University of London
Thesis for Ph.D in
Architecture.

Wells Coates.

AND HIS POSITION IN THE
BEGINNING OF THE MODERN
MOVEMENT IN ENGLAND.

supervisor:
Dr. Reyner Banham
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ABSTRACT

The author has studied the origins of the modern movement in England, which he found extremely complex. Wells Coates was one of its leading protagonists: he played a great part in the various attempts to establish the resistance movement against "ancestor-worship in design" out of which modern architecture has grown. He devoted his powers and passions to the growth of the movement in England, at a time when there was a mass of traditionalism and prejudice to be cleared away.

Wells Coates was an engineer and scientifically minded; he was also able to express his profound belief in certain architectural principles. Through the 20th Century Group, and other groups, he helped to bring modern ideas in art as well as architecture to the British scene. His part in MARS and CIAM was especially directed at exploring the common ground between architecture and engineering; at the same time he was fascinated
by the affinity between architecture and the fine arts and was one of the founders of Unit One. These ideas occupied his mind to the end of his life, when he envisaged a new organisation - "CAUSA" and "OUTLINES" - which would assemble all the branches of the visual arts against the central problems confronting contemporary architects, engineers, planners and designers.

The same combination of qualities went into his architecture, with the addition of an equally profound habit of enquiry into the social as well as the technical functioning of his buildings.

Acknowledging Wells Coates is, I think, vital. This study has been built up mostly from Wells Coates's own diaries, notes, letters, lectures and various memoranda; and from correspondence and meetings with some of his contemporaries and clients.
London University:
Thesis submitted for
Ph.D. in Architecture

WELLS COATES,
AND HIS POSITION IN THE BEGINNING OF THE
MODERN MOVEMENT IN ENGLAND

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MARCH, 1966.

Supervisor: Dr. Reyner Banham
University College, London, Bartlett School of Architecture
Wells Coates: 1939

"an alert, dark young man with crinkly hair and poodle-bright eyes"
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PART ONE

BIOGRAPHICAL OUTLINE (1)

WELLS WINTEMUTE COATES: 1895 - 1958

BORN:

Wells Wintemute Coates was born on 17th December, 1895 in Tokio, Japan, of Canadian parentage. His father was the Rev. Harper Havelock Coates, Missionary and Professor of Comparative Religions and Philosophy at the Aoyam Theological College, Tokio. His mother, Sarah Agnes Wintemute Coates, was the first woman to train and practise as an architect. She studied under Louis Sullivan in his office in Chicago, some time between 1880 and 1886, and was a contemporary of Frank Lloyd Wright. She founded, designed and was principal of the first School for Girls to be erected in Japan in the 1890's. He was the eldest of six children, two boys and four girls, Willson, Mary, Lila, Bertha and Carol.

EARLY EDUCATION:

He received his primary education in Japan from

(1) This Biographical Outline was put together from Wells Coates' own diaries, notes, letters, lectures and various memoranda.
English tutors for the usual school subjects and from a Japanese architect-builder learned the principles of classic Eastern order and the craft of building in wood. He learned the art of Japanese silk-screen painting and went to the Central School of Jiu-Jitsu in Tokio from 1907-1911.

FIRST JOB:

At the age of sixteen, he secured his first job as secretary to the general manager of a European Publishing Company. In February, 1913, he left Japan on tour, working as a secretary, on a German tourist boat, visiting China, the Philippines, Java, Sumatra, Burma, India, Egypt, Italy, France and England on the way to Canada. Before leaving Japan his mother gave him her advice for a possible career. She said:

"If you still think you want to be an architect, I give this advice - don't stay at an architectural school longer than you can bear it - study engineering."
UNIVERSITY EDUCATION:

September, 1913 - September, 1915:

In 1913 he went to Montreal, Canada, where he took Matriculation. In September, 1914 he attended McGill University College at Vancouver, British Columbia, for a double course leading to the B.A. and B.Sc. in engineering.

September, 1915 - September, 1919:

He served for four years in the First World War, fourteen months in the trenches with the Second Division Field Artillery, went to France and Belgium and entered the Royal Naval Air Service - later the Royal Air Force. In February, 1918 he was a fighter pilot with 66 Squadron B.E.F. in Italy.

September, 1919:

He returned to Canada on a scholarship. He attended McGill University College at Vancouver, B.C. to complete his courses B.A. and B.Sc. In June, 1920, he received the B.A. degree and in June, 1922 the B.Sc. degree in structural and mechanical engineering.
Summer Holidays of 1913-1915 and 1919-1922:

He worked during the May-October holidays in Canada and the United States in lumber camps, sawmills, land-surveys, cattle and fruit ranches, railways, factory and engineering construction offices and camps.

1922-1924:

In the autumn of 1922 he settled in England. He worked for two years on a scholarship from the Department of Scientific and Industrial Research in London University. He received his Ph.D. in Engineering in July, 1924, on "The Gas Temperature of the Diesel Cycle".

PROFESSIONAL CAREER:

1924-1928:

This period was an important one, in which Wells Coates increased his cultural knowledge and took various steps towards the final choice of his career. His first job in England was with the "Daily Express" in Fleet Street, Saturdays only.
He continued with his research work and received his Ph.D. in 1924.

It was difficult to get a job in England at that time. He continued with the "Daily Express" and in June took a part-time job translating telephone messages from Paris and Berlin from 5.30 p.m. to 8.30 p.m. daily. The free time during the day allowed him to do a tremendous amount of reading.

In the meantime, two people came into Wells Coates's life and greatly influenced his outlook.

Alfred Borgeaud - his fellow student at London University since 1922 - was the first really close friend. Borgeaud was a devotee of D.H.Lawrence and had a mistress who was a painter. She opened his eyes to the world of art: Cezanne, Van Gogh, Gauguin, Matisse and Picasso. About him Wells Coates wrote in a letter to Jack Pritchard on 15th July, 1930:

"We worked out together a sort of strategy of living, a framework, a skeleton, a structure, to combat what we believed to be the evil and
destructive forces of current civilisation. Through this mental framework we hoped to express in some fashion the ambition of our stout hearts, to implant in the solid earth some tangible vision of the new world as we imagined it, that new world, which is to be born in our time."

The other person was his old Canadian friend Fred Law, the journalist, who shared a flat with him in Chelsea for some time in 1924. About him Wells Coates wrote to one of his friends in December, 1927: "Fred Law showed me that the crisp, dry channels of intellectualism, presented a dusty answer to the soul's eternal question: "what shall I do with my life?"

Law and Borgeaud had a part in directing his reading to the study of the history of science, its philosophical and metaphysical foundations. Along with Borgeaud, Wells Coates explored the fresh fields of modern poetry, literature, painting, sculpture and music. In July, 1925 he went to Paris to act as
Assistant Correspondent for the "Daily Express", working on translating foreign cables, for one month, which was extended to another three months, whilst the regular Correspondent covered the Washington Conference. From November, 1925 to February, 1926, he became the Scientific Correspondent.

These eight months in Paris - in the time of the 1925 Exhibition of "Art Decoratif" - were his chance to make contact with many representatives of the new order in the visual arts, and to come to know the people who were then leading the general revolt against "ancestor-worship in design". He continued his extensive reading in many subjects. He made a special study of the origins of the work of Cézanne, Van Gogh, Gauguin, Monet and Manet; and of the living painters in 1925: Picasso, Derain, Matisse, Duncan Grant and Braque and the sculptors: Epstein, Dobson, Brancusi and Maillol.

Another important thing happened to Wells Coates during that period: in February, 1925 he fell in love with Marion Grove. In the spring of 1926, however,
she broke off their relationship, and because of this he resigned from the "Daily Express" and sat down and wrote thirty thousand words in twelve days. It was a word-painting of his life, in dialogue, verse and prose, which is his masterpiece of literature and fine poetry. He sent it to her "as a picture of his desolation". Later he wrote to a friend of his, in December, 1927:

"Losing Marion was like losing one of my eyes: prodding the cinders of that loss opened the other and soon the reasons for it came into view: I saw them in my own impatience and impetuosity. Everywhere else I had always conquered. This was my first real loss."

In April, 1926, he decided to go off into the blue .... on a journey of discovery on which he was accompanied by his friend, Alfred Borgeaud. They left for Canada.

1926 : Vancouver, B.C. and 1927 : England:

This trip to Canada contained two sad events in
Wells Coates's life. First was the tragedy of his friend Borgeaud, who fell to his death from the freight train they had "hopped" down the Coquihall Pass, near Hope, on their journey to Vancouver B.C. in September, 1926. There were newspaper articles, and it was even suggested at first that he was responsible for Borgeaud's death. The scandal was soon cleared, but in shock and desolation he abandoned the trip and left Canada.

At the same time he heard of the death of his other friend, Fred Law.

He returned to England in December, 1926, and the shock put him in bed for three months. After this he could find no job in Fleet Street, so he worked as a secretary to his friend Angus Wilson in the Press Bureau of the Advertising Exhibition and Convention from March to July 1927.

In August, 1927 he was married to Marion Chamier Grove and their only child, Laura, was born in 1930. He found having to provide for his daughter a great
responsibility. The marriage was not a happy one. His wife finally parted from him in 1937 and he did not re-marry.

In the winter of 1927, as he was preparing himself for journalism and play writing, he had to decorate and furnish a flat for himself and his wife. He made some of the furniture and fittings (mirrors, aluminium fireplace) himself. By doing this, his career was diverted to the architectural scene. In a letter to a friend in November, 1927 he wrote about this event:

"The arrangement and decoration of our flat has afforded us great pleasure. It has furthermore demonstrated the fact that I have some talent in this field. All our friends say at once: You ought to go in for this sort of thing. It may be so. I have already secured one commission to do a drawing room, and it may be that more will come, and so, by degrees I may be able to work up a small business. I
should like to do this very much. Further: I am a trained engineer, and I believe that house-building is today the business of the engineer plus the painter. Architects are mostly finished - at least in England. In France, Le Corbusier and Mallet-Stevens (two engineers) have done wonderful things".

Soon he received other commissions and Wells Coates started his profession as architect-engineer, at the end of 1927, when he was employed by Alec Walker of "Crysede" to design their shop fittings and advertisements.

1928 - 1939 London, England:

His work during this period, which pioneered later developments in many aspects of modern design, is the main subject of this study.

