

Textile and Apparel Industry: The Thread That Binds Us



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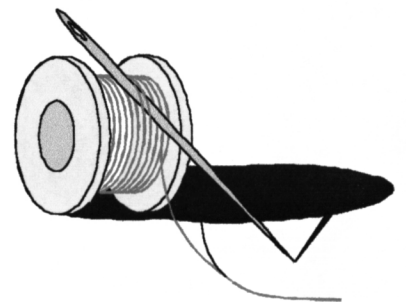


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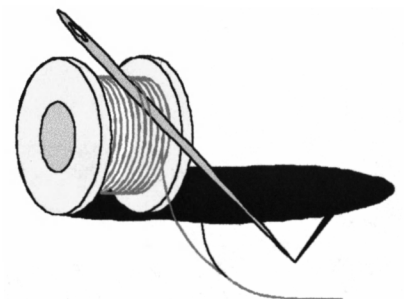
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Thomas Hood's The Song of the Shirt

*With fingers weary and worn,
with eyelids heavy and red,
A woman sat in unwomanly rags,
Plying her needle and thread—
Stitch! Stitch! Stitch!
In poverty, hunger and dirt,
And still a voice with dolorous pitch
She sang the 'Song of the Shirt'.*

*Work! Work! Work!
While the cock is crowing aloof!
And work-work-work,
Till the stars shine through the roof!
It's O! to be a slave
Along with the barbarous Turk,
Where woman has never a soul to save,
If this is Christian work.*

*Work-work-work
Till the brain begins to swim;
work-work-work
Till the eyes are heavy and dim!
Seam and gusset and band,
Band and gusset and seam
Till over the buttons I fall asleep,
And sew them on in a dream!*

*O men, with sisters dear!
O men, with mothers and wives!
It is not linen you are wearing out,
But human creatures' lives!
Stitch-stitch-stitch,
In poverty hunger and dirt,
Sewing at once, with a double thread,
A shroud as sell as a shirt.*

*But why do I talk of Death,
That phantom of grisly bone?
I hardly fear his terrible shape,
It seems so like my own,
It seems so like my own,
Because of the fasts I keep;*

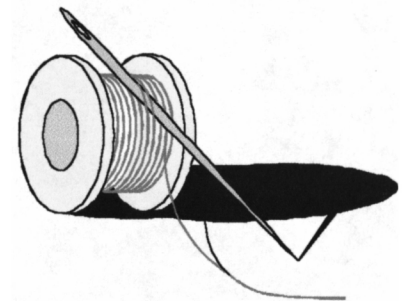
*Oh God that bread should be so dear,
And flesh and blood so cheap!*

*Work-work-work!
My labor never flags;
And what are its wages? A bed of straw,
A crust of bread-and rags
That shatter'd roof-and this naked floor-
A table-a broken chair-
And a wall so blank, my shadow I thank
For sometimes falling there!*

*Oh! but to breathe the breath
Of the cowslip and primrose sweet-
With sky above my head,
And the grass beneath my feet,
For only one short hour
To feel as I used to feel,
Before I knew the woes of want
And the walk that costs a meal!*

*My fingers weary and worn,
With eyelids heavy and red,
A woman sat in unwomanly rags,
Plying her needle and thread-
Stitch! Stitch! Stitch!
In poverty, hunger and dirt,
And still a voice with dolorous pitch
She sang the 'Song of the Shirt'.*

Introduction

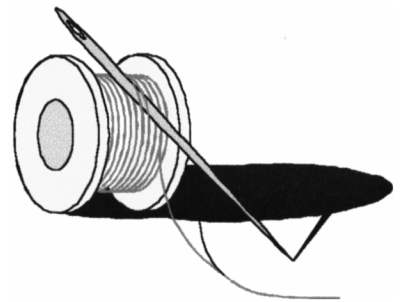


INTRODUCTION

Dress is universal. It is a concept that defines humans, as a species, while dividing and categorizing classes, into societies. Clothing can demonstrate one's social status, income level, religion, attitude, and compliance with tradition. Choices are made in reaction to war, migration, availability, technology, sexual attitudes, and fashion. Knowing this, the rise of the textile and apparel industries appears inevitable.

This paper will illustrate the importance and history of dress as a component of human behavior. It will analyze a model of development and apply its concepts to the textile and apparel industries. Finally, it will assess the social implications this industry creates, with its treatment of the human element of production. Based upon the above conceptual assertions, the primary focus is--are the economic benefits, which these industries have actualized, sufficient in offsetting the social implications, in their course of development and consumption, they have created?

Dress; A Component of Human Behavior



Dress as a Function of Human Behavior

Dress Defined

Dress has always been somewhat of an enigma. Do we dress out of function or due to the frivolous nature of our species? Was dress created out of necessity or for purposes of adornment? “Dress is the total arrangement of all outwardly detectable modifications of the body itself and all material objects added to it.” (16) We know that dress “provides protection, modesty, and adornment along with that elusive, sociopsychological quality, appearance,” (15) To categorize, dress provides three substantial purposes--protection, modesty, and adornment. These purpose vary in importance for each individual and they dress accordingly. That is the human aspect of clothing. In 1931, a French clothier wrote, “Clothing..separates man and beast...As soon as modesty appears, so does the shirt. The shirt thus marks the advent of moral progress, the birth of a new emotion which should be a powerful aid to the development of civilization.” (15)

Clothing, thus is a component of civilization. In fact, clothing has helped define class, consumption, and country. “The shirt must also be understood as an evolving historical phenomenon, not a given. Not only being dressed but being properly dressed is part of the civility of manners. Analyses of clothing, provide variation on the theme of civilization.”(15) Sumptuary laws became passé’ and fashion magazines took their place. Thus allowing dress to be the ultimate manifestation of democracy--anyone can be “in fashion” if they know what to buy. “The stores, their catalogues, pattern books, fashion magazines, and taste professionals spread the idea that art through clothing was possible for everyone.” (15)

Democratization of Dress

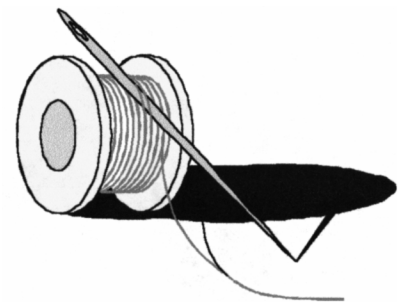
The question then begs to be asked; did the individual create trends or are trends dictated to the individual? In the French Revolution, dress and sumptuary laws were a point of power to the aristocracy. When they were stripped of their power, the bourgeoisie cried democracy. The most visible effect was through dress. Daniel Roche, a writer in the French Revolution, described fashion as, “an equilibrium point between the collective and individual.”(15) Truly, this war was the start of the democratization of dress--anyone could wear the clothes they chose. They were allowed this choice not through position, wealth or power, but through the availability of product. Thus the induction of fashion. “A form and product of behavior, which is widely accepted for a limited time and is replaceable by another fashion that is an acceptable substitute for it.” (16)

This democratization of dress proved advantageous in the military and the assimilation process. “War was an important stimulus to demand, just as it gave an important impetus to the reorganization of supply.”(15) War demanded uniformity. It demanded recognition. Without uniforms, who were one’s enemy? It indeed, it was (and is) the clothing. “Uniforms are the ultimate expression of fashion. They distinguish one from the other/enemy, while permitting a codified sign of belonging to the group or nation. Their purpose is to create an enforced egalitarianism in order to reinforce a homogenized corps.” (15) Similarly in the assimilation process, immigrants coming to America wanted to be American. The most feasible way to enter into the new society, was to first look like one was American. “Henry Ford’s Melting Pot ritual, circa 1916, well symbolized the importance of standardized clothing for the assimilation process....the immigrants walked up to a giant cauldron in their native costumes only to emerge dressed in identical “American” outfits, with a United States flag in hand.” (15)

Democratization of society through dress aside, consumers don’t like to look alike. When two women are “caught” wearing the same dress, it is distressing to say the least.

