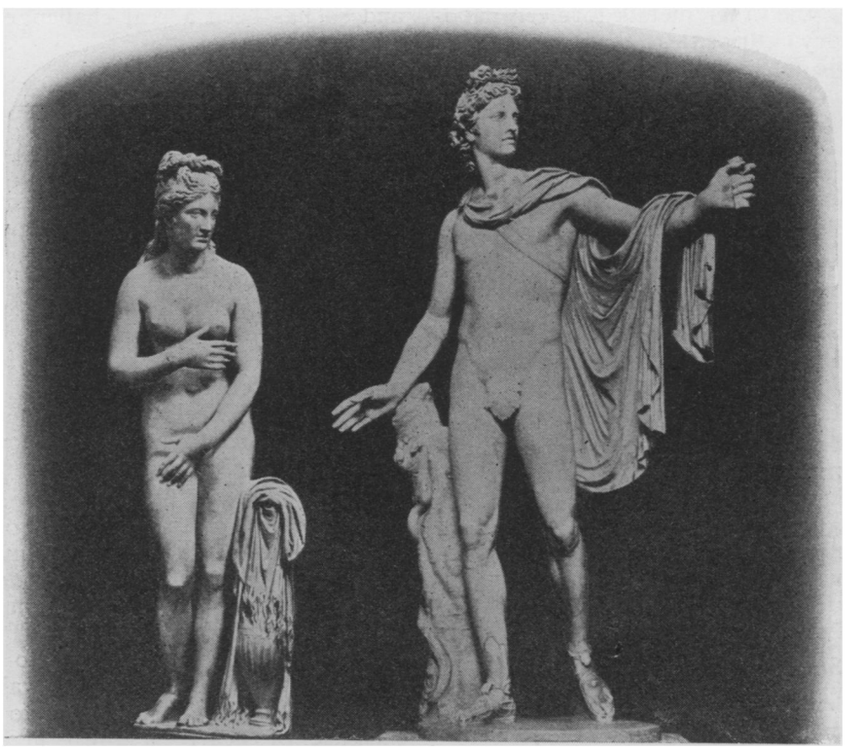
Why Ready-Made Clothes Are Poor Fits — and

BY EMILY C. DAVIS

WHEN the Greek sculptor Cleomenes carved his beloved Venus de Medici, he gave her a waist of 27½ inches and a perfect 34½ bust. She was just past five feet tall, and her proportions were so lovely that they became an ageless standard for feminine perfection.

There was the Apollo Belvedere, too. His marble porportions—six feet two inches in height and with a chest measure of 42 inches—set a mark for growing youth to aim at.

More than twenty-two centuries have passed since Greek artists raised such standards of normally healthy and attractive human beings, and men and women in America are still trying to live up to the reputations of Venuses and Apollos. Perhaps you don't think this applies to you. But if you are among the millions who buy ready-to-wear clothing, you are wearing garments influenced by the proportions of such ideal figures. Or, if you are a woman who makes clothes at home, cutting them out by paper pattern guides, you are still in the same boat. The ideal woman helped shape the pattern to her own elusive lines.



Our 2,200 Year Old Models

Are You "Statuesque"?

When your garments have to be shortened in the sleeve or let out at the hip, that goes to show that you are among the large percentage of Americans who do not meet the specifications of the ideal. In that case, you are a thirty-eight, or whatever your chest measure may be, but you are not the "statuesque" thirty-eight that the pattern expected of you. You are a tall thirty-eight, or maybe a person with shoulders of more ample spread than can be squeezed into the suit that your chest measure indicates.

The fact is, never in the history of the clothing industry has anyone designed clothes to meet the living specifications of Iowa farmers' wives, Washington government clerks, Chicago business men, or Alabama school children.

This ungathered information about real Americans is the chief cause of our fitting troubles, is the conclusion of Miss Ruth O'Brien, specialist in textiles and clothing at the U. S. Bureau of Home Economics. Miss O'Brien has just surveyed the situation in order to report on the many books and articles that have discussed the problem of making clothes fit human beings.

"To find out what troubles women have in making clothes at home, the Bureau of Home Economics once asked 1,300 women who did home sewing to tell about their difficulties," she explained. "We found that 31 per cent. have trouble in fitting clothes. This was the most frequently mentioned difficulty, and the survey was made before the fashion pendulum swung to closely fitted dresses for women.

"No one can say to what extent this dissatisfaction with patterns has led to greater buying of ready-made clothes, but Americans are certainly buying more factory garments, and this has brought the sizing situation into prominence. The home sewer's struggles to fit a paper pattern to a none-too-regular human form generally lead only to conversational complaints. But similar lack of fit among buyers of ready-made clothes reaches a wider audience.

"Women are complaining because of the time and money they must spend in having clothes refitted at the stores, and retailers are disturbed at the expense involved in the maintenance of large alteration departments, and the loss of good-will and money in returned goods and controversies over unsatisfactorily fitted garments.