Exhibitions: for Venesta (Stands) 1931-1933
Flat Reconstruction: 34, Gordon Square, London for Charles Laughton in 1931.
- 1, Kensington Palace Gardens for Mr. & Mrs. Strauss in 1931.
- 2, Devonshire Street, London, 1931.

Hairdressing Shop: at Canterbury, 1937.


The "Minimum Flat" exhibited in 1933; built as Lawn Road Flats (Isokon No.1) for Jack Pritchard in 1934.

Other Flats: - Embassy Court, Brighton in 1936.
- 10, Palace Gate, Kensington, London in 1939.

Houses: "Sunspan" house, with D. Pleydell-Bouverie, exhibited in 1934: Sunspan houses for Mrs. H. M. Hill and others.

Second Feather Club: 1933, with D. Pleydell-Bouverie.

Nursery School: at Holland Park, 1936.


Industrial Design: Radio cabinets, tables, office desks, furniture and building articles and various inventions, including an "aerodynamic sail" for yachts.

1939 - 1945 - War Service:

He entered the Royal Air Force again at the beginning of 1940, as a pilot officer and served as a technical staff officer, Air Staff in London, in charge of fighter aircraft design. In 1944 he was seconded for three months from the R.A.F. to undertake consulting work for Aircraft Industries Research Organisation on Housing. He recommended the "sectional unit" type of bungalow, which became the "AIROH"
aluminium house. He was released from the R.A.F. in 1945 with the rank of Wing Commander and was awarded the O.B.E. for his consultant work with a team on the de Havilland Dove light transport aeroplane. He went back to live in his studio flat at 18, Yeoman's Row where he resumed his private practice.

1946 - 1949:

He was a Consultant to Hawkesleys of Gloucester on development of methods for house construction. To follow on from the AIROH house, he invented the method known as "RUP" - "Room Unit Production" ("Rooms into Gardens!" "Rooms into Frame"), and developed a standardised scheme for unit assemblies and constructions of all kinds. (Programme stopped by the government action in reducing building materials and supplies.)

In 1947, he helped in organising the first CIAM Congress for ten years, held at Bridgwater.

He visited South America as a Consultant for Hawkesleys on special housing projects (Aluminium
Pre-fab houses for the Tropics).

Radio and television design for E.K.Cole Ltd.

Two stands at the "Ideal Home Exhibition", Olympia in 1948; one for Thomas French & Sons Ltd. and the other for James Clark & Eaton.

1949 - 1951:

He was appointed as Architect for the Festival of Britain, South Bank Exhibition, B.B.C. T.V. Studios building, but this was abandoned in 1950; instead for the Festival he built the "Telekinema", the first large screen T.V. Cinema with three dimensional sound and stereoscopic films and also the Television Pavilion; and he was also Consultant for the Royal Pavilion and designer of a clock presented to the Queen. The Telekinema was remodelled later to form the National Film Theatre, South Bank, until it was demolished (the L.C.C. had sold the site in 1957).

1951 - 1953:

He was appointed Master of the Faculty of Royal Designers for Industry, Royal Society of Arts, London.
1952 - 1954:
He was appointed Architect-Planner for the new town of Iroquois in Ontario (Canada) in connection with the St. Lawrence Seaway project on behalf of a group of British Industrialists, but unfortunately for political reasons the scheme fell through and the town was designed and built by someone else on a different site.

1955:
April-June: he was Visiting Critic in Architecture and Urban Design, Graduate School of Design, Harvard University, Cambridge, Mass.

1955 - 1956:
He was Visiting Professor of Architecture and Urban Design, Graduate School of Design, Harvard, in charge of the "Master's Class" in advanced architectural design and Urban design and was a Member of the Committee on Ph.D. degrees for teaching studies.

1956 - 1958:
He left Harvard, and without returning to England
flew to Vancouver. He worked with some other young architects on a project known as "Project 58" for the re-development of downtown Vancouver. In 1957 he suffered a severe heart-attack but recovered and took on a six months consultancy with B.C. Electric Company Ltd. for studies on the form of Mass Rapid Transport Systems (MARTS). He drew a sketch plan for a new type of monorail, and got a provisional patent. He was trying to find a firm to exploit the invention at the time of his death.

**MEMBERSHIP PROFESSIONAL SOCIETIES:**

1934: Elected as F.R.I.B.A.

1944: Elected Royal Designer for Industry.

1949: He was appointed President of Commission IV, on Industrialisation of Building Techniques, CIAM Congress. He was also appointed a member of the panel of Consultants on Housing and Community Planning, United Nations Organisation.

DEATH:

He died on June 17th, 1958 on a sea picnic at Vancouver Beach. His old friend Professor Serge Chermayeff said about his death:

"He died the same way he liked his life to be, surrounded by beautiful young girls, joy and fun." (1)

(1) In a conversation with the writer on 19th March, 1964.
PART TWO

THE BEGINNING OF THE MODERN MOVEMENT IN ENGLAND

The forces that shaped modern architecture are many, but the few British sources commonly acknowledged are the structural experiments of Telford and Brunel, the social theories of William Morris and his friends, and the subtle spatial harmonies expressed in the work of Charles Rennie Mackintosh. The development of the contemporary style was not primarily an English affair. The most familiar landmarks of the modern movement all appeared on the Continent. "Vers une Architecture" was published in Paris in 1923, and by the end of 1930 Le Corbusier had built the house at Garches and the Villa Savoye. By that date too Mies van der Rohe had already organised the Werkbund scheme at Stuttgart and put up the German Pavilion at Barcelona and the Tugendhat house at Brno; Alvar Aalto had designed the newspaper building at Turku in Finland and the Paimio Sanatorium; and Walter Gropius had left the Bauhaus.

England obviously played no part in this activity.
Apart from a few isolated buildings it was not until the late 1930's that the effects of the Continental revolution became visible in Britain. To understand the reasons for this delay, we must go back to examine the condition of British architecture in the 1920's. Voysey's domestic style was already being debased into a second-rate suburban vernacular; the influence of Mackintosh had stimulated no enthusiasm for further development in this direction. Architectural education was still directed towards Classical models, with an emphasis on American Renaissance architecture, its attitudes deriving largely from the Beaux Arts tradition. (1)

Wells Coates's contempt for the period is summed up in his comment:

"You have debased the great tradition. You have converted a Greek temple into a Bank and plastered the already secondhand columns of the ancients onto Selfridge's, the grocer's shop in Oxford Street."

(1) E. Maxwell Fry in an interview with the writer on 18th July, 1964.
Howard Robertson (1888-1962), who was Principal of the Architectural Association in London after the First World War, was influential in creating a new mood which permitted change when it finally came. (This is true in spite of the fact that he did not "practise what he preached" and that, as his architectural practice grew, his influence on modern architecture waned.) While the work at the Association was quite conventional, the atmosphere was not. This is clearly shown in many of the Association's general meetings and discussions between 1926 and 1938. \(^{(1)}\) Modern architecture did not really come to the Architectural Association until the end of the 1930's, but it was seen by the school on many trips abroad and through the excellent photographs of its secretary, F.R.Yerbury.

Apart from the Association, only Liverpool had a reasonably enlightened School of Architecture, under

\(^{(1)}\) See, for example, Gilbert H.Jenkins, "Modernism in Architecture", A.A.Journal, xliii (1927), pp.158-70.
the direction of Professor Charles Reilly (1874-1948),
whose attitude to the philosophical battle could be considered as "in between". English intellectuals were ineffectual.

On the whole, it was mostly because of the traditional conservatism of the various government authorities that there was always slow progress in Britain. Modern architecture had not the benefit of official encouragement as it had in Scandinavia and other European countries.

In early December, 1922, there was an exhibition of "Contemporary British Architecture" at the R.I.B.A. This exhibition revealed the extent of the decay of architecture. H.S. Goodhart-Rendel wrote about it:

"The architecture in this Exhibition suggests that we have still very much to learn in technique from the French, (1) but we have plenty of material of our own to develop when the technique of

(1) A year before, in 1922, a "Franco-British Union of Architects" had been formed, one of the aims of which was to promote the advance of the art of architecture in the two countries.
handling shall be learnt. It is being learnt at the present moment; let us only hope that with it we do not acquire an unnecessary American Accent."(1)

A reaction against the tyranny of Classical authority soon emerged. Some of the English architects were not content. In 1923 Sir John Burnett had built Adelaide House at London Bridge, with Egyptian details on the facades. (2) Arthur J. Penty commented:

"Viewed from one angle, "Adelaide House" is the influence suggested by Egyptian design. From another it is a revival of New Art, for in it Sir John Burnett has thrown overboard all the conventional trimmings and paraphernalia and relied for his effect entirely on the use of abstract form which has little relation to tradition.)

(2) The discovery of Tutankhamen's tomb in 1922 had a great influence on English architecture in the decade 1920-30. Many buildings were built in an "Egyptian style", among them in London Adelaide House (1923), Carreras Tobacco Factory (1927), Carlton Cinema, Upton Park (1927) and Britannia House (1928).
The Gothenburg Exhibition in Sweden in 1923 provided an important impetus to the modern movement in England. Here were the first outward and visible signs of Continental developments, and they had a profound effect on English taste. Those architects who journeyed to Sweden to see the exhibition were richly repaid. In that country they found a prosperous architecture, whose rich and orderly details had a Renaissance vitality. Nearly all that was interesting appeared to be new or else very old.

The "Stadhus" built by Ragnar Ostberg, Stockholm (1911-23) became very popular with conservative-minded architects. The Congress Hall (1923), built by Ericson and Bjerke, with its dramatic parabola of great looped ribs and the boldly stepped-back tiers of clerestories, became a prototype construction for many buildings in England, such as the Royal Horticultural Hall, Westminster (1926), built by Easton and H. Robertson. (1)

At the end of the 1920's and the beginning of the 1930's, new tendencies began to appear in English architecture, side by side with the traditional architecture (Neo-Georgian and Classical). The new ideas were partly the result of travel, and also had their source in books and in articles, photographs and drawings in the periodicals. The forms of the new architecture, however, ran counter to the conservative tastes of the English public, and the new style of living they proclaimed seemed foreign to their own. (1)

The first manifestation of the new ideas imported into Britain was in "New Ways", a house built by Peter Behrens at Northampton in 1926, for Bassett-Lowke. It was of box-like appearance and was something odd and strange for its time, but it had some influence on some buildings that followed. In 1927 Burnett, Tait and Lorne built some houses with the same appearance at Silver End Gardens, Essex for Lord Braintree. But "New Ways" and the Silver End houses

---

appear merely tentative and without any real integrity. (1)

It is interesting to note that Behrend's client was a manufacturer of model trains, and Tait's client a manufacturer of metal windows; both of whom might have been expected to have special sympathy for the new architecture from the Continent.