Democracy hails the individual and yet the individual gets lost in a world of “American” outfits. Therefore, it is industry’s challenge to mass produce for the individual.

Development



Development of the Textile Complex: A Model

Industry Components

Industry is developed and in turn it develops countries, inventions, and labor. The textile complex's development can be analyzed by its causes and effects and stages it goes through. This industry is called "the most Darwinesque of all industries." (15) This is due to the inherent change, it is built on. Change is the catalyst. The institutions which most readily adapt to this change will survive. Those who do not, have an average lifespan of one to three years.

To understand the growth and respective demise of this industrial complex, first one must look at the components necessary to succeed. They are investment, innovation and invention. "Investment, innovation and invention are intimately related. A balance between these three factors is essential for maximizing industrial progress." (18) Technology should be implemented, in order to create smooth conversions, while maximizing its potential. "Technological acceleration in a company should be smooth and continuous, rather than in periodic fits and starts." (18) There must be a solid macroeconomics basis, within a country, as well as a competent infrastructure. This allows forecasting a resolute growth. "By studying an industry or a country in great detail and taking all the socio-economic aspects into account, it may be possible to predict technological acceleration for the future, or what is more important, to predict conditions for optimum acceleration and to create these conditions in order to ensure economic prosperity and social stability." (18)

Modernist Theory

The umbrella theory most applicable, to the textile complex, is derived from the mainstream or modernist theory. It was developed in the late 1940's and was based, in part, on the differences of capital within the nations of the world. When a country developed, it therefor bridged the gap between what it possessed and what it lacked. "To a great extent, theories of this school were based on the notion that development and growth were synonymous; that is development was closely tied to the idea of capital formation....A key aspect of this approach, followed the trickle-down model, in which results of economic growth and modernization of the industrialized countries would trickle down gradually to the poor nations." (11)

This model identifies five classifications of countries--traditional society, the pre-take-off stage, the take off, the drive to maturity, and the age of mass consumption.

- **Traditional Society**

In the traditional society, countries are severely limited by their knowledge and technology. Their infrastructures are poor and in some cases non-existent. In many cases, this is a country that is based on subsistent living.

- **The Take Off**

Growth patterns begin to emerge. They begin to take advantage of their greatest resource--human labor. Industries begin to emerge. The infrastructure may improve, but at this level it is often still poor.

- **The Drive to Maturity**

Significant progress is sustained. Technology is seen in all parts of economic activity. The country's infrastructure has developed so that it is possible to take part in international trade and commerce. Specialization may occur.

- **The Age of High Mass Consumption**

The country now provides most of its consumable goods, as well as producing an excess for export. The infrastructure is firmly in place. With a rise in overall income, spending increases, thus facilitating greater consumption.

Textile/Apparel Developmental Model

This model provides a picture for the hosting country's development. However, it is also necessary to look at the maturation cycle of the industry itself. In Dr. Kitty G. Dickerson's book, *Textiles and Apparel in the Global economy, Third Edition*, she cites a model, based on the 1984 insights of Toyne. His theories are based on the mainstream theory and specific to the textile and apparel industries.

- **Embryonic Stage**

This is found in the poorest countries. Their industry consists of cottage industry. Cottage industry is characterized by home production, primarily done by women and children, paid for by the piece. "The spinning and weaving of cloth remains a primarily domestic industry, performed by women within the home. Not only was the work done in the home, but it was carried out with a view toward home consumption." (12) Hence, it is often called the "putting out" system. "Production and distribution were facilitated by the old putting out system, whereby, every several weeks merchants delivered fiber to be spun or wool yarn to be knitted, and collected the previous period's production at the same time, paying the spinners and knitters by the amount produced." (17) Most of the production is for domestic use. Fibers used are exclusively natural. There may be infant cotton production. However, as with the cottage industry product, it is not standardized and the quality is poor and unreliable.

- **Early export**

The first industry to arrive is apparel. “Apparel industry always is the first sign of progress. This is due, in part to easy-to-learn skills and low capital start-ups.”(15) As noted by the mainstream theory, this is an industry in which they can take advantage of their natural resource of labor. “The clothing sector is extremely labor intensive, frequently with limited capital investment, aging machinery, and its workforce is generally unskilled or semi-skilled.” (3) Growth is further facilitated through the system of outsourcing and below that, contracting and subcontracting (to be discussed later). “Foreign assembly, is the practice followed by many manufacturers in high-wage countries whereby home-designed and home-cut pieces of clothing are sent to foreign, low wage, locations and then reimported into the home country...it is the most labor intensive and requires relatively low skills, the developing countries are ideally suited for carrying out.” (10)

The production, due to the low skill level is usually initiated by those firms that cater to a price sensitive target market. The quality is unpredictable and the infrastructure remains fair.

- **Advanced Production**

At this stage, apparel and fabric are being produced. Fiber production is more capital intensive and increased knowledge is necessary. “In general, fiber, yarn, and fabric production are more capital intensive than garment manufacture. The minimum economy of scale required for efficient production is much higher, to ensure success and feasibility.”(3) Consequently, greater technology appears and is needed. There is also an increased level of exportation of finished goods. “Local recipes included medium-quality and low to medium fashion products, a relatively low number of customers per firm, high reliance on a few clients for the majority of orders and a low export profile.” (3)

The apparel production is also upgraded. The quality is more uniform, and subcontracting is lessened. The infrastructure is fairly stable and reliable, which in turn, facilitates trade.

- **Golden Age**

This stage is really the take-off of industrialization. The infrastructure is solid. At this point, the industry turns from production and begins to initiate research and development and well-established means of production. "...the firms appeared to have in common, namely high-quality products, extensive use of professional managers, good levels of capital investment, and a diversified client portfolio. The firms were all export oriented."(3) In essence, they are now the contractors. They invest in other, less developed countries. With this investment, their own textile complex begins to weaken, as their resources now lay in more sophisticated industries.

- **Full Maturity**

Employment in the textile complex, particularly in the apparel section decreases. In the textile segment of the industry, employment is decreasing, due to the increase in technology. In apparel, the industry itself decreases. Manufactured fibers are the main fibers produced. Production, in general, is extremely capital intensive and entry is arduous.

- **Significant Decline**

This stage is most adequately illustrated by the industry of the United States. Due to the high labor price, the apparel sector is simply not competitive. Thus, there is a trade deficit--importation is greater than exportation. These such nations must contend with, "... increasing demands on the ability to adapt to external factors over which both labor and management have less control. These factors include more sophisticated competition,

obsolescence resulting from new technological innovation or from changes in market or fashion demand, and the logical social outgrowth of their system.” (17) There is an increase in mergers and acquisitions, as the number of firms remaining must increase their strengths, in order to survive. At this point the nation must specialize in high tech fiber production, machinery production, as executed by Germany, or excel in research and design.

Technology Transfer

There is one exception to this model. This is evidenced in Asia. The model is called the “Flying Geese” scenario. In the 1950’s and 60’s Japan was a leader producer in the textile complex. However, as they evolved from an advanced producer, to their golden age, they differentiated themselves. They used their competitive advantage in the field of electronics and advanced technology and left the textile sector, (although like the United States, they continue to produce minimal textile/apparel products). They subcontracted work to the “Big Three”--Hong Kong, Taiwan, and South Korea.

