains of historicism and tradition after the interwar aesthetic movements, thus creating the conditions for aesthetically and functionally better mass-produced objects in more affordable prices (Goss 2004). Specifically, as it was the time for turning a nation of renters to a nation of owners, the construction of new, usually prefabricated, housing that began to be built at a rapid pace was the result of the imagination of most Americans in their effort to decentralize and, at the same time, develop new urban areas in the peripheral zone of the big cities (Friedman 1996: 131). Most of the house types were identical in that they had pitched roofs, spacious gardens, barbecues and high-tech home appliances, such as radios, televisions, washing machines and hoovers and constituted one of the strongest motivations of middle-class Americans for the first and most important step towards the mass consumption that was synonymous with the coveted American dream (Sivulka 1999: 266). These houses were contracted with the concept of myth, thus highlighting the sharp contrast of the optimistic reality of that time with the still fresh wounds of the Second World War and thus constituted a fertile ground for the cultivation of the myth concept through excessive consumerism (Tsoumas 2019: 19).

The car was another commodity that represented the post-war American dream as it fueled the consumers' tendency to buy only new, technologically and aesthetically advanced products (Genat 2003: 66). The early 1950s cars were designed to be symbols of social status, technological superiority, and breakneck speed, while reflecting the style and pace of the era. They were usually large in size to serve the whole family rather than individuals, in a sense supporting the recovery of the institutions of a happy family life (Tsoumas 2019: 20). Car industry soon became one of the largest in the country and contributed to the United States' becoming an international economic giant (Ikuta 2000: 18).

Plastics are one of the most important and, at the same time, most controversial phenomena in global industrial production, as well as in the economic, social and cultural theater of the twentieth century (Tsoumas 2007: 10). They were the anticipated result of global mechanization, but mainly of the West's need to find cheap and effective solutions to everyday practical problems (Tsoumas 2019:1). Though plastics had already been popular since the interwar times, in the second half of the 1940s many types of products made polymers such as nylon stockings, clothes, bags, accessories and polyethylene dumpsters, bottles, flower pots, bins and thousands more flooded the American market (Freinkel 2011). These were cheaper, lighter, more pliable and easier to replace than objects made from thermoset plastics. Many magazines of the time such as *House Beautiful* hosted several articles and inserts devoted to that extremely modern material, which became a new attitude to life (Alfred Sloan Foundation 2023). The American dream and the post war new lifestyle in general, were found to be wrapped in plastic, as almost everything could be produced in this material.

Synthetic products started soon replacing ordinary fabrics which showed a significant shortage after the end of the war mainly because many of them had been extensively used by the armed forces (Larsen 2017). The synthetic alternative solutions, such as nylon, polyester, acrylic and others, were nothing but the immediate result of the abundance in oil and gas and soon they were considered as miracle materials by seamstresses, fashion designers, interior designers, textile and ready-to-wear industries. Their exceptional properties as durable, waterproof, stain-resistant, light, easy to wash and cheap quickly linked them with the concepts of abundance, over- consumption, fashion and style trend, but also with the throw-

away society, like most plastic items (Tariq 2022). However, it should be stressed that in the 1950s synthetic fabrics were rapidly accepted and adopted by the postwar consumer audience who did not face them as the artificial substitutes of cotton, wool, silk or linen, but as unique, new, pioneer industrial products which would change their daily living (Kativa 2016). This paper examines the role of synthetic fabrics which emerged in masses in the postwar American market and reflected in their own way the new hyper-consumption model which mainly expressed the middle and lower classes, in the rapid building of the US postwar cultural identity.

