

The Synthetic Revolution

Film transcripts for the Shop Drawing Room

Film 1

0.04 Men afloat in a topsy turvy world. And they better become accustomed to this slightly unsettling way of life because these men are the Mercury astronauts. Here they are in a more normal setting. Seven healthy volunteers who are being trained for the first U.S. spaceflight. They shield their eyes as they see a replica of their space capsule being subjected to 11,000 degrees of heat, such as it will encounter when it splashes back into the Earth's atmosphere.

0.34 For two months, they've been going through tests and schooling at Langley Field, Virginia.

0.43 They're preparing for the day about two years from now, when one of them will be sent into orbit.

0.56 From a stylish sweep of interplanetary art to a style more suited to the caveman era. And what right minded Neanderthal would fail to club this beauty and drag her home by the hair? Well, it's not really a stone age scene in the jungle, of course, but just one of the exhibits of the nylon fair held in London

1.18 Here we get all interplanetary again. Nylon will undoubtedly be used by future space travellers, but whether the fashions will be quite as exotic as this remains to be seen.

1.33 A special feature of this strapless ball gown in printed nylon net is the bouffant bodice, bringing a touch of gadget to another occasion.

1.48 Inspired possibly by a medieval tabard, or the Knave of Hearts, is this lounging tunic worn over two coloured nylon tights.

2.02 The parade of new fashions starts with this charming evening dress featuring a deep cape collar. A suit now of honeycomb nylon fabric, ideal for the smart young thing, and even better for the not so smart young thing.

2.25 Shown for the first time, is a printed nylon satin, woven in one of the new textured yarns, which gives an unusual depth of colour.

2.38 This gorgeous confection, named Fantasy 59, is described as a Mermaid's suit with a sheer coat of nylon chiffon, all permanently pleated. First time we've come across a mermaid wearing a pleated nylon coat.

2.59 The two seated models are wearing right, a sweater and tights of textured nylon and left, a catsuit. The baby doll pyjamas are not so new, but still as popular as ever.

3.12 Let's share in the audience's approval of the efforts of designers to bring colourful new materials and designs to within the reach of everyone.

3.30 Some women look into shop windows and get completely carried away. Out into outer space, when it comes to hairdos. Cause look, just once again.

3.51 Now, this isn't London with its wacky, daft ideas. We are at Wokingham in Berkshire. We're in the astronomic hairdressing establishment that Alec Puntney here has dreamed up in the belief that the girls are prepared to give Gagarin even a few shocks about their preconceptions of the still unconquered world.

4.12 As if their atomic shampoo weren't sufficient, these girls prepared to make their hair stand on end by reading the most lurid space age tales.

4.25 These customers demand an electric shock. They expect fireworks. And they get it.

4.52 She's practically in orbit already. I'd better keep my mouth shut. Pa would never see the point of a hairdo like this that makes you think, not of Mums, but of Mars.

5.15 Now what young, healthy human boy would ever dare to make a date with a girl with her head not up in the clouds, but way above them?

5.28 Oh, I see. Now that's a trick is it? Judged by this a lot of us men must be getting way out of date.

7.47 Paris. Even in the world's fashion centre, they come up with weird and wonderful flights of fancy from time to time. A perfect example of way-outery was provided with the work of Patti Rabanne at the National Museum of Modern Art called Light and Movement. Cleopatra could certainly have wound up Egypt with this ensemble.

8.14 Perhaps just a shade too much setting lotion, dear.

8.20 One thing, though, when there's a pretty girl to look at, they certainly make the most of it.

8.32 But all indications seem to point to tomorrow's girls being dollied up in man made metal outfits.

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Film transcripts for the Factory Corridor

Film 1

0.06 Once again, the Empire's goods are on show to the world. And once again, the Empire's salesmen are honoured with royal patronage. Her Majesty, the Queen pays a visit to the textiles section at the White City accompanied by the exhibition president, Lord Derby, and the President of the Board of Trade, Mr. Walter Runciman. In a tour which lasts over 2 hours, her Majesty manages to stop at nearly 60 stands.

And ladies, you'll be interested to know that the Queen is wearing dark brown velvet. Later, Her Majesty goes to the fashion theatre, where she sits between Mr. Runciman and Mr. Richard Porter.

0.47 Don't ask me how much, you might lose interest. At Olympia, the exhibition is doubly honoured. Here the visitors include their Majesties, the King and Queen. Their Royal Highnesses, the Duke and Duchess of Kent. The Princess Royal and Her Majesty Queen Mary, who was always taking such a keen interest in the British industry's fare.