Contracting is an agreement between a jobber and a manufacturer. It is an understanding that the contracting firm will receive goods fabricated to their specifications and the contracted will received payment. Usually this is between a high-wage and low-wage country. “The practice of contracting is when the labor-intensive, intermediate steps are given to firms in low wage countries. This is used by producers in developed countries to preserve their competitiveness, so overcoming the disadvantage of expensive, indigenous labor.” (3) Sub-contracting is when they/contracted becomes the contractor. They find someone to do the work, usually cheaper than they. This, incidentally, is where many labor abuses occur.

Thus, the “Big Three” were subcontracted to do Japan’s labor. In the 1980’s they began to subcontract to Southeast Asia. In turn, in the 1990’s, Southeast Asia began to contract to Nepal, Laos, Sri Lanka, Pakistan, and Bangladesh, among others. Along with

each step of subcontracting was development for each party involved. Japan therefor, led the others, like geese in formation--all flying to success.

Adjacent to this theory is “leap frogging” and technology transfer. Leap frogging is when a country skips a step of the development model. This is facilitated by technology transfer, which is the giving of technology to a lesser developed country from a more developed. While, this certainly is, in the short run, an excellent way to progress, in the long run, the expansion of a country’s infrastructure may not be as notable. In fact, in many of these countries, the infrastructure is so poor, it is difficult for “outsiders” to do business with them. This is, in the long run, a very serious concern.

Development Specific to the Textile Industry

“The basic technological principles of spinning and weaving have remained virtually the same throughout human history. The social organization required to facilitate the technological processes involved in cloth making have varied greatly.” (17)

Factors of Development

The development of the textile industry has indeed varied upon social organization. Its production has changed hands and consequently control. However, it remains true that there must be steps of production, changing technology, a producer, and a consumer. The steps of textile production are, “three main traditional processes: the treatment of raw fibers and their transformation into yarn, the conversion of yarn into fabric, and the assembly of finished products from fabrics.” (26) For natural fibers, the above is consistent among producers. (Manufactured fibers, which will not be analyzed in this paper, vary more within producing firms and countries. Their steps of production also vary.)

Technology has decreased the need for labor. These are processes that can easily be animated, as seen as early as Hargreave's spinning jenny, originating in 1764. It has also vertically integrated the production, thus facilitating economies of scale. "Technological change has blurred the distinction between these processes...Technological change has also altered the way each of these processes is carried out, notably by increasing, within each process, the speed with which individual operations are performed, reducing the number of operators required and increasing the amount of automatic transfer between operations." (26)

The producers can vary. For example, cotton production occurs, in some stage, in almost every country in the world. In the United States, denim production has been virtually perfected. Whereas, in developing countries, cotton is the first fiber made. Its weaving is inherent in cottage industry. As a generality, the more technologically advanced the production, the more developed the country must be in order to produce it. The converse is also true. Outsourcing occurs less in this part of the industry.

The consumers are always the developed nations. These nations hold hard currency. This is what the "developing" need. In order to mature, a country must have this. In fact, of all the trade globally, developed countries receive 87% of finished goods. (11)

Development Specific to the Apparel Industry

"In apparel, small size is more pervasive. Economies of scale are much more limited than in textiles and technological change has been relatively scale neutral. While cutting is subject to greater efficiency at larger volume, sewing, apparently, is not. The need to gear production closely to fashion, tends to limit production runs, and flexibility in production tends to be more important than cost reduction through larger volume operations.

Because of the lesser scale requirements and low barriers to entry, the apparel sector has remained less concentrated than that of textiles.” (8)

Factors of Development in Apparel

The above statement aptly describes the problems and advantages of the apparel industry. Generally, the apparel industry operates on a much smaller scale than textiles. For example, a textile firm might employ 1000 people, where as the average number of employees for an apparel firm is 38. On the other hand, there may be one large textile mill in a region and 25 apparel firms. Fragmentation is the defining characteristic of apparel production. Also, apparel production exists because of developing countrys’ low cost resource--labor.

Nonetheless, apparel development is based upon the interaction between the steps of production, technology, the producers, and the consumers. As will be shown, the interaction, while based on the same basic principles, is quite different from the textile industry.

The steps of production are cutting, sewing, and pressing. Each of these steps have been refined so that international relationships can not only facilitate their manufacture but also maximize profit margins. “Cutting and pressing occur at the beginning and end of the process. Each require particular skill: proper cutting ensures that the parts will fit together and that cloth wastage is minimized; the final pressing, if poorly done, can ruin a finished garment Cutting and pressing can basically be done by only one person at a time. Sewing, however, can be and is increasingly broken down into various tasks, based on the separation of garment parts.” (15) Therefor, the cutting and pressing occur in developed nations which hold the technology and knowledge necessary. While the sewing is done in developing nations which use division of labor, as described above, to provide low cost labor.

Technology

The technological revolution of the apparel industry began with the sewing machine, and in the sewing stage, has really not progressed beyond this point. The sewing machine was introduced in 1850. The true inventor is vague and often argued. For the purposes of this paper, it will be assumed that Singer was the inventor, due to the fact that he held the first patent. The introduction of the sewing machine met some resistance. “The sewing machine was not accepted without a struggle. It was accused of throwing tailors and seamstresses out of work. Hygenists and doctors considered it dangerous to the health, and custom workers blamed it for lowering standards and fueling the entire shift to inferior ready-made goods.”(15)

The sewing machine, while controversial at its onset, is now a source of flexibility for entry into the business and production within. They are highly portable, and even outdated models can perform the basic functions necessary to sew a garment. However, it is the garment worker behind the machine, that ultimately gives the industry its power. A person is still needed to run the material through the machine. Due its inherent limpness, cloth can only be manipulated by human hands.

The cutting process has been revolutionized by the Gerber and other such cutters. “Computerized layout and grading programs, which maximize cloth use while grading and cutting patterns from an original set, have increased productivity and efficiency at the most skilled end of production.” (15) These cutters are integral because they minimize fabric waste and of course increase productivity. Technology such as this, will continually give the competitive advantage to countries, which have the means to support it.

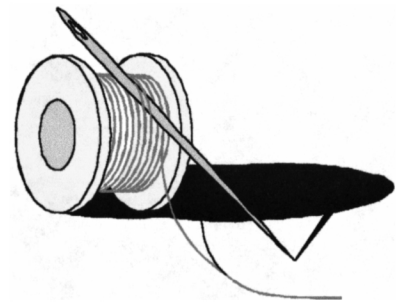
The Nature of Apparel Demand

Ultimately, in the apparel sector, consumers are the force behind the demand. Apparel development relies exclusively on the whims of the demand. “Customer preferences for

clothing fluctuate greatly depending on social occasion, type of activity, fashion, and season.” (3) This demand must be met. As discussed in the fashion section, this sector must produce individuality for the masses. “Most importantly, however, garments have to be producible in mass quantities at reasonable prices. Simplification of lines corespond to changing demand and changing use of patterns, but it is also a necessary condition for the industrialization of clothing production.” (15)

Clothing also carries with it a brand. The brand is supposedly a denotation of fad or fashion, quality or price. Unlike textiles, apparel is very specifically marketed. This marketing must be supported by time and reliability. “A most widely used activity is to promote a brand name to consumers and retailers. This implies, obviously, certain support activities such as quick re-ordering, turn around and advertising support.” (10) Again this marketing is done to and by the developed countries, who are the recipients of the final apparel products.