Acute Because Clinging

"The clinging, feminine trend in women's styles is bringing the problem into an acute stage, for accurate fit becomes vital. When risk of refitting is great, a customer displays what is technically known as sales-resistance. She refuses to buy, and departs or takes more of the clerk's time to try on more models."

The industry which produces our clothes is still in the experimental stage, Miss O'Brien points out. The world's first fur coat or grass skirt was an invention of many thousand years ago, but up to the past cen-

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How Scientists Can Get You Just the Right Size

Home Economics

tury, clothes were either simple draperies or else were made to measure. Tailors and dressmakers worked by intricate diagrams when they tried to cut an unfamiliar style.

It is scarcely a hundred years since the first ready-to-wear men's suits appeared on the market. Those first suits made for unknown wearers were rather disdainfully regarded. Women's clothes were still being produced by seamstresses. The first paper patterns were devised and sold about sixty-seven years ago. These, too, were for men—a set of graded sizes for men's shirts.

Men Got Early Start

Miss O'Brien considers that the earlier start which the men's clothing industry obtained has given men's clothing an advantage in the matter of fit. By trial and error, more of the conspicuous defects in men's suits and other garments have been remedied.

Strangely enough, American wars have contributed to progress in men's clothing. The routine army measurements made to record the chest and height dimensions of Civil War soldiers were drawn upon by the early manufacturers who were trying to establish the wholesale clothing business.

But it was the World War which led to the taking of the only scientific measurements ever made on Americans for the purpose of clothing design. Three army officers, who were also scientists, directed the task, and filled a thick army report with the results. Most of this measuring was done when the soldiers demobilized—as you might comment, recalling the variety of emergency ration uniforms worn by many men in war days.

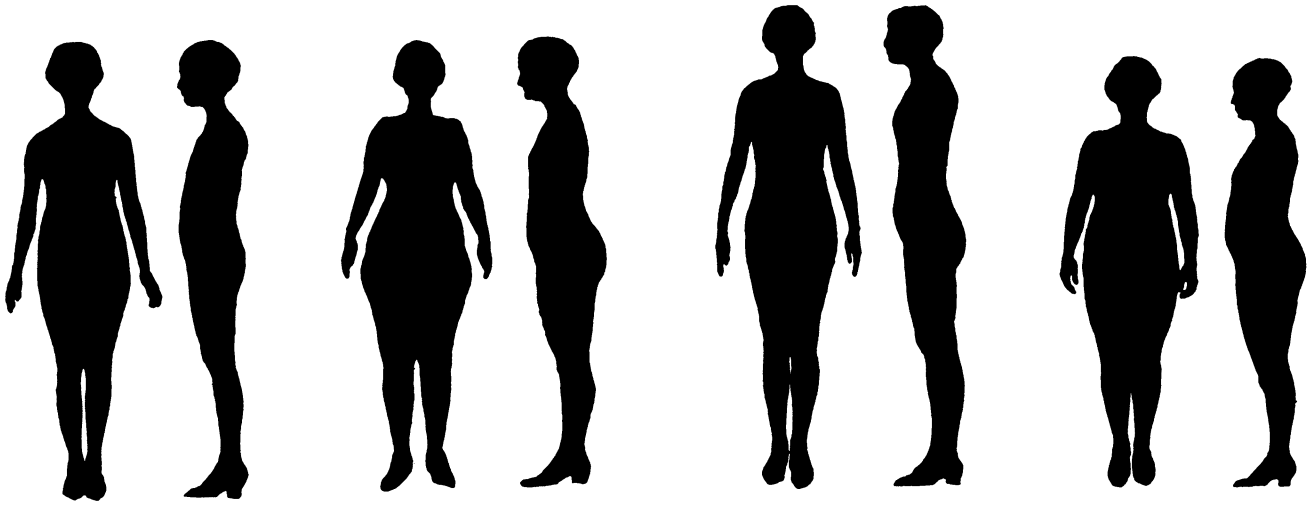
The reason for measuring the discharged men was to file away the figures as a precaution, so that if America again drafts an army, the War Department can order uniforms shipped to various army centers in the sizes that should fit men of that section. Since the measurements were taken with uniforms in mind, they are not exactly what the manufacturer of civilian clothing would prefer. The figures would, nevertheless, be of great value to the men's clothing industry, Miss O'Brien points out, but they lie buried in a government report and apparently have not been discovered.

These figures show that there is a real difference between Americans of different parts of the country, and therefore a difference in their clothing requirements. And American types change, even in a generation or two. During the Civil War, the tallest soldiers were from Kentucky. During the World War, the Missourians proved the tallest. Californians also stood out as exceptionally tall Americans. American cities are centers of low stature, the war figures indicate. In two cities only, St. Paul and Minneapolis, were the men above the normal average.

Anthropologist's Accurate Figures

So far as women and children are concerned, all scientific measurements that have been made were for health purposes, or else to compare the racial types that blend in the American melting pot. The anthropologist who is studying the racial differences is seeking the measurements that distinguish these racial types. The figures which give him this information have been standardized.