1.28 Here is your front seat view of the exhibition, which shows the world Britain Can Make It. This is the Hall of Fashion. And if it is filled with things you can't buy, well, at least there's is the consolation that will soon be in British shops, with a ticket marked not for export.

1.46 To open the exhibition at the Victoria and Albert Museum come the King and Queen. With Their Majesties were Mr. and Mrs. Attley and Sir Stafford Crips. Before austerity Stafford, so many luxuries must have been quite a headache. And here is the King's formal opening of the exhibition.

'The idea of the exhibition was conceived within a few days of the armistice with Japan. That is little more than a year ago. And as we look around in this hall, I think we can take pride in the speed of our changeover from the grim tasks of war to the creation of these many serviceable and attractive articles of peace.

I now, with much pleasure, declare the exhibition open, and I wish it every success.'

2.57 Said His Majesty, "British design must be a hallmark of preeminence in the eyes of the world". Assembled, here are the models that will put that hallmark back in its old place in the world's markets. In the future, when you say Magmar black you'll mean something like this. The Queen showed keen interest in plastics. My lady's shoes of tomorrow are made from aircraft turrets.

3.34 Most attention went to the lavish display of toys taking over from what was once almost a German monopoly, British toymakers will meet the world's future buyers at the nursery stage. And if you want music, you'll pick your spot and plug in on the wall radio.

3.59 And here's where you come right into the picture and take a look with the Queen at every woman's dream. A kitchen that's convenient, clean, gadget filled and easier to work in. You don't believe it? Well,

this one really is a dream. Now, when you see it in your home, you can wake up.

4.19 On our new shop window, the world looks down. Britain Has Made It.

4.38 The Brussels exhibition opens its gates to the world. Its central feature is the Atomian, a huge model of an iron molecule, and each 60 foot sphere contains a display of one country's industrial atomic achievements. Leaving his palace to open the exhibition is King Baudouin, the young monarch of Belgium with his brother, Prince Albert. It's not often that the whole of the Belgian royal family appears together in public, but today Queen Elizabeth, Baudouin's grandmother, and his stepmother the Princess de Réthy are here, and the man to whom Baudouin still defers as the head of the family is ex-King Leopold.

5.17 The 500 acre exhibition, which King Baudouin is opening, is the first World Exhibition since the New York one of 1939.

Apart from Belgium, 41 countries and ten international organizations are showing their achievements to the world. The biggest roll call ever.

5.36 The British section includes everything from a pub to a shop window of British industry. For each country is striving to portray not only its technical progress, but also its way of life. Very appropriate to an exhibition whose theme is peace.

An atomic clock, the most accurate kind in the world is a favorite exhibit, particularly as a meeting place where there's no argument about who's watch was wrong. The Russians are here, of course.

6.04 The French too. And for once, the Americans are modest about achievements and concentrate on their way of life. Oriental exhibits provide a charming contrast to the dazzling modernity of most of the fair.

Well, this is, above all, a survey of the civilization of the nuclear age. In the words of King Baudouin, the human race has entered a new era in its history and the aim of the exhibition is to revive the atmosphere of collaboration and peace.

6.41 Nixon and Khrushchev. These are the historic, almost unprecedented scenes from the American National Exhibition in Moscow. Whatever is to follow here may be important, too, but for raw news interest, it is the pre-opening inspection by the American Vice President and the Soviet Premier which will be recalled long after the first U.S. show window in Russia will have passed into memory. Amid the crush and almost unbelievable informality of the first tour is the record of verbal exchanges between the two high officials.

A kitchen summit conference, some reporters call it. For here, there is the impromptu sparring on economics, war and peace and relative merits of the two world systems

7.24 They pause, while a taped version of an earlier give and take bout is flashed on the small screen. It is the Ampex videotape reproduction of

the visit to the recording studio by Nixon and Khrushchev at the outset of the day's inspection tour. News of the day now enlarges portions for your theatre screen as we hear Khrushchev's remarks.

7.53 Mr. Khrushchev is telling Mr. Nixon that Russia will catch up to America and wave as she passes us by. So he says, in words and action.

8.11 The Vice President good naturedly replies to a Khrushchev reference to their taking legal side.

"All that I can say from the way you talk and the way you dominate the conversation, you would have made a good lawyer yourself".

8.29 And when challenged about the translation of their talks for the public,

"And by the same token, everything that I say will be recorded and translated and will be carried all over the Soviet Union. That is a fair bargain".