Case Studies



Case Study One: England Textile Development

“Explanations for the ‘first industrial revolution’ often start from arguments about poor land, high population densities, the availability of merchant and domestic manufacturing capital and a credit infrastructure and the existence of foreign markets.”(18)

During the mid 1750’s, England was a industrialist’s dream waiting to happen. It had a waiting labor force, raw materials, money and capitalists hopeful to become rich. This case study of England’s Industrial Revolution will just scratch the surface of its beginnings. It will focus on cotton production, as that is the relevant fiber that will be used throughout the remainder of this paper. This is used to illustrate the applicability of the developmental theories and their components.

Putting-Out System

At the beginning of the 1700’s, England’s production of cotton was dependent on the putting-out system. The old nursery rhyme says, “Baa baa black sheep, have you any wool?” This was derived from the putting-out system. The merchants would go into the highlands and give the households, primarily the women, the raw cotton. They would spin it into cloth. The men would return, pay the women for their work and bring the raw materials again. It was a time consuming trip that transgressed rough terrain. Often much of the product was lost, due to bad traveling conditions and weather.

As the dependence increased, so did the desire to try something else. “Many of the smaller, independent manufactures were gradually drawn into dependence on putters-out and became, effectively employees operating on a piece-rate wage. By the mid-eighteenth century, it was the norm. This transition to a form of wage-labour proceeded alongside the gradual piecemeal introduction of new forms of machinery.” (18)

This wage labor was the first step to recognizing that the work force needed to be drawn from their homes. Hence, the rise of the factory system.

The Factory System

“The distinction between the factory and the workshop system of production cannot be exclusively defined in terms of the use of mechanical power; it also requires concentration of the processes of manufacture under one roof, the use of specialized machines, and the organization and direction of the labor force by specialized management. Nevertheless, the availability of power is the physical prerequisite of success.” (5)

The factory system was designed because the large, newly invented machinery needed to be housed. However, it also needed power. This was solved by water and later steam power. Thus, water served as a powerful force of location. “The usual pattern for development was for the owners of country workshops to harness an adjacent stream to a water wheel for warp spinning.” (6)

The power of steam, discovered in a Scottish whiskey brewery, was also harnessed for cotton production. “There were, in fact, several methods by which such workshops were adapted to the growing scale of the cotton industry. The adaptation of steam-power is illustrated by the development of a workshop at Winstar.” (6) An advertisement, of the time, is a further indication of its popularity. “....Also a...steam engine complete, fixed at the end of the said mill, of sufficient force to work the machines.”(6)

Inventions and Technology

What were these machines, that all this power was used for? Four main inventions changed production--Kay's Shuttle, Hargreave's Spinning Jenny, Arkwright's water frame, and Crompton's Mule. What each of these machines did, is less important than the changes in demand, living patterns, and production time they produced.

Kay's Shuttle was invented in 1733. It allowed one person to weave fabric. The revolutionary aspect was, now this person could weave cloth longer than their armspan had previously dictated. Therefore, more cloth could be produced in a shorter amount of time. "Weaving technology was improved more generally by the widespread adaptation of Kay's fly shuttle, which increased productivity considerably." (18) However, if one can weave more fabric in a shorter amount of time, they need more yarn. The yarn production was still slow. Accordingly, productivity was stilted. "After the middle of the eighteenth century the demand for spun-cotton yarn began to outstrip the supply...because of the widespread adaptation of Kay's flying shuttle which doubled the capacity of the weavers. This expansion caused a bottleneck."(6)

The three inventions that followed not only solved the yarn shortage but increased the quality and tensile strength of the yarns. The spinning jenny was invented to speed the process of yarn production and to increase the durability of yarns used for weft in fabrics. "Stockings made of jenny yarn are esteemed over all Europe to be far superior in neatness and more durable than any cotton-hose manufactured in any part of Great Britain."(6)

Arkwright's water frame built upon this innovation and furthered the efficiency of production and use of labor. His machine was powered by water or steam. However, his legacy is seen further through his use and dependence on the factory system; thus he is often called the father of the Industrial Revolution. He solved the problem of labor with the use of children. He, at times, resorted to the hiring of whole families. His theory of labor and factory work is the foundation of the same concepts, to be used in the United States several years later. "Arkwright introduced into every department of the cotton manufacture, a system of industry, order and cleanliness, till then unknown in any manufactory where great numbers were employed together." (9)

It was Crompton's mule, expensive to build, but cost beneficial in the amount of laborers it replaced, that formalized and facilitated Arkwright's factory concept. "Crompton's invention combined the principles of the jenny and the water frame to

produce strong, fine-quality yarns. The mule was soon fit with 300-400 spindles, permitting it to replace that many spinners.” (11) Due to its size and cost, its location was not suited for the home. It had to be used in a factory, thus moving the labor force to a centralized location. “It was the coming of the mule, and the application of steam power to it, which really made the crucial difference, concentrating cotton spinning in urban sites; and the major transformations associated with these developments were only just beginning at the turn of the century.” (18)

Infrastructure

As the development theory dictates, with increased growth and organized commerce, a strong infrastructure must follow. England had a stable government in place and a system of banking and credit. What it lacked, was means of transportation and roads. “Transportation improvements were more important in enabling growth to continue, than in sparking it off...The spread of a Manchester-centered web of canals during the first quarter of the eighteenth century was important in providing coal for steam-powered factories and domestic hearths and in guaranteeing the food supply of coalescing industrial populations.” (18) Consequently, with the technology, improving and refining of the steps of production, and a growing infrastructure; the only missing component was labor.

Labor

“One of the most difficult problems which entrepreneurs in the early cotton- and worsted-spinning industry had to face was the recruitment and retention of a labor force. The problem was, in part a consequence of the well-known reluctance of the working classes, to enter the factories.” (6) The factory masters, as they came to be called, knew that they needed a large supply of cheap labor--similar to the contractors of today. They recruited young women and children. The wages of these workers were repatriated to

their families, who came to depend on them. “Once the mill building was completed and the machinery built, most of the labor force required were unskilled women and children.”(6)

The conditions of these factories laid the ground work for mistreatment of labor, which is seen even today. They advertised that, “apart from the wages and bonus payment, incentives such as provision of housing at low rentals were available.”(6) The treatment of both the women and children have been debated. For example, early factories wrote that the children who died, did so, “in spite of their treatment, not because of it.”(6) Yet, insurance companies of the time regarded the mills as “a hazardous risk.”(6) Floods and fire were common occurrences. Even more common were the incidences of lung disease, crippling, blindness, stunted growth, and corruption.

Often orphan children were used in the name of apprenticeship. The system of the apprentice began in ^{the} Elizabeth I reign. It was a method for destitute children to have a better life. It was at times, successful. However, in the textile factories, the children were more often harmed than helped. One of the factory workers, Bridget Earnshaw, tells her story, which reflects the cruelty. “My master had a terrible instrument called the twig whip..If I looked away form my work he would beat me with the whip. He would often beat me with little or no reason....At last I could bear it no longer and ran away but I was caught and suffered a worse beating than any previous one. He seized me by the hair and threw me against the loom, bruising my head and blackening my eyes.”(9)

England grew from a society of mercantilists to one of capitalist entrepreneurs. They developed because their technology expanded to correct bottlenecks of supply, and it created a demand for its quality products. They defined a class of producers and simultaneously, one of laborers. Its growth was enabled by a strengthening infrastructure and stable government. It laid the foundation of development, with the use of the textile industry, that the United States would come to emulate.