2. Nylon as a form of postwar cultural revolution

The American company Du Pont was a pioneer in the invention of revolutionary chemical materials such as fibers, films and plastics, which is why it had already occupied one of the highest positions in the world ranking of new technology companies since the first decades of the twentieth century. The inter-war period and especially the 1930s proved to be particularly productive as it saw the further improvement of synthetic rubber, but also the invention of the revolutionary synthetic material nylon, by the two great researchers of the company Wallace Carothers and Julian Hill in their attempt to discover an artificial substitute for the very expensive silk (Handley 2000: 34). Although initially nylon fibers were used for the creation of everyday objects such as bristled toothbrushes, nylon as a form of fabric became widely known just before the Second World War, when it was the basic material for the creation of the first women's stockings, a pioneering invention of the company that was first presented in the World New York Fair in 1939 (Wolfe 2008: 16). Nevertheless, they did not appear in the world markets until 1940, which brought a striking change in the design of traditional women's stockings, which until then had been produced from Japanese, hard-to-find silk. About sixty-four million pairs were sold worldwide, while generally during wartime their use was quite limited as almost all nylon production was directed to the making of military items such as the parachute.

After the end of the war, and under the new socio-political, economic and cultural conditions, it became apparent that man-made fabrics had begun to claim a large part of the country's industrial production, as they had already proven that they could be used in many ways in clothes and accessories, but also in household, regarding the new way of life of Americans. Their flexible qualities, variety of colors, easy care and affordability in relation to the swift increase of consumerism, intense industrialization, and the fast pace of everyday life, contributed to their wide acceptance and use. Pre-war nylon stockings represented only the beginning of a cultural and economic phenomenon that would soon revolutionize the world of fashion. Durable yet cobwebbed they returned to the market in 1945 and immediately became as popular as before. But it was not too long before the nylon pantyhose appeared and soon began to displace the long-known nylon stockings which would embrace women's legs only up to a certain degree (Wilson 1975: 19). On the contrary pantyhose was easier to use as it did not need any garters to be held up by: women were then given an unimaginable sense of freedom and comfortability as their bodies were covered from the toe to the waist, and they could enjoy the presents of new technology with less restrictions in daily life (Krier 1988: 19). At the same time pantyhose functioned as the secret emancipation object of the oppressed American women and it gradually also displaced other types of tights and socks along with the devalued position of women, especially those of the periphery.

Since the late 1940s consumer public's appetite for new clothing options after years of economic depression and war, started becoming enormous, following the general trend of the American market.

Store windows from the States of the East Coast to California and the cities of the American South were filled with fancy casual nylon clothing, as well as home goods, thus shaping the new fashion that would sweep the whole world in the years to come. On the other hand, classic Sears retail catalogs featured nylon and rayon clothing, underwear, and accessories on their fashion pages, drastically shaping thus female consumers' purchasing choices.

On the whole, 1950s experienced an unprecedented increase in nylon clothing production and consumption which spanned from feminine dresses, longer or shorter skirts, blouses, shirts, scarves, hats, sportswear, but also light and enchanting lingerie, such as nightgowns, panties, slips, brassieres and corsets. Nylon sleepwear was particularly delicate, silk-like soft, whereas many times it was combined with cotton, as was the case of the lace which decorated night garments, or with other synthetic material such as rayon.



Fig.1 Du Pont's nylon stockings were also popular after the end of the war, but soon were replaced by pantyhose. Source: Guido Deussing (2017).

American women seemed to have just rediscovered their lost femininity, self-confidence and self-esteem and enjoyed purchasing colorful, stamped, patterned or simple, light and economical clothing and footwear which were associated with their purchasing power and social autonomy. At the same time, nylon household goods such as curtains, tablecloths, pillow cases, bed sheets, carpets, towels etc., helped

housewives rearrange their houses in the up-to-date technological, practical and smart manner, which reflected the advanced sociocultural spirit of the postwar US.

As Kativa claims (2016) nylon, unlike semi-synthetic rayon, which was the result of chemical processing of plant fibers such as cotton, was thoroughly artificial, and this possibly why it was so revolutionary in its use. Nylon ignored the traditional ways of washing and ironing and brought about a new trend in wash-and-wear products for the convenience of women, especially those of younger generations who followed a modern lifestyle with less housework and more carefreeness. It was not accidental that between 1950 and 1959 washing-machine sales in the US soared. Overall, nylon was a wonder material which changed the cultural and the social profile of postwar American consumer audience, but had an important drawback: it was highly inflammable and primarily for that reason was superseded by polyester, in time.