In the new architecture which was emerging two distinct attitudes or schools of thought could be discerned. The first was known as "Romantic Modern". This attitude owed much to the beliefs of various pioneers in Europe, as shown in the work of the "Amsterdam School" and more especially of W.M. Dudok; and the pioneers of the expressionist movement in Germany. "Romantic Modern" architecture embodied merely stylistic revolution, utilising forms and lines to treat the building as a piece of sculpture, sometimes with Renaissance details, but with the proper use of materials. It was an attempt to weld

fantasy and function into one conception.

William Marinus Dudok (1884- ) was the most admired foreign architect in England, and was awarded the Royal Gold Medal of the R.I.B.A. in 1934. Dudok tried to integrate romanticism with the "De Stijl" approach. His masterly use of brickwork, his horizontal windows, plain masses dominated by towers, and flat roofs, recalled to many the Morris-Lutyens tradition. To English architects these seemed obvious signs of a new order. As his brickwork was similar to traditional English brick construction and his long horizontal windows were like Voysey's, the clichés of his style were easily established all over the country, (1) for example at the Curzon Cinema and Wembley Town Hall. This type of architecture was widely employed in the public buildings of the 1930's. (2)

(2) F. Elgohary, "European Influence on Public Architecture in Great Britain", Liverpool University, 1963.
The second school of thought was that of "Modern Architecture", by which was meant the integration of industry, art and the new social needs with architecture. James Burford in 1930 explained the meaning of the "New Architecture" as follows:

"Architecture is not merely building, not even building well. It is not so simple as that. Architecture is building ordered or controlled to express an idea or an emotion appropriate to its purpose, its position in time, and, above all, to its creators."(1)

The modern ideal was inspired by the Bauhaus and by Le Corbusier, who showed that modern architecture meant a structural rather than a merely stylistic revolution. This was not easily accepted and it was only appreciated by an avant-garde élite, of which Wells Coates was one of the main figures.

Few people in England had much idea who Le Corbusier was and even fewer what he was attempting.

so it was all the more exciting to find that his book 'Vers une Architecture' (1923) was selling in the foreign newspaper shops in Charlotte Street, London. (1)

It was in 1927 that John Rodker adventurously published Frederick Etchell's (2) translation 'Towards a New Architecture', and as Dr. Reyner Banham has said, "Although the title misses the whole point of Le Corbusier's book, it did more than any other literary work to transmit the emotional content of modern architecture to the Anglo-Saxon world." (3)

It was at this time that many architects from abroad gathered in England to join the current of the new movement.

Wells Coates started his architectural practice in 1928.


(2) F. Etchells, who built Crawfords Advertising Agency, Holborn (1930), the first modern office block in London and the first to use external stainless steel.

Amery Douglas Connell (1901- ) and Basil Robert Ward (1902- ) were born and educated in New Zealand. Connell started a practice in 1928 and Ward joined in partnership in 1930.

Raymond McGrath (1903- ), was born in Sydney, Australia. He intended to follow journalism and entered the Faculty of Arts, Sydney University in 1920, but changed his mind and joined the Faculty of Architecture; he graduated as B.Arch., gaining the University Medal and Wentworth Fellowship. He arrived in London in 1926 and after studying at the Westminster School of Art, entered Clare College, Cambridge in 1927 as a research student of architecture. (1)

Serge Chermayeff (1900- ), born in the Caucasus, had seen something of the architecture of the Argentine and was at first known principally in England for his furniture design.

Berthold Lubetkin, a Russian who had previously settled in France, came to England in 1930. He and Chermayeff

(1) From a conversation between Raymond McGrath and the writer.
were thus the first foreigners to join the movement in England, the others having come from the Dominions. R.Furneaux Jordan wrote about Lubetkin:

"In Paris was the Atelier Perret. Lubetkin, in the midst of admiration of his master, would say that he got much from him in the way of method, in the understanding of scale and proportion, very little in the philosophy of art, a great deal in the philosophy of reinforced concrete, and it was that that he brought with him to London."(1)

The only English architects among all these pioneers were Maxwell Fry and Colin Lucas. E.Maxwell Fry (1900– ) had been at the Liverpool School of Architecture under Professor Reilly, and in partnership with Thomas Adams and Longstreath Thompson. He was connected with the Design and Industries Association which was in touch with the Continental architects' work through industrial design and Continental magazines. (2)

(2) A conversation with Maxwell Fry and the writer.
Colin Anderson Lucas (1906- ), who joined Connell and Ward in 1933, was born in London. He studied at Cambridge University School of Architecture. He had a remarkable background, his father being an inventor of motor cars and his mother a composer.

In 1930 the French artist Ozenfant visited England and very much influenced the young architects whom he met. One of them was Maxwell Fry, who thought that "Ozenfant was a brilliant and primary figure in all things through his connection with Le Corbusier."

Another person influenced by Ozenfant was McGrath, who said that "his conception of colour forms influenced all with whom he came into contact, including myself". Ozenfant later published six articles on "Colour" in the Architectural Reviews of 1937.

From 1933 onwards, refugees from Nazi Germany settled in London. Eric Mendelsohn arrived in September, 1933 and worked later with Serge Chermayseff. Moholy-Nagy arrived in November, 1933.
Walter Gropius came to exhibit his work at the R.I.B.A. in May 1934 and remained in London at the invitation of Jack Pritchard, staying at his Lawn Road Flats, which were designed by Wells Coates.

Marcel Breuer arrived in 1934 and worked with F.R.S. Yorke. The engineer Felix J. Samuely came at the same time as the Hungarian architect Ernö Goldfinger, who had a Beaux Arts training, and the Russian constructivist Naum Gabo settled in London in 1934.

All these architects and artists contributed to the first flowerings of British modern architecture in the years 1933 to 1938. During this period modern architecture also began to take root in most of the Western world; except in Germany, where it had been stopped by 1933, and France, where activity was much reduced by economic difficulties. In Holland architectural development was very seriously affected by a local cultural reaction against the modern ideas. In England up to 1938 conditions were somewhat better.

In 1935, Walter Gropius wrote to Wells Coates:

(1) In a letter following a meeting of CIRPAC (International Committee for the Solution of Contemporary Architectural Problems, the Council of CIAM) in Amsterdam.
"In my opinion the modern movement in architecture is less progressive than some years ago. That may be due not only to the changed course in Germany but also to the general political and economical tension of Europe. The best modern leading architects in the different countries feel like being on lonely patrol, compelled to cut their way through that jungle of public indifference and misunderstanding, therefore our Industrial Congress is the only international platform of our modern building movement. Today more than ever \[\text{It}\] needs badly to be strengthened in order to increase its public reputation. Fortunately the general conditions in England and the U.S.A. are much more favourable to make modern architecture generally accepted than in other countries."

By 1930, Sir E.Owen Williams had overwhelmed Fleet Street with his towering and flashy black glass Daily Express Building. A much sounder job was his
Boots' warehouse, built at Beeston at the same time. What is likely to seem still the most characteristic example of the new architecture built before 1933 in England is Joseph Emberton's very light and open Royal Corinthian Yacht Club at Burnham-on-Brouch in 1930-31.

From 1933 on, British architecture was dominated by two partnerships and a movement. The influence of the partnerships did not survive the Second World War. The movement gained strength until after the war it became the establishment.

Berthold Lubetkin, with six A.A. architects, (1) formed the TECTON partnership, and put English modern architecture on the international map with the virtuoso "Penguin Pool", Regents Park Zoo, 1933-35, and Highpoint I, their block of flats in Highgate, also 1933-35. With its rational plan, structure and form, Highpoint I remains a major achievement of the early 1930's. The Connell, Ward and Lucas partnership built a series of

(1) Godfrey Samuel, Michael Dugdale, Antony Chitty, Valentine Harding, Lindsey Drake and Russell Skinner.
houses - the first, "High-and-Over", Amersham, 1930, and the latest, Bessborough Road, Roehampton, 1939 - which are among the best domestic buildings of the time. (1)

Maxwell Fry had built his first modern house in Frognal Way, Hampstead, by 1934. Three years later Fry entered the field of cheap housing by using concrete-frame construction: "Kensal House", Ladbroke Grove (1937) was the first of its kind to be built in England. By 1934, too, Holford, Stephenson and Yorke had won a prize for a house built in a Modern Homes Exhibition outside London. The following year, 1935, Frederick Gibberd’s Pullman Court apartments were built in London. Wells Coates’s Lawn Road Flats (1930-34) were a new kind of experiment, architectural and social, in the field of middle-class housing.

The foreign architects who settled in England had a stimulating influence directly and indirectly -

(1) For more details see the A.A.J. issue of Nov.1956, on Connell, Ward and Lucas.
through their work and through their social contacts. Mendelsohn's first work in England with Chermayeff was the De La War Pavilion at Bexhill-on-Sea (for whose competition design they won the R.I.B.A. award - although there was a protest from British architects against Mendelsohn winning the first prize). (1) This building is one of Mendelsohn's best works outside Germany; it had great solid surfaces very similar to the "Dudok" style. It was through his lectures, however, that many young architects were introduced to his work, although he was a very strong expressionist and too formalist for the more rationally-minded architects. (2) One of his lectures given in 1934 was called "The Creative Spirit of Crisis". In another, given to the Liverpool School of Architecture on 10th November, 1933, he said:

"I think it is the duty of the younger generation to be revolutionary, we have found the elements of a new style, and we must work it out and find the equilibrium."

(1) See the "Letters to the Editor", A.J. April 1934.
(2) In a conversation between the writer and Serge Chermayeff.
Walter Gropius put forward the same theme in his lectures, for instance in the lecture to the MARS Group on 16th May, 1934 on the "Formal and Technical Problems in Modern Architecture". In his three years' work with Maxwell Fry, his most important design by far was that for the Impington Village College in Cambridgeshire in 1937, which laid the foundation for post-war school design in England. The other scheme which had a great influence on school design after the war was Denis Clarke-Hall's in 1937, the winner of a News Chronicle competition. (1) It embodied the idea of a classroom as a "teaching space rather than a formal lecture-room" and abandoned the symmetry of traditional school design in the 1920's and 1930's. (2)

Gropius and Fry's scheme for the "Isokon No.3" estate at Leonard's Hill near Windsor in 1935 may be regarded as one of the first efforts to reconcile

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(1) Coates, Lasdun and Wheeler came fourth.