Case Study Two: Textile Development in the United States

“Economic independence seemed the logical complement to political independence. To this end American leaders were instrumental in bringing a number of skilled textile workers and with them knowledge of the new textile technology, to America from Britain in the late 1780’s.” (20)

Indeed, the United States had just gained her freedom. Her people were hungry for real sovereignty. Following England’s example, through textile production, they achieved it. This success, as will be shown, was due in part to the natural resources and ingenuity America fundamentally possessed. Technology imported from England and inventions created in the United States, also prompted success. From this, steps of production, labor, and infrastructure were integrated.

Obstacles for Industrialization

The United States intellectuals were ready for industrialization. However, its country was not. First, it had to overcome, not only physical obstacles, but also hurdles of thought and perception. After overcoming what they did not have, they then had to recognize and utilize what they did have. Their main problems encompassed the following:

- **Capital**

The United States had spent what little money she had, accumulated in trading with England, in the war. America had also lost a great benefactor. Industry, especially the textile industry, is not an easy entry pursuit. For the technical expertise and the cost of the machinery, America was not well equipped. It was beginning with nothing. “Relative capital scarcity posed more difficulties. A major problem facing promoters of American

manufacture was to attract mercantile capital away from the rival investments of land and trade.” (20)

- **Land**

The United States possessed far more land than England ever did. For that reason, and the life associated with the land, America’s people and capital were tied up in it. After the Revolutionary War, land and farming were a “sure thing.” As well, there was the Yeomen farmer’s dreaming of providing only for his family and working for no man. “The abundance of land made it cheap....Cheap land tended to divert labor and investment away from industry. Second, most American farming was at a subsistence level. Only when labor productivity increased could labor be released from farming for work in an industrial sector.” (20)

- **Labor**

The acquisition of unskilled labor proved problematic. The country was young and the unskilled labor that it possessed was relatively well paid. Furthermore, there were no labor pools such as those in England. Until the United States saw the emergence of the immigrant, still years away, this was a serious obstacle to overcome. “Recruiting a factory work force posed problems. There was the matter of a supply of unskilled labor. The lowest-paid adult white and free male workers were farm laborers....They received about 17 pounds in wages each year. Urban workers earned similar wages. Therefore wage levels of five to eleven shillings a week had to be exceeded if these laborers were to be recruited by mill owners.” (20)

- **Domestic Market**

The United States had a very small domestic market, a component necessary for moving from the early embryonic stage to that of early export. “Serious as were the US

labor and capital supply problems, far greater disabilities loomed on the demand side for promoters of an American textile factory system. One powerful deterrent was the tiny size of the potential domestic market.” (20) Secondly, the market it did have was either too poor or too rich to buy its goods. The rich in the United States used their taste for the European, to express their monetary and social position. As noted above, the poor were primarily substance farmers. “Both classes were unlikely consumers of American manufactured goods in 1790, the poor because of the low standard of living and the upper groups, who derived their wealth from trade, because of their decidedly European tastes.”(20)

- **Infrastructure**

Transportation of people, products, and services was generally impractical. The roads were primarily dirt. They had been neglected during the war and were in a state of disarray. “Dirt roads, subject to muddy conditions or flooding at fords, meant that only small freight loads, on pack horses or in small carts, could be shifted with any facility and then only slowly.”(20) The water ways were, as yet, not facilitating to use as a transportation device, due to the eastwardly flow of their currents. This confined the market place to small centers, again limiting the outlet. “Manufactured goods moved inland by water only through arduous poling or towpath towing. Manufacturers therefore were confined to small, local markets. These limited markets denied entrepreneurs access to internal and external economies of scale.” (20)

Factors for Success

True, the United States had much to overcome. However, what it did possess would lead it to great wealth and success. In a matter of decades it would come to succeed far beyond England’s greatest accomplishment. The factors for success follow:

- **Natural Resources**

England, in all of her industry, always had to rely on a producer of raw material, i.e., cotton. The United States would be able to not only manufacture but also grow and develop her own raw materials. Thus allowing the United States to eventually become entirely self-sufficient.

The raw material can be seen in two ways. The first, is the raw materials associated with the means for manufacturing. “Its natural resources, still largely unexploited and unknown, afforded innumerable streams for mill seats, plentiful supplies of timber for the construction of machinery and factories, and minerals invaluable in machine-making and power transmission equipment.”(20) Second, were the components for the products themselves. (More complete effects of the growth of cotton will be analyzed further.) “In the South, farmers grew the prime raw material for industrial textile manufacturing.”(20)

- **Labor**

The people who were potential factory workers, were seen as skilled and unskilled. The unskilled had been factory workers in England. This lessened the training time when they were utilized in the American factories. The skilled labor was skilled mechanically. They had the talents to design or redesign the machines needed. According to David Jeremy, author of *Transatlantic Industrial Revolution*, these basic crafting skills were similar to the skills which the pre-industrial technicians possessed in England. These people were essential, not only because they had needed skills and ingenuity but also because they believed in the power of machines.

The United States had major stones in their path. However, as applied in the developmental theories, by utilizing the comparative advantages they had, they would succeed. They employed technology, developed steps of production, used their labor wisely, and improved their infrastructure.

Technology--Samuel Slater

Samuel Slater was an immigrant from England. It is said he had an incredible memory and during his apprenticeship, memorized the machine configuration and brought it to America. During that time, England was seeking to protect her industry. She did so, by enacting strict laws against technical exchange of machinery. "Secretiveness, a preindustrial posture deriving from the apprenticeship system in which the innovative craftsman swore to keep his master's secrets, widened in Britain with the advent of radically new technologies."(20)

He brought the secret of Arkwright's water frame. He was the first to achieve a profit with this system. He bided his time and sought no patents. In his later years, he chose his partnerships carefully. His talents were used to illustrate the design of components of the machine and to ensure the machine, as a whole was correctly assembled. He also perfected the carding machine. He then built upon the Quaker institution of family labor and employed whole families in his factories. Finally, he encouraged the immigration of other skilled English apprentices. "Slater's operations diffused British cotton technology into America, by channeling immigrants into the industry." (20)

The most outstanding characteristic of this genius was his ability to adapt what England possessed to fit the American skills. He built upon the Puritan work ethic and devised a system of labor that intensified this, and also created a sense of community. He allowed the transfer of technology he possessed, thus creating industry throughout the United States.

Lowell and his factories

One of the foremost to act upon Slater's developments was Francis Cabot Lowell. Lowell did more with labor management and utilization in order to fully exploit his technological innovations. Technologically, he designed a crude, power loom. His partner Paul Moody improved on this design, with the inspiration of other models, in the

United States at the time, to increase the speed and accuracy of the machine. He vertically integrated his factories. “By utilizing the power loom, it integrated all the steps in the manufacturing process at a single location, thus eliminating the loss of time, labor, and materials associated with the putting-out system.” (4)

Lowell is noted historically, for abetting the labor problem. “He recruited teen-age girls from New England farms and housed them in dormitories or boarding houses close to the mill and supervised by matrons of the highest respectability.”(19) Factory work was a much preferred option. A young woman, at that time, could either work in domestic service, teach, or get married. His workforce was composed of women in their teens and twenties and most were unmarried. (Factory work did not exclude women from marriage.) Most of the young women were not sent there out of financial need, although much of their wage was remitted to their fathers, rather because they sought independence.

Lowell believed that industry could exist without labor abuses. The research indicates that initially this was the case. However, as his success grew the girls began to work an average of 14 hours a day and the state of their living conditions diminished. In response they created the Factory Girls Association and successfully lobbied for an 11 hour day.