And so the historic debates run their course, Nixon and Khrushchev, in perhaps the strangest international discussions on record.

The Synthetic Revolution

Film transcripts for the Morning Room

Film 1

Double Two. The shirt for you. Double Two, Double Two, Double Two.

Double Two Double Two easy to wash Terylene. Yes. Double Two.

Yes it drips and it dries overnight. It's marvellous Double Two. Wrinkles? No. Double Two. No need to iron it ever. It's got a spare collar too. My husband likes Double Two. That's Terylene for you. Double Two

Every day and every country, millions of people want to buy textiles. Suits and costumes, underclothes and curtains, carpets and furnishings. The textile industry is the second largest in the world. A revolution is taking place in the industry. Once customers could only buy the natural fibres, wool, cotton and silk. Now they are offered new materials. These are made from fibres created by chemists in laboratories, more of them than man could ever grow naturally. Year by year the volume of artificial fibres is increasing. Year by year the quality and variety are increasing. But customer will decide the outcome of the struggle. It concerns Britain, for she supplies the world with finest cotton goods. And Britain without Commonwealth is the largest producer of woollen goods.

For centuries wool has meant prosperity to Britain. For centuries, Britain has led the world with our woollen goods. It is our oldest industry, and much of Britain's story is a story of world. After the Norman conquest, orders of monks settled in the Dales and moorlands of Yorkshire, in the valleys of Wales. In the shadow of our monasteries began the trade, which was to fill England's Treasury. Flemish and Huguenots weavers, fleeing from persecution, settled in England in the Middle Ages, bringing with them great skill and valuable new methods producing Worsted, the finest of woollen cloth.

Medieval England was built on wool. Whole towns, Norwich, Bradford, Cirencester. Whole districts of Cotswolds, East Anglia, Somerset, Devon, the Yorkshire Ridings grew and prospered because of wool. Wool became the flower of strength and revenue and blood of England. It was part of the woof and warp of English life. Crafts started in the Middle Ages have been handed down from father to son and still exist today. Tiny villages in Wales and Ireland and Scotland still weave the

homespun which have made their names world famous. Donegal Tweed. West of England Tweed. Welsh Tweed. Harris Tweed. Women on the island of Harris still sing the old working songs which have come down to them from their great great grandmother.

In the 19th century, the demand for British cloth became far greater than the supply of British wool. Manufacturers could buy only one fifth of their needs in the home market. They turned to the sheep rearing dominions. To Australia, New Zealand, South Africa, where the merino flourished in the warm, dry climate. Merino, the finest wool in the world. In these dominions wool became big business. Wool brought prosperity to thousands of growers, drovers, shearers, slaughters, merchants.

Ports and harbours were built, were extended. Then extended again because of wool. Dominion wool was sent to England, to Europe, to America, to Russia.

The world clamoured for wool and the dominions responded. They supplied three quarters of the world's need for wool. The wool trade grew until it became the backbone of Commonwealth prosperity.

In New Zealand today, there are 32 million sheep. Wool makes up one quarter of New Zealand's total exports. In South Africa, about 35 million sheep. Wool is second only to the gold export. But sheep rearing is no easy job in any dominion. There's often a fight against nature, against droughts and disease, against distance and soil erosion. In Australia there are 118 million sheep. Wool is Australia's greatest single export. The Australian wool cheque is £73 million each year.

Australia and New Zealand, South Africa, all dependent on wool. All feeding the woollen mills of Britain.

A woollen mill is more than a factory. Is a product of a thousand years of British industry. The processes and machinery used today have been evolved over centuries. In 1939, 250,000 people worked in the world trade in Britain alone. With their families about a million men, women and children depended on world for their daily bread. For generations the same families have worked in the mills as sorters and scarers and spinners. As cleaners and carders and dyers. The mill has dominated the life of their towns and its vats and its looms have dominated their working days. So long a part of English life, the mill has left its mark on the English language. Dyed in the wool is a phrase that came from here, on tenterhooks as another. It is here that

unmarried women are first called spinsters. Family names have been born here. Families called Shearer. Families called Brander, Comber, Carder, Weaver and Dyer.

Today, some of the machinery is as old as the mills. And the work can be dirty, exhausting. But the families who work in the thump and the rattle know that their products are praised all over the world. Made in Britain has become a hallmark of quality.

This has been the pattern for 100 years. Wool from Australia. Wool from New Zealand. Wool from South Africa. To Europe. America and Asia. Woollen cloth from Britain to every country in the world. Wool, a cornerstone of the Commonwealth.