(2) For more details see J.A.Godfrey and R.Castle Cleary, School Design and Construction, Glasgow, 1953.
the English tradition of good living with the requirements of contemporary town and country life. This scheme provided the basis for housing schemes designed after the war. (1)

The main work of Marcel Breuer with F.R.S.Yorke was the "Exhibition House" at Bristol in 1936. Their other important scheme was that for "The Garden City" in 1936, in which the integration of structural potentialities and architectural design was happily demonstrated.

The professional magazines played a part in establishing the growth of the new architecture, although in the 1920's they only occasionally commented on what was going on outside Britain. The Journal of the Royal Institute of British Architects kept closely to its concept of national responsibility. The Architectural Review only turned modern at the end of the decade, and it was left to the weekly Architect and Building News to publish Howard Robertson's pictorial reviews of contemporary building in Europe between 1928 and 1930.

In 1933 J.M. Richards joined the Architectural Press, and both the Architectural Review and the Architects' Journal set themselves to agitate on behalf of modern architects.

P. Morton Shand (1888-1960) was one of the most important of those who animated architectural journalism with discussion of the modern ideas. He was first invited to write articles on architecture for the Architectural Association Journal in 1924, and he
wrote throughout 1926 for the Architects' Journal — although his real speciality in the 1920's was food and wine. His interest in architecture, however, began to bring him into contact with many European architects. At the end of the decade his criticism in the Architectural Review became more perceptive, and his review of the Stockholm Exhibition (1) was a turning point in its policy. Shand wrote for the Review a series of articles called "Scenario for a Human Drama", in which he covered a period and subject about which very little had been written. Wells Coates knew Morton Shand and admired his work. 

The Architectural Review gave men like Raymond McGrath, Serge Chermayeff, Wells Coates, J.M.Richards, C.H.Reilly, Viscount Burnham, James Burford, John Summerson, F.R.Yerbury, Nikolaus Pevsner and Herbert Read an opportunity to advance their views on the modern movement. Besides encouraging the new ideas,

it showed the English public these ideas in practice. In November 1933, with the co-operation of Fortnum and Mason, the Architectural Review organised an Exhibition at 181 Piccadilly, London. Its aim was to exhibit the work of Alvar Aalto and Aino Maisso-Aalto, showing the designs in which they had used contemporary materials most successfully. They showed Aalto's famous curved plywood chairs with curving metal-frame seats for the first time in England. They also showed what co-operation between the designer and manufacturer could produce in terms of mass-production.

The Royal Academy Exhibition of "Art in Industry" in January 1935 at Burlington House, London coincided with the publication of a number of books on the same theme:

Herbert Read: "Art and Industry - the Principles of Industrial Design", London, 1934;

John Gloag: "Industrial Art Explained," London, 1934; and

In a preliminary circular issued by the organisers of the Exhibition, the objectives were stated to be:

"To impress upon the British as well as the foreign public both the importance of beauty in the articles they purchase and the fact that British manufacturers in co-operation with British artists are capable of supplying such articles in all branches of industry.

"To enable British manufacturers to study the full extent to which British artists are capable of supplying original attractive and technically suitable designs for the production of articles by mechanical means, and to turn the attention of artists to design in relation to industry.

"To show that a more frequent association of the artist's name with the article produced from his design can be of great advantage in promoting demand." (1)

Herbert Read criticised the Exhibition in his article "Novelism at the Royal Academy" in the *Architectural Review* of February, 1935, saying that not one of these objectives had been attained. Mentioning the glassware gallery for which Maxwell Fry had been responsible, he wrote:

"It is the only gallery which displays any specifically modern feeling in its construction and decoration. Most of the rooms look like Easter Bazaars, with gilded columns of faintly Egyptian flavour and tented ceilings of billowy gauze."

By the end of the thirties many books and articles had been published popularising modern architecture in Britain. "The Modern House" by F.R.S.Yorke (1906-1962), published in 1934, undoubtedly had considerable influence on the younger generation of architects. Maxwell Fry wrote of this book in the *Architectural Review* of October 1962:

"'The Modern House' was filled with photographs
and plans of the best modern houses for the brave sponsors of the movement, our first clients, and this book showed us where we stood, introduced us to architects as yet unknown to us, acted as an open sesame for a new type of Continental tour, but above all, set standards of excellence by which we could measure ourselves, an example that drew our affections and acted as a ferment for whatever talent God had given us. I find it hard to over-estimate the value of that book, especially to someone like myself that had no money to travel; it was a real eye-opener, appearing as early as 1934, and it gave us a conspectus of the movement at the time we most needed it." (1)

In 1934 he had written about the same book:

"For however much the modern architects appear to be in advance of their time, their strength

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as designers arises from a realisation of the spirit that moves people, however unconsciously, to prefer a free form of living, combined with a more logical sense of the uses to which modern materials should be properly put." (1)


"No serious attempt is made to define what is 'modern'. If such an attempt were necessary, I can think of no better definition than that which Frank Lloyd Wright has given in the second of his "Two Lectures on Architecture", delivered at the Art Institute in Chicago: 'Modern Architecture is power - that is to say material resources - directly applied to purpose.'"

Certain individuals outside architecture also played a part in the growth of the modern movement in England. The new ideas found friends and supporters in men such as Frank Pick (1878-1941), Mansfield D. Forbes (1890-1936) and J.C. Pritchard (1899- ). They threw themselves wholeheartedly into the cause of architectural reform.

Frank Pick's position as Managing Director of the London Passenger Transport Board from 1920-41 gave him the opportunity of presenting the new art and architecture to the British public. He employed the best available living artists like Jacob Epstein and McKnight Kauffer, whose poster advertisements reflected current developments in modern art. With the co-operation of Charles Holden (1875-1960), L.P.T.B. produced an architectural tiller to form in the Underground Railway stations. (1) It was also under Frank Pick's chairmanship of the Council "For

(1) For more details see N. Pevsner, "Patient Progress", The Life of Frank Pick", A.Rev. Aug.1942, pp.31-34.
Art and Industry" (initiated in January 1934 as the result of a recommendation made by the Gorell Committee, the Board of Trade), that several reports were issued, the most important of which was entitled "Design and the Designer in Industry" (1937). This report, which dealt generally with the subject of design and industry, with particular reference to the recruitment, training and position of the designer, had a tremendous influence and helped to reform art school education in England. (1)

Mansfield Forbes, with his illuminating personality, attracted to his "Finella" house in Cambridge, (2) painters, architects and indeed all those who were genuinely concerned with contemporary expression. One thing which came out of this was the formation of the "20th Century Group", which led to the formation of the MARS Group, with which the


(2) Reconstructed by Raymond McGrath in 1928, this house was the first to use glass on a large scale in interior design.
next Part will deal. "Finella" was the centre of other new movements in the visual arts. It was here that the modern movement in photography was born in the formation of the partnership of Dell and Wainwright, who had a tremendous influence on architectural design in England. It was also where the publication the "Circle" was conceived in 1935.

The "Circle" idea arose among intellectual artists who saw the growing influence of the Surrealist movement, as it had reached its peak, at the first International Surrealism Exhibition held at the New Burlington Gallery in 1936, where Salvador Dali lectured wearing a diver's helmet - as a buffer to the development of the modern movement in England.

Jack Pritchard - who studied engineering and economics at Cambridge - was a powerful exponent of the new architectural ideas. He was the first furniture manufacturer to dare to ask Le Corbusier to design the "Venesta" stand at the Olympia Exhibition, in early September, 1930. Jack Pritchard
encouraged young architects in their creative ideas. He commissioned Wells Coates, still a young architect with no previous experience, to design his flats in Hampstead. Jack Pritchard made these flats a home and meeting-ground of the architects and other refugees from Nazi-Germany.

Walter Gropius, Moholy-Nagy, Marcel Breuer and Jacques and Jacqueline Groag found refuge there. He engaged Gropius and Breuer in his ISOKON firm to produce low-price furniture. Probably the best-known piece resulting from this partnership was the long chair in pre-formed plywood by Marcel Breuer (now again in production). Later Moholy-Nagy was asked to produce some advertisements for ISOKON, most of which were published in the Architectural Review. It was Jack Pritchard who introduced Henry Morris to Walter Gropius, by whom Impington Village College was built in partnership with Maxwell Fry.

A fundamental feature of the movement in the thirties was the activity of the various avant-garde
groups, which put forward the modern creed by means of manifestos, exhibitions, and other propaganda. Architects, artists, engineers, critics and historians - including many of the men mentioned above - worked together in an attempt to analyse the contemporary social structure and to draw from it the proper solutions to design problems. Most of these groups - the "20th Century Group", UNIT ONE, and the "Circle" - were short-lived. The MARS Group (the British branch of CIAM), which lasted from 1933 until 1958, was more successful. To the members of these groups and to many younger men who came under their influence, modern architecture was most distinctly a cause. Architects today take for granted acceptance of the ideals and aspirations of these early pioneers. Wells Coates was a leading figure in nearly all these groups; as J.M. Richards has said, he "devoted all his powers and passions" (1) to the growth of the movement. In the following pages we shall examine these groups and the part played by Wells Coates in their activities.

PART THREE

A : THE 20th CENTURY GROUP
(1930 - 1933)

It was at Mansfield D. Forbes' "Finella" House in Cambridge that the idea of forming a group was conceived. The announcement of the organisation for a proposed exhibition of "Modern British Design" sponsored by a well-known advertising agency, at the Daily Mail Ideal Home Exhibition of 1933 encouraged its formation. It was announced in the Architects Journal in July 1930 as the "20th Century Group", and included architects such as Joseph Emberton, Howard Robertson and Serge Chermayeff as well as Mansfield Forbes.

The first meeting was held in the Inner Morning Room at Forbes' London Club, the "Travellers". By means of exhibitions they aimed to encourage good design in architecture and in all branches of the applied industrial arts. Meanwhile, Serge Chermayeff, Wells Coates, Mansfield Forbes, Jack Pritchard and Howard Robertson met privately to discuss the proposals for the above exhibition. They circulated an Agenda.
to all the members of the Group before their next meeting on 26th February, 1931, giving their recommendations. These were:

(a) That only the best examples of modern design should be exhibited.

(b) That for this reason the selection of exhibits should not be left either to trade or the organisers, but be controlled by a Committee selected by the designers themselves.