Eli Whitney and the Cotton Gin

In every history book written about this period, there will be a note that in 1793, Eli Whitney invented the cotton gin. What will is not told is what this gin did to the country. In one sense it revitalized the South, corrected the problems with cotton production for the world as a whole, and pushed the United States into the early export stage of production. In another, it resurrected the institution of slavery and created a new kind of dependence the country did not free itself from, until the Civil War.

The South, prior to 1793, was a conglomeration of Yeomen subsistence farmers. They only grew agricultural products for their own survival. It was known the commercial⁷

value of cotton, but it was unprofitable to grow. This was due to the labor and time intensive methodology associated with separating the seeds from the cotton plant. Cotton can not be processed into fabric with those seeds intact. Whitney developed a machine that successfully did that and with this invention removed any barriers to the South's success.

For the South, cotton was indeed "white gold." "By the industry, skill, and enterprise employed in the manufacture of cotton, mankind are better clothed; their convert better promoted; general industry more highly stimulated; commerce more widely extended; and civilization more rapidly advanced than in any preceding age." (7) It employed the unemployable and created a new world. "The whole interior of the Southern states was languishing. As soon as the gin appeared, new vistas opened; the entire South changed. Old people and young, at once found lucrative employment....Individuals who were depressed with poverty, and sunk with idleness, have suddenly risen to wealth and respectability."(22)

However, with demand growing, the cotton itself had to grow. At this time, slavery was in a state of manumission. "Four years after the emancipations by the States had ceased, the slave trade was prohibited." (7) The cotton gin gave it new life. Some argued that only through slavery, could the South utilize economies of scale in production. "The farmers of these new States...will demand a market for their products. This can be furnished, only by the extension of slavery." (7) Slavery was expanded and the South was soon dependent upon it.

Did Eli Whitney invent the cotton gin to propagate slavery, inadvertently or maliciously? Did he realize the demand it would create? In all of his remaining papers, he never mentions slavery. "Because of the critical part Whitney inadvertently played in slavery's consolidation and expansion, his omitting any reference to it is striking. It must seem that he deliberately did not choose to consider it in terms of good and evil." (23) "No comment whatsoever appears in his letters about the institution of slavery, although it

was his gin that gave it new life. He seemed to take that social system for granted.” (22) Perhaps, it will never be known. What is known, is that the cotton gin is the primary reason that slavery survived.

Case Study Three: Apparel Manufacture--The Needle Workers

“Where did clothes come from before we started buying them “of the rack?” The answer depends on class. Clothing was made at home by and for the poor, while skilled tailors and seamstresses fitted out the rich.”(15)

In the mid-eighteen hundreds, there was an explosion of fashion in England. People had more money and less time and everyone could buy clothes. The clothes were now affordable to everyone. The first reason for this was cheaper materials. “The new machinery, in the service of the booming textile industries, could produce ever more abundant and cheaper materials.” (27) The second reason was an improved infrastructure which could deliver both products and changing fashion ideals. “The improved communications, and in particular railways, led to greater mobility so that fashions could be disseminated widely and quickly.”(27) The third reason is that the printing techniques and paper patterns acclimated people to changing styles. “New printing techniques and cheaper paper resulted in a mushrooming of women’s magazines, which naturally took a keen interest in fashion.”(27) Finally, the clothing industry organized itself in order to oblige the ever changing demand.

Skill and Hierarchy

The industry of apparel production was initially created without the usual element of technology. Everything was done by hand. As is inherent in this side of the textile complex, entry required little capital. However, it did require skill. "In the sewing trades, skill is a matter of historic period, of craft, of garment type, and of raw materials." (15) Sewing required two things--labor and time. The industry was in a hierarchical structure, which reflected the reliance upon both. There were four different houses of apparel, each based on their clientele, who they allocated their resources to, accordingly.

A first-rate house served the nobility. They were concerned with the highest fashion and the best materials. Usually, dresses were made from silks or velvets. In a second-rate house, the middle class was served. In these houses, the apprentice system was utilized and the first semblance of "outsourcing" was seen. They used a combination of silk and cotton. The third and fourth rate houses made bodices and skirts. They served the merchant class. They did all of their own sewing. They worked almost exclusively in cotton, although mourning clothes, were almost always made from silk, an any of the establishments.

The other source of clothing was by the contract of an independent seamstress. These women were underpaid and poorly treated. They often found themselves in this trade, due to necessity--widowhood or dependent children. "Naturally in the case of clothes production, it was the seamstress who suffered the most. Without the safety net of a welfare state, she had either to accept whatever pittance was offered her, or starve." (27)

Conditions of Labor

"The desire for cheapness forced down the seamstress's wages; the demand for speedy production lengthened her working day....The dresses were completed at the expense of the dressmaker's sleep and there were frequent complaints of customers' unreasonable demands."(27)

The customers were then as they are today. They wanted it here, now and cheap. The needleworkers suffered for this. They experienced a life similar to slavery, and conditions worse than most.

The dressmakers for the most part, were not impoverished women. They were the daughters of the farmers, merchants, and artisans. They looked at this endeavor as one more for freedom, than economy. Needlework was a skill which was elemental for girls to learn. Having been taught the skill at home, the entry into the workforce was one of relative ease. Some entered as apprentices, and were well looked upon for doing so. Often, a young woman had to pay for her apprenticeship. The common goal was for a young woman to mature and have her own shop. This only happened in five percent of the cases.

Once within the system, marriage was the only way out. This was often due to entrance based upon the indentured system, rather than the apprenticeship. The hours were grounded solely upon demand. "The length of the working day varied according to the time of year, but during the two 'Seasons,' the minimum was eighteen hours a day and some girls worked twenty hours daily for three months." (27) Outside the season, the shops either closed, leaving the girls destitute, or required twelve hour work days to maintain inventory and fill mourning orders.

It is the effect on the women's health that is striking. Even if their illness was not overt, they would tend to age quickly, and have very little, if any, resistance to illness. When the Epidemiological Society of London took a poll they found, "Only one in twenty to be in good health. The rest suffered from depressed physical power, nervous exhaustion, and numerous functional disorders." (27) The reasons for such bad health stemmed from the same causes of lung diseases in the textile factories--no ventilation. Also, "bad cooking, monotony of diet, careless or dirty serving of food, in one case, the girls had to eat their meals next to a sink, and were several times put off their food by obnoxious smells rushing up the escape pipe."(27)

Furthermore, the light was very poor. Hand sewing, in particular, necessitates light by its intricacy. The women who worked on clothes for mourning often went blind. “Fainting, headaches, giddiness, hysteria and occasionally total blindness were brought on by long hours of close work by artificial light.” (27) Finally, the bent posture, and sedentary nature of their work resulted in ulcers, disfiguration, lung diseases, and disorders of the spine. In fact, consumption is known as the tailor’s disease. “Even those who leave this work at an early age retain permanently injured health and a broken constitution; and when married, bring feeble and sickly children into the world...No method of life could be better calculated to destroy health and induce early death.” (27)

Technology

The sewing machine was the ultimate ruin of this industry. It simply was an instrument to deskill the tasks at hand. It hurt the industry in two ways. The first is by deskilling England’s workforce. The second is by creating more work for the already taxed workforce.

Skill is defined as “speed and accuracy.”(15) However, “The ability to work at high speed is a skill inadvertently created by de-skilling.”(15) The invention of the sewing machine created a high speed demand. In turn, the intricate skills of sewing were lost. For England, this was a loss of a valuable natural resource. “The machine further damaged England’s economic competitiveness by destroying a major national asset, the skill of her workforce. This skill justified the English artisan receiving higher wages than his continental counterpoint.” (18) As seen in the example of technology transfer in the United States, technology is easily transferable, thus putting countries on equal ground. Skill, on the other hand, is not so easily transferred.