3. Acrylic fibers: the Orlon fabric flexibility

Acrylic fibers, another great DuPont achievement, created in 1941, began to be produced soon after the end of the war; however, their mass production in the form of commodities began in the early 1950s. These fibers were light weight, warm and soft, usually textured, and formed the basis of a type of fabric, trademarked as Orlon. This new product was more like natural materials, could be washed and worn easily, as it was wrinkle resistant, but also had hypoallergenic properties, which the use of nylon could not guarantee (Stauffer 2004: 112). As it looked and felt like processed wool, but was much cheaper to produce (Cohen and Johnson 2010: 54) acrylic began to gradually displace wool's production, initially in knitted garments such as dresses, blouses, sweaters, scarves and caps, and later on blankets and bedding, in general. But it should be noted that although there were several similarities between wool and acrylic, there were also several differences. According to Kadolph, Langford, Hallen and Saddler (1993: 39), acrylic fibers could crease when they went through the dry spinning process, and, unlike wool fibers, they had more bulk and could be warmer without being too heavy. Due to their technological superiority, their ability to be produced in a huge variety of items, designs and colors, their ability not to need dry cleaning, to be washed without shrinking and to dry very quickly, but also because of their affordable price Orlon products very quickly flooded the American market and became extremely popular. Throughout the 1950s, but also the 1960s, the advantages of acrylic fibers were immediate and obvious, which is why Orlon products seemed to conquer, in addition to the American markets, those of Europe and Asia. This happened mainly because acrylic fibers were also industrialized in Germany and Japan being thus accessible to everyone. It was the time when the world consumer audience, as well as the industrialists, expected the permanent replacement of natural fibers by artificial ones, which would bring about a great revolution in world textile production. However, by time consumers began to express their concerns about the flammability of acrylic, a major disadvantage of synthetic fibers in general, which made them gradually switch to the choice of wool products, as wool is much more flame resistant.

Nevertheless, Du Pont's remarkable technological achievements alone were not enough to make Orlon a success. According to Blaszczyk (2006: 490), the company had to find ways to position Orlon as a key material for modern, fresh ideas in the field of fashion design. Du Pont had to know or even guess the taste and desires of the consumer public and accordingly had to create the corresponding design proposals.

The rapid increase in the demand for residential housing, mainly in the suburbs of large cities, but also in many smaller cities of the American periphery in conjunction with the phenomenon of the recovery of family life, the large increase in births (baby boom phenomenon) and the strengthening of the middle class were important elements of the post-war culture and contributed to the development of the garden, but mainly of the suburban courtyard.



Fig. 3 Print advertisement presenting Orlon fabric's high qualities in the classic American backyard and sportswear. Source: Du Pont booklet This is Du Pont, 1953.

Very quickly the courtyard space at the back of the 1950s house became the physical and emotional extension of the domestic space itself, as it was associated with the concepts of carefreeness, tranquility, peace, and entertainment. In many cases in the backyard there was a private small or larger private pool, lots of potted plants, but also a lawn with small trees or bushes and a designated area for cooking, barbecuing and other such activities. It was the place where owners could accommodate their friends, colleagues and neighbors, especially during the summer time, and enjoy themselves.

The furniture of the back yard, such as chairs, armchairs, tables, sun umbrellas and shades were usually of metal or plastic frame and were upholstered with unique Orlon fabrics in modern designs and colors. Once again we can see how acrylic fabrics became associated with the culture of the post-war American dream, contributing significantly to the shaping of the garden and outdoor design of the American home (Holik 2017).