(c) That its purpose should be to express as comprehensively as possible the significance of modern design in the life of the modern community. It should envisage the needs of all classes of the community, the municipality as well as those of commerce and industry. It would be mainly architectural in nature and would be concerned with groups of dwellings, factories, offices, houses, shops and places of entertainment and units of transport in common use, as well as with furniture, fabrics and fittings.
It was, however, felt that such an exhibition on a scale similar to the most successful Swedish Exhibition of 1930, designed by Asplund, would fail either through lack of finance or if it were left to the commercial interests. It was therefore proposed that a larger meeting of professional designers and others should be held in order to canvas opinion and to formulate practical proposals with the initial object of furthering common aims by means of exhibitions and other activities. This enlarged the scope of the original proposals. So an Executive Council was formed of three officers and seven members,\(^{(1)}\) with power to co-opt other members. The Council drew up a list of the Group's aims as follows:

1. To define the principles to which contemporary design should conform.

2. To make known these principles by writing, lectures and discussions etc. and by contact

\(^{(1)}\) Chairman - Col.J.Delahaye; Vice Chairman - Mansfield Forbes; Secretary - A.Gibbons Grinling; Members - Noel Carrington, Jack Pritchard, Raymond McGrath, C.A.Richter, S.Chermayeff, Wells Coates and Howard Robertson.
with Government authorities, manufacturers and other business enterprises, and with existing societies interested in design.

3. To co-ordinate the efforts of modern British designers with a view to the achievement of architectural unity.

4. To promote exhibitions of contemporary design in relation to architecture and interior equipment.

The Council put forward some proposals for Group activities. It was proposed, when the Group was eventually formed, that within three years a comprehensive exhibition, comparable in scale to the Swedish Exhibition, including a complete housing scheme with mass-produced and standardised equipment, should be held. It was also proposed that a Committee of designers should be appointed to present a report of the Group's constructive proposals for the revision of building regulations and bye-laws which were being discussed by the Government and the L.C.C.
As with all such Groups, which depend for their cohesion upon ideas, there was much discursiveness and argument.

At the first General Meeting of the Group on 26th February, 1931, held in a room at the Savoy over lunch, the ceaseless endeavours of Mansfield Forbes had brought together some eighty people of totally dissimilar minds and intentions (architects, sculptors and painters). (1) At this meeting Wells Coates, for the first time, clearly expressed his own convictions about modern architecture.

In his talk, which he called "SKETCH PLAN OF A NEW AESTHETIC", he explained the arguments, trends, and the development of the Group. He said:

"What I believe was an advance on the original intention was made when it was agreed that the whole character of the new movement in the applied arts - which we supposedly represented -

(1) Memorandum sent by Wells Coates to Alan Jarvis, the Director of the National Gallery, Ottawa, Ont. Canada on 11.11.56.
was architectural rather than decorative. It has been even suggested that what has been loosely called "the modern movement" is concerned merely with new shapes, meant I imagine, in the purely decorative sense.

"It seems to me that there has been a lack of appreciation of the undeniable fact that if the character of the new movement is architectural rather than decorative, its basis is scientific. Scientific, in the sense that scientific analysis has opened our eyes to the existence of aesthetic traditions of the highest order; older and unlike the Greek and Gothic traditions. As architects, engineers, allied designers and enlightened amateurs of today, we possess this knowledge."

Wells Coates explained his philosophy most expressively as he said, by dramatising himself in the person of three imaginary characters:

"The first of these three characters plays
the role of differentiator, and for the sake of convenience I have imagined him as the child of an ancient and non-European Culture. His name is the Artist Samurai.

"The second plays the part of the identifier, and is essentially a man of our day. His name is the scientific Mandarin.

"The third character I have imagined as a mature kind of rebel, a practical man, possessing the attitude and knowledge of the first two characters combined."

At the end of his talk he proposed a new constitution for the Group, which, though unsuccessful on this occasion, served as an inspiration for the more successful MARS Group which followed. He said:

"I propose that our organisation should form the nucleus of a new Group, to be called the "ALPHA" Group, Alpha signifying beginning. I propose that it be composed of all those creative individuals within whatever category
or specialised unit, whether artists, scientists or technical experts, industrialists, manufacturers or enlightened amateurs, those whose interest lie all ahead, whose credentials are in the future, who are united by a common aim, to perfect and create fashion and compose the new order in its three dimensional and visual aspects; all these are, in this sense, truly the architects of the New Order."

Of course, there were many endless arguments and discussions, and Mansfield Forbes, who had little time for more argument, was exasperated by it.

"I hear there was no end of time wasted by absurd disputes re arbitrage of "modernism" - as though the whole point of summoning so select a number of individuals in the first place was not on the tacit understanding and premise that the least modernistic thing, the "dud-est" of the Group could do would pass the minimum, "pessimum" Criterion for Exhibition."(1)

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On 3rd December, 1931, Wells Coates, Serge Chermayeff and Frederick Etchells met to discuss the project of the Group Exhibition in conjunction with the "Daily Mail" Ideal Home Exhibition of 1933. They were the Committee, under the leadership of Etchells, responsible for the Exhibition from the point of view of design generally. It was thought that a printed catalogue for the Exhibition as a whole should be, in fact, the real "manifesto" of the Group.

The Group met privately many times and the last meeting was on 1st March, 1933 at Godfrey Samuel's rooms for the discussion of the proposed exhibition. The thing never got off the ground at all because its execution had not been thought out.

Then came the end of the Group - coinciding with the birth of the MARS Group in March, 1933 - without any display or material evidence of any agreement among the members. Though it was short-lived, it was the jumping-off platform for the MARS Group, and the first forum of the new architectural ideas in England.
History has taught us that no new movement is born of itself, but is evolved inevitably from previous groups and ideas. Great Britain was not officially represented in CIAM (Les Congres Internationaux d'Architecture Moderne) till the fourth meeting of the Congress at Athens in August, 1933. The International Secretariat had tried to interest English architects in the programme of work of the Congress. They succeeded in contacting Howard Robertson - through his cousin P. Morton Shand - and asked him to join them. Howard Robertson (1888-1962) became a member of the organisation in 1929. He, S. Rowland Pierce and Patrick Cutbush were invited and attended the Congress at Brussels in November, 1931. They completed questionnaires which Dr. Siegfried Giedion - the

(1) There was a great argument between Wells Coates and Howard Robertson about the word "officially". See the A.J. of 10th May, 1933.
(3) This was confirmed in a discussion between the writer and Godfrey Samuel and E. Maxwell Fry.
Secretary of CIAM — had sent, but they did not represent any work (studies or drawings) to associate with the CIAM programme. By the end of 1931 Howard Robertson tried to form an English Group and a meeting was held at the Architectural Association, London for this purpose. (1)

After their discussion they decided to leave the question of adherence to those individual architects who might be considered. Howard Robertson's belief was that it was hopeless to form an English Group at that time.

P. Morton Shand — who knew Wells Coates's attitude from the "20th Century Group" meetings — again recommended Wells Coates to Dr. Giedion. (2) On 28th February, 1933, Wells Coates received a report from Dr. Giedion which authorised him to form a


(2) This was confirmed by Godfrey Samuel in a conversation with the writer, and in the circulated memorandum written to MARS Group members by Wells Coates on 13th February, 1934.
British Group of architects and engineers, allied to the national groups organised in nineteen other countries to work in collaboration with the International Association. Wells Coates considered that the formation of the British Group started from that date. Wells Coates, E.Maxwell Fry, D.Pleydell-Bouverie, P.Morton Shand, H.de Cronin Hastings and John Gloag were among the first to support the formation of the Group. The principles of the Group were adopted from the statutes of CIAM which were:

To formulate contemporary architectural problems.
To represent the modern architectural idea.
To cause this idea to penetrate technical, economic and social circles.
To work towards the solution of the contemporary problems of architecture.

There were some difficulties facing the young group before its official announcement. There was

the difficulty of choosing the Group's membership. Wells Coates excluded some architects who were known as "modern architects" like Howard Robertson, Grey Wornum, Oliver Hill, Walmesley Lewis, Oswald Milne, etc. They excluded Joseph Emberton too from the Group because of his designs for the new Olympia Exhibition.

Wells Coates knew that the broadcasting of an idea of this kind would, at the start, dissipate and diffuse interest. What was needed was a focus, a "nucleus-in-being", to which the sort of people he wanted would be not only willing, but anxious, to get in on; and soon because the central idea seemed to be wholly acceptable, just a few leading names would be enough to get people rushing to climb on the band-wagon. (1)

After meetings, invitations and negotiations, the first members of the Group were ten architects and three non-professional:

(1) Later Wells Coates received a letter from Eric Mendelsohn asking: "Why am I not a member of the MARS Group?" Coates' answer was: "You are not a member of the German Group of CIAM - Why?" - and that closed it.
Chairman : Wells Coates
Vice Chairman : Maxwell Fry
Members : D. Pleydell Bouverie
           Basil Ward
           Colin Lucas
           R. T. F. Skinner
           John Betjeman
           A. D. Connell
           Godfrey Samuel
Secretary-Treasurer : F. R. S. Yorke
           ( P. Morton Shand (with
           ( National and International
           ( Groups)
Liaison
           ( H. de C. Hastings (with
Secretaries
           ( G. B. Press)
           ( John Gloag (with British
           Trade Organisations and
           Professional Societies,
           Institutions, etc.)

Another difficulty was the Group's name. There
were many discussions about it and MARS (Modern Architectural Research) was Wells Coates' invention. (1) The Group was called the X Group among the members themselves. The official announcement of the formation of the Group came out after their meeting on 25th April, 1933, in the technical papers, and read:

"At the invitation of the President and Secretariat of the International Congress of Modern Architecture, Mr. Wells Coates has formed the nucleus of a British section of this International Association of Architects, Engineers and Town-planners. It will be recalled that the first Congress was held at La Safran in June, 1928, the second at Frankfurt in October, 1929 and the last at Brussels in November, 1931,

(1) Coates wanted the name on the lines of the Soviet system of making up a short-clipped word out of the initials of the phrase, which explains the meaning of the Group. He first suggested GBMA (The Group of British Modern Architecture) but Maxwell Fry did not approve as there might be some confusion with the Medical Association.
when official delegations from nineteen other countries - not, however, including Great Britain - attended. It is hoped that it will be possible to send a small official British delegation to the Fourth Congress which is to be held in Moscow from June 1st to the 10th of this year.