The second disadvantage of technology is that it increased the workload. Instead of making the tasks at hand easier to perform, the tasks themselves were more complicated. The use of greater yardages of material, increased decorative lace, and difficulty of the

patterns created more drudgery for the young women employed. “As soon as lovely woman discovers she can make ten stitches in the time that one used to require, she is inclined to put in ten times as many stitches as she formerly did.” (27)

Thus, this is the first example shown, that illustrates the down side of technology. In an industry where skill is prized, machines will never overcome. However, in the apparel industry, the foremost word on consumers’ minds is often price. The cheaper the better.

*“Hurray for cheap clothing! I want not to know
How the work of material was got;
If the article’s good and the figure is low,
For the wherefore I care not a jot.
Make me out to encourage oppression and vice,
Oh my beggarly meanness enlarge;
Ha! I get a whole suit for half of the price
A respectable tailor would charge.”*

(Taken from “The song of the Cheap Consumer” Published in “Punch,” an underground magazine, that put a face to the faceless laborers of the day.) (27)

Case Study Four: Apparel Manufacture--the United States

“Nineteenth-century Americans believed that women had a “natural” affinity for the fashion trades. After all, were not ribbons and flowers, ruffles and lace, satins and silks intrinsically feminine?”(14)

In the 1800’s the United States had recovered from the war of 1812. As demonstrated prior, the textile industry was booming. The American consumer was becoming just that.

As a country, America was developing past the early export stage into advanced production. People were more employed and received greater wages, but had less time for endeavors, such as making their own clothes. “The changing urban landscape evidenced a newly affluent middle-class way of life, attested as well to a growing interest in fashion, especially women’s fashion.” (14) As in England, a class of dress makers and milliners were born. “Dressmakers and milliners performed a critical function: making fashion for women who could not or would not make their own clothes; transforming fabrics, flowers, ribbons, and lace into works of art.” (14)

The Dressmaker

Thus the dressmaker’s shop was born. The owners of these shops were women. The marriage status varied. Most were spinsters or widows and a few were married. However, it was necessary to employ most of one’s time in learning the business. “Attaining expertise in one’s craft often required a commitment that precluded marriage.”(14)

Much credit must be given to these women. Legally, they were virtually unprotected. They experienced credit problems and often lost control over the materials needed in their production, as they were predominately sold by men. As in the industry today, a dress shop had a very short lifespan--usually only a few years. “Hampered by insufficient capital, limited credit, and customers who habitually refused to pay their bills, many dressmakers found entrepreneurship a perilous undertaking that lasted a few years at the most.”(14)

Young women entered the trade, almost primarily through the apprenticeship system, which their families usually financed. They entered for greater freedom, ambition, and to be a working woman, who could still be respected within society. “The custom production of feminine apparel offered advantages that few female occupations could match: skilled work, relatively high wages, “respectable” social status within the working class.”(14) As in England, the workers were sixteen to twenty five years old.

The Nature of the Work

The most outstanding characteristic of the apparel industry, which has prevailed throughout its history, and is still seen today, is the seasonality of the work. Again, the in-season demanded overtime and the off seasons, destitution. “The seasons were a matter of no minor significance. Many milliners had no work for the months of July, August, January, and February....women in both trades [dressmaking and millinery] were busy for only sixteen weeks in the year.” (14)

As in England, most conditions for the workers were deplorable. The proprietors often enjoyed a very wealthy life, such as that of their clients. They did this at the expense of their workers. The apprentices often learned little about the actual running of a business, due to the amount of work that needed to be done. The workers’ health was always at stake. “Let us slip down stairs to the basement. This is the work-room. Faugh, how it smells. There is no attempt at ventilation. The room is crowded with girls and women, most of whom are pale and attenuated, and are being robbed of life slowly and surely....They bend over their work with aching backs and throbbing brows; sharp pains dart through their eyeballs; they breathe an atmosphere of death.”(14)

Technology

Once again, it was technology that put an end to the dressmaker. “During the late nineteenth century, the greatest threat to their skill came not from managers intent on exerting control over production but from inventors of new technologies who perceived that the ambiguous meaning of women’s needlework might yield them tidy profits.”(14) The dressmaker’s position became extinct due to the sewing machine, advances in the science of cutting garments, the retailer and subsequent factories.

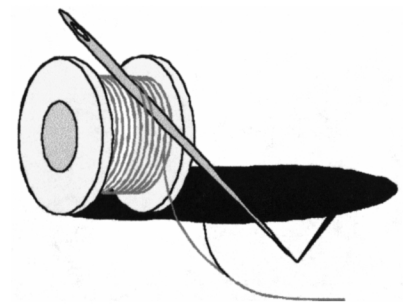
The sewing machine created the same conditions it did in England. It took an arduous task and made it more so. Furthermore, it gave new life to the home sewer. “Well into the twentieth century, women’s dresses and hats were made at home.” (14) The art of hand sewing was becoming lost and so were the consumers who had the time and money to appreciate it.

In a woman’s dress shop, the owner did all the cutting. It was seen as the most crucial and technologically advanced step. This was the step that the garment took form. Garments, at this time, were supposed to “fit like skin.” A bad cutting job could ruin this. Of course, fittings were always necessary. Inventors of the time, sought to take the skill out of this, and making it into a scientific process. “We frequently meet cutters who have practiced the greater part of their lives and yet, who work by such a crude system, compared to that sanctioned by the experts in the art.” (14) They designed tools and charts to guide the cutters. This was the first step to mass production and the last time a woman was a cutter. Once inside the factory, only men did the cutting, as is still seen today.

The final step that took apart the dressmakers was the retailers and the factories. “Retailers are intermediaries who sell goods made elsewhere, directly to consumers. Retailing in this sense, is a relatively recent development.” (14) The dress shops were based on customization and individualization. Each dress was unique. Retail can not operate on this concept. It demands standardization, and therefore, is mass production’s counterpart. “Factory production began in earnest in the late 1890’s, when shirtwaists (blouses) and separate skirts came into vogue.” (14) The dress maker became the machine operator. “Thus, the garment factory offered for women not creative labor but relentless, monotonous work. Custom dressmakers might stitch away at a dizzying speed during rush seasons, but their labor more closely paralleled the irregular rhythms of artisanal production than the incessant pace of the factory.” (14)

The greatest tragedy of the time was the Triangle Shirtwaist Company fire, in New York. There were no fire escapes. During working hours, the women were locked inside, in order to discourage breaks. When the fire began, the women were trapped. The fire ladders were not tall enough to reach the top floor of the building, where the women were housed. 146 workers were killed, either by jumping to their deaths or by the fire. This illustrates the pure capitalism of the factory system. Women were changed from artisans and experts, to disposable commodities, who could not be afforded fire escapes.

Society



Society-- The Trap of the Textile Complex

Thus far, development and the economic benefits of the textile complex have been shown. This is an industry which is found in every country in the world. Its power is vested in its employment of resources, consumers and labor. It had also been shown that labor is often neglected the humanity it deserves. As the fundamental factors of development have remained, such as easy entry into the apparel sector, and the capital intensive nature of the textile portion, so have the crimes committed against labor. Is it inherent that industry can only propagate itself at the expense of labor? Perhaps commerce should not concern itself with this particular institution, as Eli Whitney did. I however, contend that if a country benefits economically from industry, it should do so without compromising the dignity of its citizens.