His methods of working, his use of instruments, are all scientifically precise. He knows that by following the accepted procedure, he can compare his measurements with those taken by fellow scientists on other human beings in any part of the world. He spends much time



All 38's, But Look at the Difference

They show why millions of dollars are spent altering ready-to-wear clothes. The differences in height, neck measure, slant and width of shoulders, waist and hip measure, position of waistline, and other proportions would make changes necessary on almost any size 38 pattern or ready-made garment if it is to fit these figures properly.

over head proportions. When he measures the arm, he runs his line from tip to tip of the middle fingers. He considers the waist too indefinite and shifting a landmark to be of any scientific value for his purpose. So he guides from the hip bone instead.

Some of these measurements, which anthropometrists have been carefully gathering, would be useful to the clothing maker; but additional figures would be needed, Miss O'Brien said. Anyone who has made clothing at home or who has worked in the industry knows that clothing has its customary landmarks of measurement. The clothing maker would like to know the circumference of the wrist of American types. He would like to know the circumference of waist, and the side length of a trouser leg.

Some manufacturers, Miss O'Brien has found, draft their own patterns. Others rely on model makers of the industry. In either case, the measurements have a heritage of tradition, like recipes handed down through families. From time to time they are modified, if there are complaints. Some firms probably have made minor researches, holding the results as trade secrets. But, Miss O'Brien adds, most manufacturers do not realize that measurement is a science rather than an art, and so it is unlikely that such secrets are of basic value.

"On the contrary, there are many indications that ancient ideas of human proportions are still being relied upon," she has found.

Study Ancient Theories

For evidence that the clothing industry still turns to the measurements treasured by ancient and medieval art it is only necessary to read through the files of some of the clothing trade journals. Theories of Leonardo da Vinci, Michelangelo, and nameless artists of Egypt and Greece are explained and discussed.

The art canons set up by the old masters grew out of the belief that human proportions are based on secret harmonies. It was thought that the head or the foot or some other part of the body must be the significant unit from which a formula for perfect bodily proportion could be worked out. Some figured eight head lengths to a perfect body, some preferred seven. Seven heads as a standard for height was particularly endorsed by writers who linked their formulas with occult revelations and mystic number harmonies.

The old Greek Pythagoras, whose researches into Oriental lore made him a person of great traditional wisdom, was said to have learned the key to all harmonious proportions in sculpture, painting, and other arts. And the search for this supposedly lost lore of the ancients has never been entirely given up.

One retail dealer who pondered over the difficulties of fitting clothes to the American public became convinced that customers in the shops should be measured as a guide to average proportions. He suggested, not long ago, that the shops have their saleswomen measure customers in the course of fittings. Then these measurements could be assembled and charted.

This plan sounds practical at first mention, but Miss O'Brien points out that it would not be the hoped-for cure of the situation. Fitters and sales clerks are not trained to take scientific measurements. Nor would their tape lines and guides be the precise tools of the anthropometrist.

Another suggestion is that colleges might measure different American types that are at hand in their neighborhoods. Iowa, for example, might measure the farm girl, other colleges would measure children, men typical of an inland city, stenographers, or laborers.

Besides the lack of accurate measurements, fitting difficulties are increased by skimp-cutting of garments. This super-economical use of goods enables a manufacturer to sell popular styles more cheaply.

Skimp-cutting is particularly noticeable in children's clothes. How many of your friends, Miss O'Brien asks, tell you that Junior is large for his age, and offer as proof the fact that he wears a suit two years larger than his years would call for? His bewildered parents do not realize that the point is Junior's suits are cut small, and not that Junior is such a big boy. It is not unusual, she has found, to encounter a child of five wearing a seven year old suit of underwear and a four year old outer suit.

"Expansion" Clothes

Children have a hard time with the fitting of clothes, at best. Their clothes are likely to be bought large and worn until they are unmistakably tight and outgrown. The Bureau of Home Economics believes that children's clothes should be designed to meet this problem of "expansion" better than they now are. A suit with an adjustable shoulder is one of the simple but worthwhile ideas of government designers.

After clothing makers find out the sizes of real Americans, the next step will be to turn out clothes to fit types. Your shoes are cut in sizes based on your combination of length and width. Coats, and other garments, now made according to bust measure, may eventually be marked tall 36, large-hipped 36, slender 36, in as many combinations as the statisticians find necessary and practical.

THE OLD AND THE NEW BEAUTY

	Old Greece	Modern America	
	Venus de Medici	*Miss Campbell*	*Miss Malcomson*
Neck	12¼	12½	12½
Bust	34½	35	34
Waist	27½	25	26
Hips	36½	38	34
Thigh	21½	20	20
Calf	14	13¼	13¼
Ankle	8¼	7¾	7½
Upper arm	11½	10	10½
Lower arm	11¼	—	9
Wrist	6¾	5½	6
Height	5 ft. 1 in.	5 ft. 5¼ in.	5 ft. 6 in.
Weight	—	130 lbs.	133 lbs.