

## From My Perspective: The Future of Clothing

Joseph Coates

**CLOTHES ARE A CONUNDRUM** FOR THE FUTURIST. They are nearly universally worn and a worldwide industry spends tons of money to present the new, must-have stuff to would-be customers. And yet, there have been no significant studies of the future of clothing.

The history and the anthropology of clothes are in good shape, but when one looks out a decade or more, the situation is worse than “anyone’s guess,” it is a matter of complete indifference. The movie and television industry, which have nearly unlimited money to put into making high-quality films, reflect the same lack of insight into the future. Consider the characters on *Star Trek*; they all dress in metalized long johns. Films of combat in the future are barely more than comic parodies of medieval knights in their metallic clothing speckled with fantastic gimcracks and push buttons of uncertain functions. Let us explore this intellectually arid landscape to look at what is shaping the future of clothing.

First of all, there is the question of fashion. Fashion and clothing are so intimately linked that we must consider them as twins joined at the hip. Fashion may move rapidly or slowly, but always in the context of culture, which moves at a far slower pace. Culture is an especially potent factor in clothing, and is in turn, influenced by climate, the annual cycle of weather change, and local raw materials. In the modern era, changes in clothing occurred with cultural transitions from the 18th to the 19th and from the 19th to the 20th centuries. For example, clothes associated with death and funerals were invariably black and worn for a very long time. In the 18th century, a middle-class widow’s weeds were worn for 21 months. Then, during the 19th

century and the early 20th century, there were black armbands for men that announced bereavement. Those cultural elements marking the end of a life have, in the United States, almost disappeared except that one wears conservative clothes and most, if not quite all, people dress in their Sunday best for a funeral.

As part of culture there is the inevitability of social change. Women’s entry into the workforce on a large scale has happened twice in the lifetime of many readers. The first in WWII when all of the Rosie the Riveters adopted men’s industrial coveralls and overalls and made only one significant concession to femininity, a colored bandana to keep their long hair out of harm’s way. That did not survive the war. The need to celebrate victory and to enjoy the emerging prosperity of the country made women’s clothes more lavish and generous in fabric, in ways not seen for 30 years. The more drastic change in women’s dress as well as in young men’s began in the 1960s when middle-class women entered the work force in massive numbers. Now, they are in the workforce almost in parity of numbers with men. The new jobs for women were not primarily blue-collar but white-collar and office work, which commits them to more formal clothes. Clothes distinguish a woman who has a white-collar job from those who do not and further mark the upwardly mobile in their “dress for success.” On the other hand, social changes going on

rather dramatically in the last three decades made even more common “dressing down,” rather than dressing up, especially outside work. Steadily, however, leisure and recreational garb are making it onto the business scene. Today, *Forbes*, *Fortune*, and *Business Week* show the few surviving new tycoons of Silicon Valley in extremely relaxed garb. Changing attitudes toward a more congenial, stress-free workplace has given us dress-down Friday. That has not escaped corporate regimentation. All clothiers at noticeable cost provide the new regimented garments suitable for dress-down Friday, making it barely a step ahead toward loosening up the workplace.

The trend toward more comfort and informality will move men to wear short pants during the summer season and at other times, in white-collar work. The trend toward working at home, particularly for those people who spend some time in a conventional office and some time at home, will push more informality and comfort at both places.

Pants for woman have now become acceptable in all work contexts. More significant is the radical reduction of age differences in choice of clothes. Most old people, i.e., over 50, function as if they were 10 years younger than they are chronologically. Their better health also contributes to their dressing in the clothes of a younger crowd. Older women are dressing

in stylish pants like their younger sisters, and in many regards like their adult children. At the other age extreme, small children are now dressing much like adults, except for both girls and boys on formal occasions when they tend to dress as everyone did in an earlier generation.

The autonomy people feel is broad in its effects. Clothes have become more functional, more comfortable, and less specific to occasions. Clothing less and less marks class distinctions, unless you have a particularly acute eye for the subtle measures of quality and hence, of cost in men's and women's clothing. How many readers could spot a US\$300 pair of shoes on the street or a US\$1500 business suit?

Trickle down in style is a long-time cultural phenomenon. In the last 50 years, upward flow has also been more frequent as the street clothes of youths, blue jeans, have gradually and steadily moved upscale and become ubiquitous. They are the universally worn garment by man and boy, woman and girl. However, they now acquire their own class distinctions. One can pay incredible prices, often hundreds of dollars, for designer jeans usually conspicuously decorated and rarely worn thin or holey.