4. The qualities of polyester

Another of Du Pont's technological achievements that had a catalytic effect on the hyper-consumption lifestyle, but also on the shaping of taste and the broader US post-war culture, was the invention of

polyester, another type of fabric made of petroleum-based chemicals. In fact, polyester fibers first appeared in the company's laboratories in the early 1930s, and as in the case of nylon, they were invented by Wallace Carothers who had the brilliant idea to experiment with mixing different types of alcohols with carbonic acids. After several processes, Carothers, in collaboration with Julian Hill, decided to publish the results of their research in an article in the Journal of the American Chemical Society claiming that they had the ability to turn polyesters into a fiber with properties superior to those of natural fibers, such as silk or cotton (American Chemical Society 1995: 1). Although it had very promising prospects as a raw material for mass-produced fabrics in the mid-1930s, polyester was overshadowed by the unprecedented success of nylon and remained in obscurity until 1939 when it was discovered by John Winfield and James Dickson chemists who, with the help of the British scientists, W. K. Birtwhistle and C. G. Ritchie worked on its improvement. Two years later they succeeded in producing the most perfected polyester fiber named Terylene, the rights of which they sold to Du Pont in 1946.

Soon, polyester would have to prove its high qualities on which the new American trade and market would rely on. For example, its durability and strength as a fabric enabled it to cope with the daily activities of consumers, especially those who needed movement or strenuous exercise such as athletes, so many types of sportswear and athletic uniforms were made out of it. When it was first marketed it was rather expensive, but soon became a more efficient and affordable material and thus it could be the first choice for economical manufacturing options. It did not wrinkle nor fade and could often be blended with other, most of the times natural fibers such as cotton, in order to create more versatile products. However, except its advantages, polyester had also several drawbacks, as it was a material prone to static, and thus could not absorb moisture, and it did retain heat. Consequently, it was unsuitable for the manufacture of products such as towels or bedding needed to soak up moisture or products needed to facilitate airflow (Vanoer, 2019). Polyester could also be skin irritating for people allergic in synthetic materials and could cause nose and throat irritation during melt processing.

However, it was not until the 1950s that polyester began to become popular, as did the aforementioned synthetic materials, following the post-war fashion of technology, speed, comfortable and happy living, but also the concepts of the cheap and the ephemeral, which the overproduced, much promising synthetic products bore. The pleasure of overconsumption and the myth of advertising triggered the massive production of polyester commodities, mainly clothing, but also textiles which were used to manufacture home furnishings and carpets, ropes, nets and sailcloth. But, polyester's high qualities would not have been explored and experienced by American consumers if its marketing strategy was weak and feeble. Advertising had to be intense and convincing for polyester's technological superiority and its unprecedented advantages. This was a rather feasible goal if we take into account the overall postwar period image which reflected people's almost desperate need for consumption (Handley 2000: 54).



Fig.4 Print advertisement demonstrating the polyester’s flexibility in menswear, 1958. Source: www.vintage-adventures.com

Thus, consumers would soon discover many interesting qualities in this new technology material and to which it owed its exceptional popularity. House appliances, cars, travels, even music apparels were quickly affordable for the middle classes, and that was a great opportunity for industrialized clothing to become the next most popular commodity as it represented then a rather new, more ‘democratic’ way of mass production. In the 1950s and in the 1960s polyester for men’s sweaters, vests, jackets, ties, shirts and suits, but also women’s clothing was broadly known under the trade name Dacron. Being in a variety of shapes, colors and pleating, these items gradually became the symbols of a new, laid-back, unwary era. As polyester was associated with plastics success soon signified the new modernist aesthetic and became the icon of novelty, especially in men’s ready-to-wear fashion (O’Connor 2011: 79).

5. Conclusion

As the postwar period in the US was proved to be a time of abundance and affluence based on technological change and overconsumption, Americans embraced newly invented products and they gradually turned away from whatever they thought as traditional and typical as they wanted to be liberated from commodities associated with the war period of deprivation. Marketing strategies, and especially advertising made new technology fabrics, along with plastics, a great opportunity for a carefree casual living, with no anxiety and worries. Nylon, acrylic and polyester clothing, but also house interior fabrics soon gained a big part in this new sociocultural vision of leisure, as they enhanced the idea that comfortable, affordable, easy to use and wear clothes can inaugurate a new, brighter era in consumption and in the standard of living. Manmade fabrics seemed to have acquired particularly important meanings

which changed the way American consumers perceived fashion in everyday life, and constituted both personal and household icons of a new type of modernity and innovation.

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