Sweatshops--Defined

“They were situated in the South-East portion of the city, in a dilapidated-looking building; the wooden steps shook, narrow and nauseating toilets were in the stairway... medium-sized rooms where some twenty workers worked like demons, cutting, placing buttons, ironing, each according to their specialty. The spectacle of such feverish activity, of all those hands following the movement of the machines, made me think of one of the circles of hell in Dante.”(15)

Sweatshops or sweating, dates back to the fifteenth century. It is a term that in today’s politically correct word has come to know great significance. Its organization can be defined as, “The term sweating or sweating system originally denoted a system of subcontracting, wherein the work is let out to contractors to be done in small shops or homes. The system to be contrasted with the sweating system is the factory system, wherein the manufacture employs his own workman, under the management of his own

foreman.”(25) As far as its workers are concerned, it is defined as, “The sweatshop has often summarized the worst of seasonal unemployment, contracting, and the homework paradigm all at once...It implies cramped space, long hours, low wages, child, female and immigrant labor, exploitive middlemen and/or germs.”(15)

Reasons For the Survival of the Sweatshop

The sweat shop has survived because it is based on the conditions of flexibility, speed, and competition. The apparel industry is based on demand and the seasonality of that demand. A manufacture^r must be flexible in order to survive. With the ease of entry, there is no way to do this but to push your labor. “Clothing, women’s in particular, remains a most unpredictable commodity. Weather and season and the whims of fashion drive apparel merchants to minimize their risks of getting caught with goods they can’t sell. The industry has historically dealt with this unpredictability by pushing risk down through the production chain. From the retailers’ point of view, readily available, and easily disposable producers is the ideal solution.”(25)

Speed is inevitable. As stated previously, speed is the number one key to deskilling an operation. Production is based upon demand. That demand will not wait for next season. The demand is for today. A contractor who can not perform at top speed will lose his contracts. A component of speed is price. The policy of many retailers is to compete on a price basis. That is the great strength of these contractors--they have low cost labor. “Corporations have been allowed and even encouraged to contract by government policies, virtually unimpeded by the enforcement of the minimal standards and laws.”(25)

Finally, competition gives the manufacturers no choice. With a life span of three years, a manufacture must make as much as he can, for as long as he can. (“He” is used because the owners of these manufacturing plants are exclusively male.) The sweatshops of today compete in a very different culture than the factories in America in the nineteen hundreds. The factories competed within a domestic market, for a domestic market. The sweatshops

of today compete within a global economy for a global and domestic market. “While the sweatshop is certainly a feature of the economic landscape in developing countries, these shops generally cater to their own domestic markets and face similar competitive pressures from manufacturers exporting to the United States.”(25)

Contracting is at the heart of the sweatshop issue. The reason that Nike and Kathy Lee ^{explain} did not know that their names were on sweatshop produced goods, was because they entered into a contract with a legitimate contractor, who then subcontracted to a contractor, who then subcontracted again, and so on. “The advantages of contracting are that it shifts certain risks, costs, and responsibilities onto the contractor.”(15) However, the retailer should have the ultimate responsibility, due to the fact that they are the suppliers to the ultimate consumer. “Even when a big retailer deals with a traditional manufacturer, the retailer by virtue of its dominant market position, sets the parameters to such an extent as to often reduce the manufacturer to a virtual contractor.”(25)

Labor and conditions

“There are about 100 minors like me-thirteen, fourteen years old-some even twelve. We were forced to work from 8:00 p.m. to 9:00 p.m., the next day. Working all these hours, I made 31 cents. No one can survive on these wages. The supervisors insult us and yell at us to work faster. The bathroom is locked and you need permission and can use it twice a day. The place is hot like an oven. We have no health care, sick days, or vacation. I am an orphan. I live in a one-room home with eleven people. I have to work to help feed three small brothers.” (Testimony given from Wendy Diaz, an apparel worker, brought to the United States, to respond to the charges brought against Kathy Lee Gifford.) (25)

The demographics of a sweatshop are very similar to the factories. The workers are primarily the indigenous poor, although immigrant labor is used. Family labor and patriarchal remittances remain prevalent. Women, usually defined as being over fourteen

years of age, are seen more in Latin America. Children are put to use at a greater rate in Asia, Africa, and India.

The use of children is particularly striking. It is a myth that children are needed because of their “nimble fingers.” Children are worked because they can be exploited. “They are the most exploitable work force in the world. If children resist they are physically punished. They talk of being chained to their looms, beatings, and even being hung upside down by the feet for entire days, for misbehaving.”(2)

What is being done and not being done

The obstacles in curtailing sweatshops are based on their very nature. They are difficult if not impossible to codify. They are volatile to closings, and can replace an illegal workforce easily. Also, guidelines which have been set, are based upon the inspection by an independent party. Often these parties are prone to bribery and corruption. There are also semantic problems, such as “what is the definition of a child.” To most it would seem common sense. However, corporations and foreign cultures skew this basic knowledge to meet their own needs.

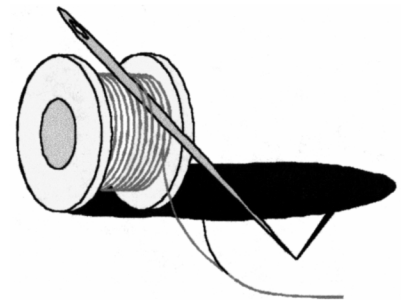
The organizations set up to deal with problems of this type do not have the scope, manpower, or relevant standards to solve the problem. However, retailers have begun to agree, to at least acknowledge the problem. One proposed solution is the adoption of the ACTWU-Clothing Manufacturers precedent. “The precedent would begin by involving all unions in signing and writing new codes and agreeing to abide by them when entering into all new collective bargaining agreements.”(25)

“Rosa Martinez produces apparel for US markets on her sewing machine in El Salvador. You can hire her for 33 cents an hour. Rosa is more than just colorful. She and her co-workers are known for their industriousness, reliability and quick learning, They make El Salvador one of the best buys.” (25)

It would seem as though, this was a crime. However, the United States, in part, subsidizes these systems with tax dollars. The above advertisement was paid for by the United States. It is funded through an organization called the Salvadoran Foundation for Economic and Social Development. It receives 94 percent of its funding from the United States. (25) The advertisement is an encouragement to US companies to relocate in El Salvador in order to capitalize on its cheap labor.

The US government is pushing for foreign investment and globalization. The US unions are shouting for protectionism and standards. It is the fight of labor against progress. However, is it really progress if the children of our world continue to suffer?

Conclusion



Conclusion

The thesis of this paper is, are the economic benefits, which these industries have actualized, sufficient in offsetting the social implications, in their course of development and consumption, they have created? It has been shown that the textile complex is, in part, responsible for the development of much of the world. It is an industry that can be easily transferred, either by technology or by ease of entry. It employs and therefore, it is powerful. It meets one of the human species most basic needs--clothing, and therefore, it is again, powerful. It is built upon changing demand, technology, producers, and consumers. It is simply a force of satisfaction for many.

However, it has also been ascertained, in each example of "progress," the harm that came to its laborers. I will simply never be able to fathom, what a eighteen hour day is. I will never know how it feels to work under the pressure of survival. What a sweatshop is, I will never fully understand. Nonetheless, as long as consumers demand and development is taking place, producers must produce. Is giving life to a country, while enslaving its poorest, justified? The question is answered differently by each who is asked. I, myself, don't know the answer. What I know, is that commerce is based on the bottom line, sadly.

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