"The British Group will be known as the MARS Group (Modern Architectural Research)."

The next members who joined to participate with the Group were:

B.Lubetkin, Cyril Sweet (Quantity Surveyor) and Geoffrey Boumphrey (Architectural Critic).

Elaborate agenda were circulated for the early meetings, every member having his allotted share in the production of some kind of manifesto, which never quite worked. This was because of the difficulty in getting people to work together without friction, co-operatively, collectively and towards some common end. There were other practical difficulties, such as the lack of time and funds. There were the
difficulties which attend the formation phase of any organisation: a common agreement on the programme of work or the principles of association.

In spite of these difficulties, the first members of the Group worked together, putting all their efforts into establishing the indispensability of their Group's principles to the architectural profession in England. They divided themselves into several Committees to cover the aims of the Group: (a) Long Term Programme Committee (Coates, Connell and Samuel). They had surveyed the whole field of proposed research work and the field of activities and relationships generally. They drew up a draft of the proposed MARS Map. (See Appendix IV)  

(b) Short-Term Programme Committee composed of Fry, Hastings and Ward. They produced a scheme of Slum Clearance activities.

This was all theoretical till the time came to put the Group into action. Owing to Russia's inefficiency of organisation for the Congress in Moscow
(June 1st-10th, 1933), an urgent CIRPAC (CIAM Council) meeting was called in Paris and it was decided that the Congress would take place on board S.S.Patras II, cruising for seventeen days in the Mediterranean, visiting Athens and the Greek Islands and leaving Marseilles on the 29th July, 1933. On receipt of this news, Wells Coates, Connell, Samuel and Fry met on May 8th, 1933 and decided to produce material for the Congress in the short time available (three months). The programme of work for the Fourth Congress was dealing with the Functional Town, i.e.

"Essential functions of town:

1. Shelter
2. Work
3. Relaxation united by the element of circulation are determinants of the forms of the urban agglomeration."

The Group concentrated on their maps and on the data of existing conditions in London. They produced nine maps explaining London's circulation.
on the lines of the indications set down by the Congress Committee (Underground, tramways and buses). W. Goode-smith provided all the transport maps and he was in charge of map production. Coates, Pleydell-Bouverie, Connell, Ward, Yorke, Fry, Lucas and the Tecton Group produced the maps. As there was no home for the Group, Maxwell Fry's office at 58, Victoria Street was the centre of their meetings. In addition to the maps, descriptive reports were made on geological data, prevailing winds and climate, the historical development of roads from Roman times and the tendencies of development. (1)

Now, England was represented in the Fourth Congress by the delegates: Wells Coates, G.M. Boumphrey, P. Morton Shand and Godfrey Samuel. The twenty nations constituting the International Congress contributed maps and an analysis of existing conditions in thirty-three towns and cities in their representative countries,

(1) In recent years the L.C.C. has used these analyses in their slum-clearance programmes.
on which the small publication *Resolutions of the Congress of Athens* was based later in 1938.

This was the first success of the MARS Group; they had made a positive contact with other similar Groups associated together in CIAM. This trip was also a success to Wells Coates personally, as he moved from the national to the international scene. He became an active member by sharing in many of the discussion programmes and manifestos that constituted the working papers of CIAM. On their return from the trip, Wells Coates, working with Sert and Weissmann, met in Marseilles and drafted the future programme of work for the next Congress.

By the winter of 1934 the Group had decided to undertake a long-term investigation into the complicated question of housing and urban replanning. For reasons of convenience in finding statistical information, it was though best to take a London Borough as a sample area, and Bethnal Green seemed to fulfil all the conditions of a good sample.
Work had already started when an invitation came in June, 1934, from the "New Homes for Old Exhibition Group", at the instigation of Miss Elizabeth Denby. They asked the MARS Group to join them at Olympia in September, 1934. There was very little time available in which to produce any definite findings and the Group concentrated chiefly on the vivid presentation of existing conditions, just as a study to illustrate the main point for such an analysis of the movement of mass emigration.

Fry, Sise and Kauffmann were proposed by Coates to be responsible for the organisation and presentation of the Exhibition material. Arthur Korn, who came with Gropius to the CIRPAC meeting in London in May, 1934, with his exhibition experience in Germany, also assisted in the presentation.

This was the first display of the MARS Group work and received considerable attention. The editor of the Architects' Journal in September, 1934, said:

"The Group has been formed primarily for research,
which, within the term of the tasks the
members have set themselves, includes not
only technical investigation into purely
architectural matters such as planning and
structures, but also includes rather deep
probings into the whole structure of society."

With the help of this exhibition material, Wells
Coates wanted to establish MARS' ideas throughout the
country. In a letter to Gordon Stevenson in Liverpool
on October 8th, 1934, he said:

"Having finally produced our first public
display of MARS' work, we are hoping to extend
the whole of our system of research and ex-
hibition, on the lines originally discussed
with you, i.e. a nucleus centre of MARS
activities outside of London." (1)

So the Charts of the Slum-Clearance of Bethnal
Green were exhibited at Liverpool School of Architecture

(1) Stevenson and Holford formed a nucleus in Liverpool.
early in 1935, and were circulated in many other places in the country. They were exhibited at the (1) City of Hull College of Art and Craft in October, 1935, and were used as the Group’s work at the CIRPAC meeting in Amsterdam on June 2nd, 1935.

On the 20th-21st May, 1934, a meeting of CIRPAC took place in London at the R.I.B.A., at the invitation of the British Group of CIAM:- Le Corbusier, Gropius, Korn, Giedion, Merkelbach, Moser, Sert, Steiger, Syrkus, Torres and Weissmann attended. The English delegates were: Coates, Samuel, Fry, Goodesmith, Kauffmann, Lubetkin, McGrath, Townsend and Shand. Through the preparation, the careful organisation and the hospitality of the MARS Group to the delegates, it was possible to achieve the whole programme of work. In this meeting Wells Coates was appointed, with Corbusier, Gropius, Sert, Aalto and Breuer, to the Commission for the possible participation of CIAM in the 1937 Exhibition in Paris.

(1) Which had arranged, in connection with the Architectural School a series of lectures on "Housing the People" on 14.10-3.11.1935. Leslie Martin, Maxwell Fry and Raymond McGrath were MARS representatives and were involved in the course.
By the mid-thirties, the members of the MARS Group had increased to fifty in number, including engineers, critics, historians and a circle of ardent well-wishers of various callings.\(^{(1)}\) The Group had lost its conspiratorial defensiveness and had become an active force. The Group felt that they were in a position to enter upon an active policy of propaganda for modern architecture among the architectural profession and the public. They put forward a programme which included:

**Propaganda:**

(a) Letters and articles etc. in the press.
(b) Exhibitions.
(c) Lectures: inside MARS and for the public.
(d) Propaganda work in schools.
(e) Liaison.

**Research:**

They would concentrate on the problem of HOUSING, which was divided into:

\(^{(1)}\) Wells Coates received many letters from students of Manchester University (Professor Cardingly), the A.A. and the Liverpool School of Architecture, who wanted to be members of the Group.
(a) Active exposure of the OBSTRUCTIONS to modern architecture:
   i. Legislative (Town-planning, Building, Art, Byelaw and Administrative).
   ii. Social

(b) Analytical and technical research.

This programme of work succeeded partly, but took longer than the time originally proposed. Many articles were written in the periodicals. Lectures were given to the Group:

Gropius : Statement of the Problem of the pre-fabricated house.

Goodesmith : The External Wall.

Lubetkin : Heat Insulation Problems.

Arup : Reinforced Concrete Structure.
    Obstructions in England.

Sweet : The Technique of Building Cost Analysis.

It was proposed to have a large Exhibition in the autumn of 1935, and it was decided that the
Exhibition should show the combination of MARS research and propaganda. The intention was framed as follows:

"That the Exhibition be a presentation explaining to the public the aesthetic aspect of modern architecture as it has consciously grown from social conditions, with special emphasis on the legislation governing housing." (1)

There was the difficulty of space for the Exhibition, which the R.I.B.A. first offered to the Group, but for various reasons Wells Coates never accepted it. Lubetkin proposed that a catalogue should be issued using advertisements as a means of raising the financial support necessary.

These programmes and activities of the Group took place at the beginning of 1935. The three years that followed were not very active as far as the cohesive work of the Group was concerned.

For the programme of research, it was felt that

(1) These were A.D. Connell's words.
MARS as a Group would have little time to carry out active research. It was left to the individual members of the Group to carry out research in any subject in which they were interested. The main aim of the Group was the Exhibition, which fortunately took place at the end of January, 1938, in spite of the difficulties which faced the Group. One of these was the split of some members of the Group. This Anti-MARS movement, first proposed by Morton Shand and supported by others in January, 1936, consisted of censure of the C.E.C. (Central Executive Committee) in these terms:

"That the C.E.C. had shown inability to fulfil the purpose laid down in the original programme. That they allowed what meetings there were to be wasted on impractical dissertations, as for example, general statements on aesthetics, which had been repeatedly and more competently stated by the more experienced pioneers of the very movement which MARS professed to represent."
That they had failed to organise the programme in the form of practical research, which should have formed the first part of the MARS programme as originally announced, e.g.:
The Editorship of Technical Information data.
Building Case Law.
Housing - Research.
Supporting propaganda for other Groups which have already been formulated, e.g. A.T.O. Housing Exhibition."

This anti-MARS motion was the result of disagreements between Lubetkin, Ward, Connell and Lucas and Wells Coates. A division of opinion had arisen among them about the quality and intentions of one another's work.

It happened that the Connell, Ward and Lucas partnership shared third prize in the 1935 Hertford (County Hall) competition with the traditionalist who had designed the Royal Institute of British Architects building. "Astragal" commented in the Architects' Journal:
"The combined names for the third premium add to one's excitement over this competition result. Mr. Grey Wornum returns magnificently to the field of competition battle and ties with none other than Messrs. Connell, Ward and Lucas who have departed from reinforced concrete to produce a scheme worthy of the most Scandinavian - Romantic - Neo-Classical Humanistic virtuoso.

"I must retire for a while and make a major adjustment to my conception of architectural standards." (1)

A year later, in the Newport competition design for new civic buildings, Connell, Ward and Lucas won second prize with a deliberately Neo-Classical design. This their MARS colleagues could not overlook and the partners were called to a meeting of the Group to explain their betrayal of modern architecture. When Connell, Ward and Lucas appeared, however, the Group discovered that, never having agreed on aims

and methods, it really had no standards by which it could condemn their actions.