The flow upward also occurs as a result of adoption of different occupational garb as discussed below. In the United States, the underclass and the ethnic groups are often style leaders initially in the extreme, but gradually after being toned down, their styles enter the general society. One sees this from the post-WWII lavish zoot suits with the incredibly large shoulders, the enormously puffy trousers, and the jackets halfway down the thigh that gradually

showed up in the postwar decade, radically altered, in all men's wear.

Prisoners' garb has made its way into the general dress of young men. The transition is quite clear since prisoners are not allowed to wear belts; their clothes tend to be loose and easily become low-slung. This was picked up by younger boys in the ghetto and has now made its way into the general market as tremendously oversized clothes hanging very loose, baggy, and slung quite low; maybe overwhelming comfort for the sake of style to the point of uncomfortable and inconvenient. Physical trickledown is also real. During the French Revolution, some 90 percent of clothes that were bought were in the secondhand market. Today, a big market for worn jeans from the United States feeds the Japanese market. Apparently, the Japanese are too inhibited in public to age new jeans for 2 or 3 years to a stylishly ragged state.

Bill Cunningham frequently had a half page in the Sunday *New York Times* dramatically showing how ordinary people innovate in clothing. Each of his articles has a theme, e.g., yellow, fur, hats, party dress, belts, etc., illustrated by 8 or 10 photos taken in public places.

Occupations seen as glamorous or daring lend to copycat clothes. The lumberjack, for example, has given us a number of forms of winter clothing. The soldier has not only given us camouflage recently, but after both World Wars, they gave us leather jackets. Eisenhower jackets appeared briefly and then disappeared while the Navy's pea jacket is still with us. WWI brought us the wristwatch and basically killed off the pocket watch. A pilot could not reach the watch in his pocket. The wristwatch was a practical innovation and overcame

any hint of the effeminate.

I wore my first blue jeans while working as a laborer on a railroad in the late 1940s. They were virtually unknown in urban America then and were looked at as a strange garment. Collegians adopted jeans in the 1950s. They spread like wildfire when the baby boomers became prominent as activists and protesters.

The media, particularly films and TV, have continually shaped clothing fashion. As the world globalizes, American dress, to a greater extent than French dress, has become the style leader of the world. In numerous pictures, we saw of Kosovo with adults and children fleeing the urban battleground, with only one or two minor adjustments in children's clothes, one could have placed them anywhere in America. The younger adults were in a similar position. It was only the older adults who revealed that they came from a place far removed from the origins of the new styles. Today, the media flows primarily from the United States and the West to the rest of the world. However, the world's largest film industry, in Bollywood, India, is growing as it is in many other countries. Immigration will give us fresh exposures to full-fledged foreign garb that may influence styles, but the overwhelming trend for the next couple of decades will be a worldwide adoption of American styles.

In the 1930s, Clark Gable, in the film *It Happened One Night*, appeared bare-chested, causing a measurable decline of sales in men's undershirts. This probably was a factor leading to the abandonment of tops for men's swimwear. Marlene Dietrich introduced the world to women in pants. Earlier, the opera star

Fedora gave us the onetime familiar, snap-brimmed hat for men.

Hip Hop and rock groups have influenced America, most conspicuously in making grunge the order of the day for millions of young people.

The textile industry, as it evolved, produced low-cost cloth. The availability of industrial sewing machines and the resulting mass manufacturing dropped the cost of production of clothing. The complement to that was the rise of the department store. More recently, in the mid part of the 20th century, the chain store came along, which thrives on economies of scale and puts high value on uniformity in production, style, and manufacture, with low-cost marginal variations in decoration and color, producing the widely desired diversity.

Advertising is a big factor in social change. Cheap paper in color off high-speed presses gave us magazines and newspapers and low-cost catalogs in the early 20th century. They introduced the population at large to changes in clothing styles. Low-cost manufacturing and new sales outlets, notably the department store, made clothes in wide variety available to everyone.

The rise of the middle class created an extremely important influence on clothes. The middle class was at first primarily an urban phenomenon. For most of its members at the turn of the 20th century, status was shown through dress even more than in owning an automobile. The ability to dress one's family in the height of fashion and display the most recent new style was a near-universal class goal.