Viscous, made from timber, was poured into sulphuric acid, and a fibre was formed.

A new world lay open to the chemist.

With this new knowledge, man took trees from the giant forests of the Earth. From Canada, from Norway, from Sweden. He floated them down river to the sawmills, turned them into wood pulp, which could easily be sent across the seas to factories.

Then the pulp was washed and the resin extracted.

Swirled around in vats, mixed with chemicals, turned into viscous.

Then no longer wood, it was extruded in acid baths as fine, glistening filament. Filament which could be spun and dyed and woven into cloth. Into cellulose rayon.

New processes were discovered. After cellulose rayon, came acetate rayon, and then the cupra ammonium types. Thus, a great new industry began. Factories sprang up, machines were installed, operators in scores, then hundreds and thousands, came to tend them, to turn the new fibres into cloth.

Then out into the shops when the new materials. Some of them took custom from silk. Artificial silk became famous. Others took custom from cotton. Cotton stockings were largely replaced by the new fibres. The cotton trade was seriously affected by the new developments. At this stage, wool was little affected for it had qualities which the man made fibres couldn't imitate. But in the 1930s, synthetics left the field of commerce and became a matter of politics.

The peaceful German countryside held more than Nazi youth being trained for war. Germany and Italy and Japan, in an all out effort to make themselves independent of the wool growing democracies, gave high priority to ersatz research. Textiles became weapons.

Great laboratories hidden in the heart of Germany, obtain fantastic results from fantastic substances. From milk, from fish, from glass.

It's difficult to believe that this fleecy wool-like substance was once fish.

By 1949, Germany, Italy and Japan were producing nearly 90% of the world's total output of synthetics. They reduced their wool consumption nearly by half. America too, with 132 million people to clothe, made prodigious efforts to develop a synthetic textile industry. What is happening in America is happening all over the world. Manufacturers are trying to meet the huge world demand by pouring onto the market manmade fibres. Month by month, they are coming closer to the fine qualities of silk and cotton. Now they're endeavouring to produce fibres with the world from strength of wool. Experts claim that manmade fibres are not imitations of natural fibres. They have qualities of their own.

The drive of the wool growers is led from headquarters in London.

These men of the Wool Secretariat have been sent from the Commonwealth Wool countries. They believe that the wool has qualities which the new synthetics cannot imitate. But they also know that customs follows fashion and that wool can meet the challenge only if it is modernised, improved and adapted to meet the changing demands of fashion. They have arranged worldwide publicity drives. Posters are designed for underground trains, for trams and busses. For the world press. Posters reminding the world that wool is warmest, healthiest, softest and longest wearing.

Mannequins are sent around the world to make designers and buyers wool conscious. New publicity ideas are tried out. Mobile display boxes are used up and down the country to show the uses of wool. Clothes and pelts and carpets.

This artist has been engaged to create a new character for displays, for cartoons. All this to stimulate worldwide interest

in wool. But the International Wool Secretariat knows the publicity is not enough. The product itself must be improved. And they have put up thousands of pounds to help research. Two years ago, Australian research workers discovered that by treating wool with the juice of the Pawpaw fruit they can prevent it from irritating even the most sensitive of skins. The tickle has at last gone out of wool. Research has improved the quality of wool. Has lengthened the wool on the sheep's back. At Tottenham, Leeds, the International Wool Secretariat has subsidised a big research centre where researchers cured another of wool's weaknesses. A pair of socks is put into a mixture of soapy water and chemicals, far worse than the perspiration of the human foot, then given a long day's route march on the mechanical tester. One of them has been treated against shrinking and remains unshrunk. And they have at least ten other ways of preventing shrinking. A new woollen fabric, so light and diaphanous that it weighs only one and a quarter ounces to the square yard, as fine and as strong as silk, has been produced at Leeds University. At that university, there is a faculty of textiles under its own professor. For fibres are an all important subject to the textile cities. At Leeds and at Bradford, new entrants into the textile trade, are given a thorough scientific training before they start work in the mills. For the world trade needs new blood. New brains. Men with receptive minds who realise that wool is at the crossroads. Who see clearly the challenge of a new manmade textiles, but who believe that with the aid of science, they can meet this challenge.

Of course, publicity research and recruitment are essential if the natural fibres are to hold our place.