Lubetkin objected to the Group's developing architectural philosophy. Highpoint I, Tecton's apartment building of 1934, had been considered a conclusive statement of MARS Group aspirations. Three years later came Highpoint II, in which Lubetkin was accused of formalism (1) when he used what he called "dynamic order". (2) And while Lubetkin argued that it was necessary to impose an environment on society, the English architects wished to let the environment grow naturally by itself.

Wells Coates, whose buildings expressed his purely functionalist theories, figured largely in these disagreements against Lubetkin and Connell, Ward and Lucas. The upshot was that both sides disappeared from MARS Group meetings in the spring of 1936.

(1) Antony Cox, "Highpoint Two, North Hill, Highgate", Focus, Nov. 1938, p. 79.
Maxwell Fry played a great part in organising and preparing for the coming Exhibition of 1938. (1) He collected the money required, by the same means recommended by Lubetkin. A catalogue was printed which included:

"What is modern architecture?
What is the MARS Group?
Why an Exhibition? When and Where?
What will it contain?
Who will support it?

The time proposed for the Exhibition was June, 1937, at the New Burlington Galleries, Bond Street, London. To show how wide an appeal the Exhibition might make, the catalogue had listed a number of people prominent in public life who supported the idea of the Group; men like Lord Derby, Lord Wakefield of Hythe, Lord Horder, Sir Michael Sadler and George Bernard Shaw (who eventually wrote the introduction of the catalogue for the MARS Group Exhibition of 1938). A subscription form was included too by which the money

(1) An interview with Maxwell Fry on 30th Dec. 1964.

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was collected with the help of a wide circle of supporters in the building industry, such as Crawfords.

In the meantime, it was left to the individuals to work in research under any of the four only active Committees left which were:

(a) Planning Committee.
(b) Obstruction Committee.
(c) Press Committee.
(d) Exhibition.

These four vital Committees were abstracted from the hierarchy of theoretical Committees, the position in which MARS found itself at the end of 1935. A "Town Planning Committee" of the MARS Group was set up in December, 1936. Members of this Committee were:- E.Maxwell Fry, Godfrey Samuel, William Tatton Brown, Arthur Ling and Christopher Tunnard with Arthur Korn as the Chairman. (1) A sub-committee dealing with transport and economics was led by F.J.Samuely. They had worked hard on "A Master-Plan for London" which

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(1) Sert, J.L., Can Our Cities Survive, Harvard University, 1942.
was a hypothetical town-planning scheme for London and an application of the Charte d'Athène. It was represented at the annual meeting of CIAM and at Paris in 1937. The scheme took up a large space at the MARS Exhibition of 1938.

Preparing for the Exhibition the C.E.C. of MARS had planned a studied scenario for MARS propaganda - 'for-and-explanation-of-modern' architecture. To organise the Exhibition they divided it into three sections:

1. Planning
2. Building technique
3. Aesthetics.

Three Committees were formed to draw the recommendations of each section: these were:

(1) For further details see A.Rev., June, 1942, p.135. The scheme was an analysis of the growth of London (1965), based on phenomena such as the migration of industry and population from the centre of the town to the periphery. It showed how this movement could be controlled as part of a scheme for the future planning of the Metropolis. By draining London of its built-up elements by means of arterial roads, the historical centre could be given freedom to breathe. Parks could be created in the built-up areas, whence the population had migrated either to the suburbs or to the towers in the central area. (Arthur Korn to the writer on 22nd January, 1964).

(2) J.M.Richards, Samuel, Fry, Harding, Tatton Brown, Kauffmann, Hastings and Sweet.
Committee I : Kauffmann, Tatton Brown, Gibberd, Hastings, Sharp and Fry.
Committee II : Chermayeff, de Peyer, Nicholson and Skinner.
Committee III : Boumphrey, Chitty, Goldfinger and Ward.

Gropius helped the Group in preparing the outline scenario for the Exhibition before leaving for the U.S.A. in April, 1937. Moholy-Nagy was responsible for presenting and organising the Exhibition; he and Maxwell Fry planned the spaces and the exhibits at the New Burlington Galleries. (1)

When everything was ready for the Exhibition – money, space and the date on which it should take place – Wells Coates came back to the scene. He shared in the organisation of the work for the Exhibition and a space was also provided for him in which he showed a fully equipped living room-unit of his design. This space was not originally planned.

(1) Maxwell Fry to the writer on 30th December, 1964.
The Exhibition had two aims:

1. To encourage the public and the building public in particular to take an interest in contemporary architecture.

2. To show how much fuller advantage might be taken of the great advances that had been made in science and building technique.

The scheme of the Exhibition followed the now familiar analysis of life in terms of "Habitation, Work, Relaxation and Communication", drawn from the "Charte d'Athènes". This theme was given a witty twist by the adoption of Godfrey Samuel's suggestion to interpret it through the words of Sir Henry Wooton, paraphrasing Vitruvius, who wrote in 1624: "Well building hath three conditions - Commoditie, firmeness and delight".

*Commoditie* was interpreted in an outline of the building needs: building needs for habitation, building needs for work, architecture in the service of the community, transport and town-planning section.
Firmeness was interpreted in a survey of the contributions of the scientist, the engineer and the manufacturer to structural technique. Delight was interpreted in the work of the architect set forth in a review of the achievements of the modern movement.

Those who participated in the design and organisation of the Exhibition were:
This Exhibition was the chief event and the visible success of the MARS Group in the thirties and had been initiated by the efforts of Wells Coates. It was on the 11th January, 1938 that Le Corbusier opened the Exhibition at the New Burlington Galleries, and it remained open until the 29th January.

This was the first fruit of a struggle to introduce into England principles and stylistic language which had evolved elsewhere. It had led a generation of young architects to identify themselves with the movement: with the result that after the 1939-45 War it was possible for certain major national building problems to be studied in a spirit of collaboration and realism from which enormous benefits were derived.

MARS also had publicity outside Britain. On 19th September, 1935 Wells Coates received a letter from Dr. S. Koike, the Editor of the Japanese Journal on Architecture and Town-planning called "KOKUSAI KENTIKU", asking him to send him information on MARS.
Group activities. On 6th January, 1936, Ernestine M. Fantal (Curator of Architecture and Industrial Arts, the Museum of Modern Art, New York) asked Cyril Sweet - the Secretary of MARS - to send him photographs of MARS Group work, and the Director of the Museum of Modern Art asked Kauffmann, Coates and Sise to exhibit their work as that of modern English architects.

An Exhibition on "Modern Architecture in England" was held in the Museum of Modern Art, New York in 1937, in which the work of Wells Coates figured very largely.

On 21st April, 1938, Tatton Brown, the acting Secretary of CIAM, received a letter from Pierre Andre Emery (Algeria) in which he was asked for documentation of the MARS Exhibition of 1938 to be published in the North African Press.

It should also be remembered in respect of the success of MARS that it was the only Group of the twenty-one national Groups represented at Athens in 1933 to have kept the same form and constitution.
for its whole life of twenty-five years - unlike so many others which had been formed around one "personality". The Group was dissolved in 1958. (1)

(1) For more details on MARS activities after the War see: Denys Lasdun: "MARS Group 1953-1957", Architects Year Book 8, pp.57-61.
NEW ARCHITECTURE

EXHIBITION OF

JUNIORS OF MODERN ARCHITECTURE

ORGANISED BY

MASS GROUP

NEW BURLINGTON GALLERIES

BURLINGTON GARDENS W1

JANUARY 12TH TO 29TH 1938

10 A.M. TO 8 P.M. ADMISSION 1/-
modern architecture

Whatever we see, whatever we touch, can become expressive—eloquent in form, responsive in texture. In this part of the exhibition textures of several kinds are displayed. Nearby, equipment is exhibited. The standardised craftsmanship of the machine must be faultless in appearance as in technique.

Masonry and steel are shown. Masonry, once the basic medium of architecture, is now one medium of many: admirable for beauty and occasional convenience, rather than for strength or economy. Steel, scientific metamorphosis of iron, gives strength which is homogeneous and exactly calculable.

the living room is shown as a fully equipped unit. The purpose of such a room is not circumscribed. It is not a space conforming to fixed routine, but a harbour, a background.
Wells Coates's part in MARS and CIAM was especially directed at exploring the common ground between architecture and engineering. He was also concerned with the common ground between architecture and the fine arts. Together with Paul Nash, he was one of the founders of UNIT ONE in 1932. Paul Nash was a young watercolourist with somewhat pre-Raphaelite tendencies and a predilection for decorous park-like landscapes, creating image after image of great originality. (1) He was probably the key figure in English painting at the beginning of the thirties. Nash, however, had a questioning imagination and was aware of what had happened and was happening across the Channel. He did not find it easy to make in his own work a satisfactory point of contact with "Modern Art", but he realised intellectually that such contact was essential for English artists and for the future of English art.

Three months before the formation of MARS, Nash's ideas were realised in the formation of UNIT ONE. This was the first attempt at a greater collaboration among those working in the visual arts in England. It started from a conversation one evening at the end of 1932, at the Cafe Royal, when Paul Nash, Henry Moore, Edward Wadsworth and Wells Coates discussed the possibility of organising a joint exhibition of the work of painters, sculptors and architects working in sympathy with each other. By means of this exhibition and others they would explore and clarify relationships between the arts, presenting what was described as a "United Front" of the visual arts.

The formation of UNIT ONE was announced in a letter from Paul Nash published in The Times on 2nd June, 1933. According to Herbert Read (who was an eloquent spokesman for the Group)(1) this was the modern movement in English Architecture, Painting and Sculpture; and in Nash's words:

"The UNIT stood for the expression of the truly contemporary spirit."