Urbanization complemented the

rise of the middle class by both stimulating and providing the base for displaying status. The city does something that small towns and rural living cannot do. The urban environment offers an endless passing parade of models who whet the urban passion for being up-to-the minute. (See the paragraph above on Bill Cunningham.)

Immigration is important since we are a nation of immigrants. Each new wave has brought fresh variations in lifestyles. That pattern will continue. It is likely that Asian, Middle Eastern, Central European, and Latin American immigrants will bring more color, wider choice in decoration, perhaps even more flamboyant gestures and body language, which in turn, will all be reflected in clothing. On the other hand, immigration can have a profound effect on the immigrants moving from old-world customs to those of the new world. This shows up most strongly with children, teenagers, and youths who are committed to rejecting their parent's old-world ways, manners, and customs as they integrate into the new world.

Foreign clothes will enter into style. Saris, as they are or modified, will become popular as we see how attractive they are on immigrant Indian women. Pajamas, kimonos, and saris also have desirable features: highly functional, comfortable, eye-catching, and displays varying degrees of ostentation.

The state of the economy is a well-established factor in changing fashion. In lush times, clothes become more elegant and daring; on the other hand, in distressed times, clothes become conservative and utilitarian to subtly demonstrate that the wearer is somewhere between comfortable and well fixed. As we saw in the

1920s flapper era, clothes acquired an incredible flamboyance, i.e., colorful displays and clothes to match women's new freedom. The flapper threw over many of the literal as well as social constraints of the late Victorian period, moving towards less physical support like corsets, but committed to simplicity in the sense of unconstraining garb. All of that disappeared in the Great Depression and styles became much more formal and more utilitarian. A similar cycle repeated itself with the shortages of material in WWII and the pent-up demand for new things released in the postwar era. It will be interesting to watch early in the current decade what the effects will be if the economic recession continues. As unemployment rises, we can anticipate a more sober turn in dress.

To a great extent style changes in fashion are not for economic reasons. It is the constant striving to be up-to-the-minute, to be different, but not too different. It is sometimes attractive to jump back a generation or two to adapt what had been fashionable. The "retro" becomes new simply for the sake of newness but is often accompanied by a feigned nostalgia- "things were so much better and more exciting in the 70s."

Politics have their effects, sometimes in simple dramatic dress like the Italian Black Shirts. More recent is the mythic bra burning in the 1960s. There never was any bra burning, but it became a slogan that substantially changed the upper torso garb of women, leading to two attractive or attracting developments: wet T-shirt contests and more bare bosoms and female nudity in the popular arts, entertainment, and magazines. Where women go, men

are not far behind.

The desire for freedom from constraints is perpetual and nearly universal in the United States. It may merely be the migration from the small towns to the big city or it may be tied to a social movement. The bohemians in the early part of the 20th century rebelled against social constraints in general, while the flower children and the protesters in the 1960s and 1970s were against war, in favor of peace, for women's liberation and for equality of all sorts. They were joined together in these causes advocating that the common underlying causes of their unrest must go. Much of this showed up symbolically and naturally in the reduced constraints in dress as a hallmark of the urgency to relax more serious social constraints.

Prominent and admired people can have their effects. Jacqueline Kennedy was known for her pillbox hats, which became quite popular, as did her low-heel shoes. More recent presidential wives have not had that striking effect, not even Mrs. Reagan, who truly was a high-fashion clotheshorse.

Science and technology are wellsprings of change in clothes. Rayon and nylon have dramatically changed the quality, appeal, cost, and durability of clothes. Technology also introduces changes, which get overdone and then fall into a generally accepted pattern. One sees this with Permapress, which came to mark a cheap garment. Now garments that hold their creases, resist wrinkles, and have a good drape are quite popular.

One-upping people is by no means dead. It may be characteristic of our species. We see it now with the rise in the use of linen in women's wear, particularly in jackets. Linen is far

from wrinkle-free and is easily damaged, making the choice of linen for any garment a bit pretentious.

The home sewing machine, now almost passé, gave millions of women the opportunity, in all households, to imitate what they had seen in catalogs, magazines, or on their neighbors' backs. This promoted style consciousness.