But today, like the cotton industry, wool is facing not only competition from outside, but difficulties inside the industry. During the war, the number of men and women in Britain's wool trade fell by more than a third. And employers are finding it very hard to fill the gap. Perhaps the old mills, the old conditions, the old towns themselves have a lot to do with the trouble. Are the young men and women of today willing to work in conditions that have changed little in 100 years? There are diehards among the manufacturers in Yorkshire, among the growers in the Dominions, who are opposed to spending got brass on new fangled things like research and publicity and rebuilding. Wool, they say, is good enough to win on its own merits. They are rightly proud of world's great tradition, but blind pride goes

before a fall. Whichever industry can improve quality and reduce costs, we will take the custom. In the end, the low priced article always wins.

The manufacturers of the new fibres have certain advantages. They work where the labour problem is easier. Their modern factories offer better working conditions. Raw materials in plenty can be brought to the factory, costing less for transport. It is easier to stabilise and control prices because, unlike the cotton grower and the wool grower, they need not care the effects of drought or disease. And these new textiles are made by a handful of compact companies backed by big money. The science of synthetics is young. Already it has achieved surprising results. It will do better. Science does not stand still. Today, attractive fabrics at attractive prices are being planned from soya beans, peanuts, corn, chicken feathers, clamshells, seaweeds, aluminium, fish, milk, glass. As yet, no manmade fibre can successfully compete with wool on its own ground. But if quality improves and costs come down, who knows what tomorrow holds.

The whole world welcomes new developments, giving better textiles at lower prices. And Britain, too, is taking a lead in this field. But wool, like cotton, will be encouraged to hold its place in fair and open competition with the new textiles. For cotton and woollen goods are a main crop in British economy. That is a struggle. A struggle for your custom. The struggle between the fibres made by nature and the fibres made by man. And it is you, the buyers of clothes and curtains and furnishings, who will help to decide the outcome of this struggle. For the customer is always right. And you, the customers, will decide today the textiles of tomorrow. The clothes to come.

Sing a little song about Terylene, Terylene made the St Michael way. Nothing's ever wrong about Terylene, Terylene made the St Michael way.

So come to Marks and Spencer and look at the fine display of the fabulously beautiful, wonderful Terylene, made the St Michael way.

So chic. So sleek. The styling is beguiling and unique.

And the pleats and made to stay and the colours bright and gay make you pretty as a picture so to speak.

The suits are fashionable and washable and always look like new.

And these St Michael shirts. Really smart aren't they?

Slacks for girls, beautifully styled. And slacks for men. Casual shirts too.

Easy to take care of. Easy on the eye. And oh so easy on the pocket.

St Michael. Plus Terylene. Equals Top of the Class.

Tery-ery-lene. Tery-ery-lene. T-T-T-Terylene.

Sing a little song about Terylene, Terylene made the St Michael way. Nothing's ever wrong about Terylene, Terylene made the St Michael way.

So come to Marks and Spencer and look at the fine display of the fabulously beautiful, wonderful Terylene, made the St Michael way.

From Marks and Spencer.

Even allowing for the fact that we live in a world of remarkable scientific achievement, we certainly come across some strange looking contraptions in our travels. This one called The Fadeometer is what its name implies, a machine for exposing samples of material to artificial sunlight to see if they'll fade. Just one of the complex pieces of equipment used in research at laboratories of the Retail Trading Standards Association.

It may seem rather drastic to cut up brand new dresses, but it's in a good cause. The customer's protection. Each sample having to undergo stringent tests for colour fastness, shrinkage and strength. And arising from this backroom research, many traders have been prosecuted under the Merchandise Marks Act for giving false descriptions. The housewife often has to buy something quite expensive with just a preliminary examination, and if the label in the shop is inaccurate, she could be literally throwing her money away. Here, a carpet is dissected to ascertain the percentage pile and to examine the backing, both of which have an important bearing on the carpets wearing qualities.

Strange how people love watching the rain. Well, this is about testing resistance to showers. Water penetration is measured to decide whether a suitable rain resistant finish has been applied and whether the fabric itself is of suitable construction.

If your children have a habit of playing tug of war with their scarves or bedclothes, you'll obviously want something pretty strong so let's introduce a machine that tests the fabrics tensile strength. Although quite seriously, it's quite possible that a cloth with too few threads, or with chemically damaged yarns, may not be able to withstand even normal wearing strains.

To simulate ordinary wear and tear on vanishing fabrics, researchers here use an abrasion machine which will wear a hole in most fabrics and certainly determines how hard wearing it is.

Finally, for certain knitted materials such as underwear, that can't really be tested properly by stretching, a contraption is used for gauging its bursting strength with the end of a balloon under the fabric. Yet another of the ingenious measures being taken today by scientists to protect the man in the street.