Not all technology affecting garments is in their manufacture. For example, the bicycle as a popular mode of practical and recreational travel led to bloomers and other derivative changes in women's undergarments. At the same time, the early open top automobile called for dusters, which were virtually unknown outside the Western cattle range. Chemical industry changes such as dyes or new materials for making buttons and other decorations at low cost have influenced style. New closures are a recurrent opportunity for invention and creativity in clothes. The zipper and, more recently, Velcro added new flexibility, convenience, and diversity to clothes including shoes.

Sports as recreation or an occupation lead to new clothes. The broad-scale participation in golf and tennis has expanded our wardrobe. Admiration of sports figures also does. The technological changes in sports shoes adopted from basketball have led to broad-scale adoption of athletic shoes by the general public, particularly children and young adults. Unconventional shoes are now worn by people of all ages. The football jersey has become a standard walking billboard in many young men's wardrobes.

Science and technology has already given us the cell phone, and it is only a matter of time before it

becomes fully integrated with clothes, not as a pendant or a belt attachment, but woven or pressed into the fabric of clothes.

Medical knowledge has its effects on garments. Women throughout the Victorian era carefully guarded their skin against the sun with broad-brimmed hats, recognizing that the sun aged the skin at a merciless rate. The term "redneck" for the rural outdoor worker, especially the farmer, acknowledges the badly burned, crinkled, and sun-scarred neck from long, daily exposure. Suntan lotions and sun blockers were symbiotic with ever shrinking beach wear. As new medical knowledge confirms the bad effects of excessive sun exposure, tanning is in temporary decline, but the beauty of a tanned body persists. Women especially are caught up in striking a balance between risk and beauty, with various kinds of putative defenses mediating their decisions.

As beachwear comes to cover less and less of the body, the skin may acquire decorations that could amount to a body cover, ie., clothing. There are now fabrics transparent to ultraviolet light. In a few years, those fabrics may be broadly patterning skin with the summer sun to create abstract, concrete, animal, or biological patterns all over the body, creating the equivalent of a new garment. Skin as clothing will become more popular. The extensive uses of tattoos or simulated tattoos are no longer the exclusive domain of the tough crowd, but catching on throughout society at all ages for men and women.

Imitation sharkskin in the form of V-shaped scales was worn by swimmers at the Sydney Olympics to reduce drag and turbulence and thereby improve their performance.

As the body is more often less dressed, the trend is to push the edge of daring in terms of what can be revealed in public and what can be displayed in a theatrical performance. We see the umbilicus as the latest hot thing pushing the edge. It is unlikely, however, that modes of skin decoration popular in other cultures will move into the West. Cicatrices and other forms of scarification, which can be quite beautiful, are not likely to be popular because they are painful to acquire and irreversible. Permanence is unacceptable in a style-conscious society where style changes at lightning speed.

Regarding status, having a fur coat often is not enough, but having one from an exotic animal is more of a showpiece. Not just having fine luggage, but having fine luggage obviously tagged, marked, or labeled is what counts for many of us. For the extremely wealthy, their displays are carried on in a much more muted and closed environment among the wealthy themselves. This is carried to an extreme in conservative Islamic countries where the wives of the very wealthy may be, by any criteria, splendidly dressed in the latest of Paris fashions, but go about in their limited public movement completely covered to hide, as their culture requires, themselves and their grandeur.

Occupation of course is still with us in the form of work clothes, but their expansion into more general clothes for specific occupations continues. Demonstrating potential fertility is, often unconsciously, a number one priority item in women's clothes with a strong tendency to expose more and more of the richness of the young nubility. Gender differences do persist, but they are fading to a small degree. For

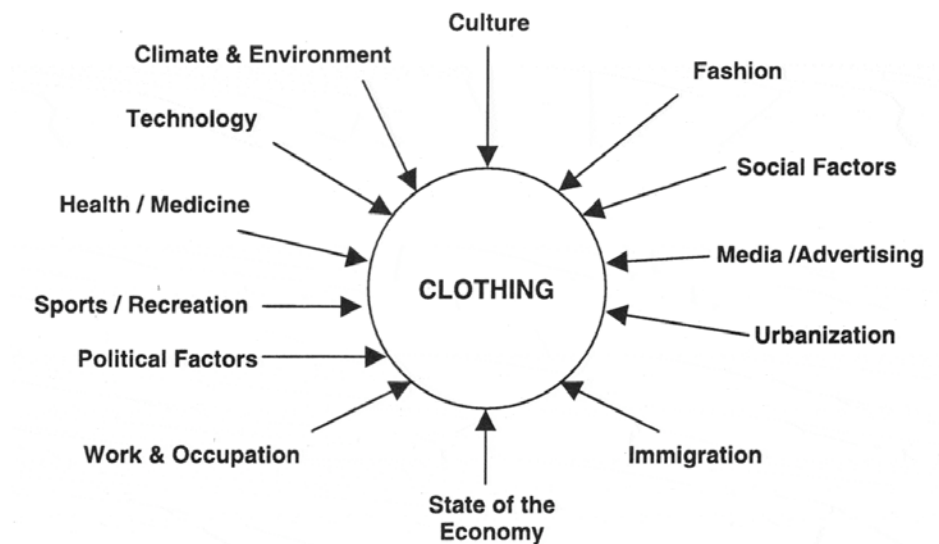


Figure 1. Factors affecting clothing

example, the day before this writing, my wife and I encountered two people about whom we independently puzzled as to whether they were men or women.

Ornamentation is outside the scope of this essay. Therefore, I skip over such things as haircuts and hairstyles, pins, bracelets, and related adornments.

Clothing in most societies is for the purpose of announcing wealth, status, occupation, fertility, and gender. Those goals of garb will dominate for the projectable future, shaped and embellished by the secondary factors discussed above.

Having identified and illustrated the factors changing clothing up to the present and into the future (Fig. 1), let us turn more explicitly to future garb.

The cultural universals in time and space will continue to dominate fashions in clothing to illustrate status, wealth, group memberships, affiliations, age, fertility, health, well-being, profession, occupation, and power.

Markers of these socially central conditions will be reflected in the ways the drivers of change, discussed below, show up.

The military and sports worlds come together in interest and in the availability of money to pay for research, development, test, and evaluation of new clothing concepts. The military is the big moneybags. It seeks clothing to protect the soldier, to provide better safeguards against dangers—not just firearms, but explosives, poisons, biological attacks, heat and cold, as well as vermin and disease. Clothing also has to withstand falling and flying objects. All these capabilities have their parallel in the civilian sector among emergency workers, police, and firefighters with wider applications to the clothes and equipment for sports.

People in dangerous jobs and sports could use smart clothing, that is, clothing that can sense the wearer's condition or situation, and in turn, modify its own structure to protect him or her—for example to

keep the body warm or cool. Clothing will be able to change color to blend into, or to contrast with, the external environment in the chameleon-like way or it may respond to specific signals that the wearer imposes on the clothes.

We already have widely used Kevlar to protect against heavy impact. New materials and weaves will have further safeguards along those lines. Coming out of recent research is the promise of super-strong natural silk, factory-manufactured. The super-strong silk, in principal, several hundred times stronger than steel, may provide the military with cheaper lightweight materials for wrapping, packaging, rappelling, and tying up prisoners, and drastically reduce bulk in safety gear, nets, and parachutes. In numerous other applications where strength is limited by weight, super-strong silk will reduce that limitation.

Inner and outer garments as well as weather gear will be enhanced by new materials. Going beyond the new strength and camouflage elements will be the introduction of electrical conducting polymers, which will be able to sense virtually any kind of changes that one can imagine: heat, moisture (sweat), anxiety, chemical and biological material, and then electromechanically change the structure of the garment, or signal the skin and alert the wearer or an attached signaling device. Much of this is already in advanced development by the military. Early models will probably be available in the next year or two at high prices. However, volume production will take care of the price of anything that is successful.

New strategies for applying antibacterial material to clothing may have great advantages in the field and for outdoor recreation,

and for people on safari, when the ability to wash and to change clothes as frequently as one would like is impossible. The antibacterial effects would eliminate both the consequences of sweat becoming objectionable and bacteria causing skin inflammation or infection. Many of these anticipated changes will not necessarily change anything radically in the shape, cut, or design of garments.

Technology has many dimensions to it. The improvements in material may lead to more disposable garments, particularly underwear, handkerchiefs, sportswear, and sweatbands. Specialty garments in terms of material or function may become cheaper and more convenient to dispose of rather than to clean. Disposability will have applications in both military and recreational activities. On the other hand, disposables may also move upscale and allow one to have dresses, shirts, shorts, stockings, socks, and other garments, which after some reasonable number of uses will simply be discarded. Disposability depends upon the balance among price, functionality, and attractiveness.

Technology is coming together to influence not just clothes directly, but moving into what I call "total body cosmetics." There will be no part of the body or persona that will elude the promise of a makeover. We already have hair dye and enormous ranges of facial cosmetics and the puffed-up look from breast and lip augmentation. Botox injection removes wrinkles, at least for a while. We are moving in directions that are more radical in body alterations. We already have technologies to remove saddlebags and rubber tires. Implants in other parts of the body, e.g., buttocks, will also become common. Going beyond the

physical, total body cosmetics will deal with behavior, the way one walks, talks, expresses oneself, and one's body language. All people are candidates for a total body makeover.

Clothes designed to fit the new body or new persona should boom. A recent TV program imported from England aggressively and often cruelly reviews the total image of people, particularly women, and tells them what needs to be done to get themselves into presentable shape. We see total body cosmetics as a diagnostic service becoming a successful, small business, perhaps even a franchised, small business, providing a service tree of any of the articles, products, or intervention services that might bias the analysis. Ages 14, 25, 44, and 60 may be the peaks at which men or women seek total body advice and move on from there to rehabilitation, rejuvenation and reform.

The total body makeover counseling will bring attention to adornments and ornaments such as shoes, hairdo, and jewelry; a situation ideal for small businesses, and if perfected, for an Internet consulting service.

Linked to an aspect of a total makeover is the change in population, especially aging. One can now accept with full confidence the notion that aging Americans now act, behave, and see themselves as if they were a decade younger than they are chronologically. Among the geriatrics and the emerging geriatrics, clothing for those who are not caught up in makeover is becoming larger and more comfortable and at the same time becoming more youthful.

It is no great news that Americans

are so alarmingly overweight that it is a priority in the public health community to guide us all into better eating, more exercise, and less smoking. This triad of advice will surely catch on, and as it does, it will become increasingly medicalized with much more specific advice, even prescriptions from physicians, and more intimate links between physicians and workout centers. As people succeed in becoming remade, there will be a market for clothes that are changeable in size.

Sports and recreation, as already noted, are a source for new demands for clothing, uniforms, and sports gear. As sports becomes more physically demanding, and in many regards, life threatening, specialized clothing will be required and will become more "civilianized," for lack of a better term.

Environmentally, the most important factor affecting the future of clothing is greenhouse warming. Greenhouse warming promises to smear out the seasons, with a general move of warmer zones toward the poles in each hemisphere. Weather will be more spiky, with longer, hotter dry spells and episodes of heavier rain and snowfall. The combination of overall warming, spikiness, and smearing out of the seasons, will call for layered clothing of traditional styles, materials, and design. Smart clothing that is made of intelligent materials will be worn over a wide range of temperatures.

The climate change to, on average, warmer weather in the temperate zones will bring back lighter weight, shorter, and in many regards, older styles, such as the shorts worn by the colonial officers and shorter, lighter skirts, dresses, and shorts for women. The changes in clothing also becomes an

interesting propaganda to indicate that one is with it, that is, one understands the seriousness of the need to accommodate to changes in climate.

New materials and technology will go beyond improvement to introduce striking innovations. For example, smart garments when equipped with flexible plastic electronics will allow clothes to become electronic billboards announcing everything from your political and sexual preferences to insults, jokes, and compliments. These e-textiles will more generally permit instant changes in the color, patterns and designs on garments, and all other textiles as well.

Fragrances, and more importantly, pheromones will be available either impregnated into fabrics or dosed into fabrics. They will become a truly new social tool, particularly for people searching for new friends and companionship or merely to strike up a social relationship. The pheromones could be released into fabrics in response to an electrical or electronic signal or it might be keyed to respond to change in one's physiology or body emission or a potential pickup's pheromones.

New materials will give us completely water-washable garments without any of the annoyances of shrinkage or extensive wrinkling. There is no fundamental reason why most clothing could not be made water-washable.

The fashion industry is enormously clever but not particularly smart. It has a short-term focus on immediate payoff, on novelty, and innovation but really does not pay attention in a smart way to its own long-term needs. The pressing need of the clothing sector is a broad-scale national

anthropometric study of the sort done decades ago to layout the real body conformations of Americans at various ages and of various socioeconomic cultural backgrounds. As most women now know, there used to be size 8, 10, 12, and 14 dresses and suits. Today, women may have to try on clothing three size ranges over in order to find something that approaches fitting. The situation is perhaps most dramatic in women's clothing, but it has also affected men with the movement toward small, medium, and large, and with sleeve lengths marked between two digits, 34-35 or 36-37. What one finds is that men's clothes are increasingly designed to fit no known primate. The industry, having distorted all sizes, has created an obstacle to their own success in marketing clothes through catalogs and on the Internet.

Bespoke clothing, the English term for "tailor-made," will become more and more routine and popular. The closest thing that we have to it today in mass marketing are skintight jeans for women where one only needs to supply three numbers, the waist, the hips, and the thigh measurements. Digital photography to collect size data from the individual will allow merchants to build a complete archive of clothes styles, sizes, and so on for each customer. Factory machinery will create a garment that will have a 98 percent correct fit with wrap-up changes made by a human tailor. The implications of this are that once one has gotten information into the database, no more visits to the department store or to the clothing store will be needed.

Until you change shape or change in weight, everything will be handled electronically through the

Internet. The market for better fitting bespoke garments shows up particularly in men's clothes. Half of the men one sees on the street have shoulder seams on their garments 3 or 4 inches down the arm. This style is responding to the inability of the garment industry to properly size clothes.

The Internet, in addition to becoming more important to marketing clothing, will also be a site for creativity. In spite of the belief that the garment district would like to pass off on us, that clothing style begins with the high couture shops in New York, Paris, and London and then works down through upscale to midscale and on to downscale garments, a tremendous amount of creative innovation, as Bill Cunningham's work shows, begins with ordinary people and first shows up on the street. The Internet, making information available universally and virtually instantly, will lead to street developments being copied, creating demand on manufacturers to innovate, or in their jargon, to respond to the market.

Advertising will continue as a paramount factor in marketing clothes. The increasing size and falling cost of database services coupled with the tools for bespoke garments will make markets of one person practical.

Another effect will be to change the pattern of who buys clothes for whom. Today, women buy 90 percent of women's clothes and 24-30 percent of men's.

Vegetarianism is slowly and steadily growing. If it continues to catch on for dietary needs, it may expand and turn many people away from animal skins and animal parts. We may find that vegetarianism leads to a turning away from natural leather, as many

have turned away from natural fur that lead to a boom in synthetic and artificial furs, the so-called faux furs, running to about 200 million US dollars in year 2000.

The social trend toward androgyny carries at least two different implications. One is sex-indeterminate clothing. We have already had a shot at that during the unisex movement. That will undoubtedly continue and become quite practical in some forms of work and recreational clothing and even become stylish for some forms of casual and even formal social occasions. An even more extreme form amounting to cross-dressing, women adopting men's garments and men adopting women's garments, will continue what we have already experienced. The movement appears to be men's garments becoming women's garments with little flow in the reverse direction. There seems to be a nearly universal fear among straight men of being mistaken for being gay and therefore, avoiding any association with female clothes because of the faulty belief that being gay implies femininity. In addition, cross-dressing, men dressed as women, now has a poor reputation in our society because of its association with transsexual prostitutes.

One element of the general economy that may move into the clothing sector is rental. Already a substantial number of cars, hardware, machinery, do-it-yourself equipment, and special-events clothing, such as tuxedos and evening gowns, are often if not usually rented by householders. That market could expand into everyday clothing where one has the desire to satisfy personal idiosyncrasies or where one's occupation makes it desirable to rotate the personal wardrobe at a

higher rate than the pocketbook would tolerate. New technologies of fabric handling will reduce any risks of disease or contagion from rental clothes.

One of the long-term patterns in the history of fashion since the middle of the 19th century is the recurrent style of retro: earlier decade's fashions revived or somewhat revived to create what is new. What we are familiar with only in photographs and old-time drawings will continue to be revived from time to time. The middle class, which dominates the clothing and marketing industry, is in constant tension between the intense desire to be different and the strong desire to be safe, that is, not to make a fool of oneself or be bizarre or outlandish. Fashion will continually find its opportunity at the midpoint of the new, the exciting, the up-to-the-minute, and the safe and reliable. Safety in style is a function of age, social status, class, occupation, and other factors already discussed.

In fine, over the next generation, our clothes will be more comfortable, better fitting, more durable, and easier to clean or discard. They will also guard our health and safety, respond to the environment, improve our work and recreation, and communicate with people and things automatically or at the wearer's discretion.

Enjoy it all.