The Group had eleven members, all of whom were well-known for their sympathy with the modern movement in England. They were:

**Architects**: Wells Coates (1895-1958)  
Colin Lucas (1906-  )

**Sculptors**: Henry Moore (1898-  )  
Barbara Hepworth (1903-  )

**Painters**: Ben Nicholson (1894-  )  
Frances Hodgkins (1869-1947), by she resigned from the UNIT and her place was taken by  
Tristram Hillier (1905-  )  
Edward Burra (1905-  )  
John Biggs (1892-  )  
John Armstrong (1893-  )

These artists had not agreed that any one method of painting or carving or building was the right method, they had not even agreed that their art should express a common sentiment or even a conscious direction. The essential bond in such a UNIT was idealistic: it was not in any sense technical. (1)

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(1) From the Pamphlet on the "Unit One Exhibition" held at Stoke-on-Trent (Museums and Art Gallery, Hanley) from 4th August to 8th September, 1934.
Nash expressed its purpose thus:

"The formation of UNIT ONE is a method of concentrating certain individual faces as a hard defence, a compact wall against the tide behind which development can proceed and experiment continue."(1)

The aims of the Group found success when an Exhibition prepared by the UNIT was shown, first in July, 1933 at the Zwemmer Gallery, under the title "Artists of Today". Wells Coates and Pleydell-Bouverie had designed its equipment. When the Exhibition was shown at the Walker Art Gallery in Liverpool in May, 1934, over 30,000 people visited it.(2) The Exhibition was also shown at Manchester, Derby, Swansea and Belfast.

Afterwards a book was printed on the UNIT in which each of the members set out his philosophy or at least his point of departure. Wells Coates explained his belief:

(1) Paul Nash's letter to The Times, 2nd June, 1933.
(2) Circulated notice to the UNIT, January, 1935.
"The tradition of Architecture is to seek the order that leads to freedom and fullness of life. Architecture has to serve the purpose of the people as well as the purpose of beauty. Thus will it "serve life". As architects of the ultimate human and material scenes of a new order, we are not concerned with the formal problems of style so much as with an architectural solution of the social and economic problems of today. The most fundamental change in our technique is the replacement of natural materials by scientific ones, and more particularly the development of steel, steel-concrete and steel-glass construction. The invention of steel and the elaboration of systems of construction based on its properties and those of its satellite materials, has in itself been responsible for the most spectacular changes in our social life, creating new social, as well as a new technical design situation."
In these few succinct phrases Wells Coates outlined the twentieth Century approach in architecture: the gospel according to Gropius and Le Corbusier. In spite of the fact that modern architecture in 1934 was at least twenty-five years old, it was still necessary for Coates to spell out the basic tenets of the twentieth Century architects' faith and "he spent all his life to achieve these principles". (1)

Herbert Read's book "Art and Industry" (London, 1934), had a great influence on Paul Nash and relatively on UNIT ONE. Paul Nash realised that the UNIT had not concerned themselves with Industrial Art. In a letter to Wells Coates on 25th November, 1934, he wrote:

"But since reading Herbert's book I must confess I have seen a glimmer of light. The first thing I felt sure of was that part of the UNIT should represent Industrial Art. I asked Herbert whether he knew positively of

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any real live industrial artist who could be incorporated - failing which I imagined we should have to grow one among ourselves."

Herbert Read's letter to Paul Nash dated 23rd November, 1934 played a great part and had a great effect on the constitution of the UNIT. The letter, too, showed the disagreement between Paul Nash and some other members at the ballot which Nash prepared to exclude some of them. In the letter Read wrote:

"The UNIT must, if it is to be at all real, have an architectural basis. I am very loath to interfere, except to encourage the idea and at all costs keep it going. You have done right to get Wells into the new constitution right away: the UNIT must, if it is to be at all real, have an architectural basis. Add a "real" industrial artist by all means, if you can find one, they are mostly
anonymous. As Henry Moore and I talked the
matter out, it seemed the real future of the
UNIT was a functional one - to so reconstitute
ourselves that you can operate as a practical
unit in the industrial system. The UNIT as
a unit should be perfect to undertake the
designing of a building in every detail -
architecture, fittings, interior, decoration
and furniture. This is not an impossible
ideal. The Banhaus has already proved in
Germany (Gropius told me the other night that
although he founded the Banhaus on an industrial
basis the first two people he asked to co-
operate were a painter and a sculptor) the
trial which you already have. If you did
make that your ideal, it might guide you in
the future reconstitution of the UNIT."

The effect of this letter on Paul Nash could
be traced in his letter to Wells Coates on 25th
November, 1934, as he said:
"You may remember Wells when you and I first discussed the composition of UNIT ONE, we seriously thought of making it to include a kind of industrial design - represented say by Kauffer. But I feel after reading Herbert's very clear analysis of the problem of today that a functional unit has got to face much more than "equipment when called upon". It has to face creating new art forms and not only for architecture, painting and sculpture but form for industry. It would have to develop itself into more or less the pattern organisation of the German Banhaus. The question is, do we want that, and, if so, can it be done?"

Coates commented, many years later, on the result of this proposed reconstruction of the UNIT:

"Paul Nash wanted the whole thing to go in several directions at once, before one knew it. UNIT ONE became an unmanageable thing:"
something which had little chance of survival, because it went beyond the principles of acceptance - strictly limited as they were - agreed upon by its members. Henry Moore and I took the initiative then to complete its programme and end it, before it became something it could not have been. This was a great disappointment to Paul, but so be it."(1)

In the circulated notice signed by Wells Coates, Henry Moore and Paul Nash in January, 1935 the end of UNIT ONE came in these words:

"It became obvious that the constitution of the Group known as UNIT ONE was not desired. Such an association was felt to be inadequate to meet present needs, especially in view of recent developments in regard to industrial art. It was agreed therefore to end the UNIT completely in form and name.

"The ideals embodied in UNIT ONE, however, will find expression in a new development under another name.'

(1) In Wells Coates's letter to Alan Jarvis, Director of the National Gallery, Ottawa, Canada, on 11.11.56.
The details of a new constitution were embodied in a draft statement of May, 1955, prepared by Herbert Read and Wells Coates of the "ARTISTS' UNIT". They aimed at:

"1. Complete reorganisation of the educational system in so far as it affects the relations of art and industry, with a view to a more effective liaison between the factory and the art school.

"2. Co-operation with the State and Industry to secure better standards of design.

"3. Adequate recognition of the status of the designer.

"4. Organisation of exhibitions of modern machine art.

"5. Establishment of a journal devoted to industrial art."

But these aims were not received enthusiastically by the individual members of the UNIT because of the lack of cohesion between them and the UNIT came to an end.

The influence on English architects of this art
movement can be traced in Wells Coates himself, in his words:

"UNIT ONE is, in its most simple form work in line and space. They have given me great invention, what complex play of feeling makes up the values of a walled living place and what makes that special quality of being at rest which only buildings seem to have. A man of art will get whatever more is necessary by and from himself." (1)

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At the end of his life, Wells Coates prepared his most far-reaching scheme for an organisation of architects, engineers, planners, designers and artists. It was to be called CAUSA and would sponsor a publication, OUTLINES.

The idea came when he was at Harvard University in 1955-56. He had spent a lot of time in outlining and devising the new constitution which could combine all branches of the visual arts. He wanted to put all his great experiences gained, as we have seen in the last three sections, from his work in England in the thirties, against the central problems confronting professionals working the these fields. It was put in his words as he wrote in his first memorandum on 1st July, 1956:

"The problem divides itself into two parts:

FIRSTLY: What are the best methods to use in
the dissemination of information and
of opinion on these matters directly
to the public, as a matter of general education?" (General Education of Public).

SECONDLY: By what means and through what type of agency can thoughts of the Masters of contemporary architecture and the leading Pioneers therein, be brought together into a general pattern of principles and of techniques of actions?" (Collected views of the Masters and Leaders).

In the same memorandum he found the solution of these problems, in:

"THE IDEA OF OUTLINES":

1. Considering the first problem, the writer devised the form of a new type of publication, to be called OUTLINES as a systematic alignment of information and of opinion, in words and illustrations, on single sheets of thin card, coupled with a key-system of notation for
related and inter-related subject matters. OUTLINES would be associated with such ancillary material as coloured slides, tape recordings, film material where appropriate, and general exhibition material of such a form to be capable of general distribution and projection to the widest public through radio, T.V., films, as well as through initial publication through selected media.

"THE IDEA OF C.A.U.S.A.:

2. Considering secondly, how best to initiate OUTLINES on a firm basis, the writer foresaw the necessity for some new type of organisation around which the highest minds could congregate and form the foundation for the advanced and unified studies which he deems necessary in the present state of the professions concerned with architecture and engineering (as applied to structure, planning (city and regional), landscape architecture, technology, industrial techniques),
together with those individual media of expression: sculpture, painting, graphics, in their direct application to buildings and to the general contemporary scene of streets, squares, towns and cities. Such an organisation might be called:

CENTRE FOR ADVANCED AND UNIFIED STUDIES IN THE APPLIED ARTS ("C.A.U.S.A.")

- signifying the "cause", the beginning – which would be the generating centre for the publication of OUTLINES in the sense described.

In another draft devised by Wells Coates on the 10th February, 1956 to explain his OUTLINES, he wrote:

"Not a book, not a magazine. Not an encyclopaedia, not a reference. Not a series of articles; but OUTLINES (each on one card-sheet)

Each OUTLINE would start with:

GENESIS: The beginning, the origin, how it came about; and follow on with:
ANALYSIS: The detailed description of items and wholes; and finally with:

SYNTHESIS: What it means - the future look,
Some OUTLINES would contain sections comprising all three: C.A.S."

He also put down the sequence of OUTLINES, as follows:

"1. Most important to ask the Masters;
Frank Lloyd Wright, Gropius, Le Corbusier,
Mies van der Rohe, Bucky Fuller and others;
what is their view of the present position,
trend, direction, goal. Best and most readable form - dialogue.

"2. Preparation for this first series; getting together a few of the younger and still active minds not satisfied with the present position, to outline what the Masters are going to be asked and suggesting a target and goal. (He suggested later Serge Chermayeff, Eduard Sekler - who backed him at that time - and himself.)
"3. Criticism of specific works; against the background of such a statement of purpose, followed by comments by Masters and a "Synthesis" of their answers in some form; a true criticism of existing and current works could be undertaken against suitable historical analysis, etc. (Sekler) thus building up a body of criticism and evaluation of some use to students and teachers.

"4. People do not read criticism because there isn't much of it; still, very conscious of present-day defects, they discuss all buildings prodigiiously.

"5. People don't want histories, or long accounts of the totality; they want 'comprehensive synoptic views' put into connection and into relation, one with the other." (1)

To begin the execution of his ideas, the first members who backed him were:

(1) These are some extracts which are further explained and analysed in Appendix No.
Wells Coates  ) Programme directors and initiators
Serge Chermayeff) of dialogues and of material for
Eduard Sekler  ) analysis.
Executives : Ivan Chermayeff - for layout
               G.Kidder Smith - for photography
Publishers : U.S.A. - Thomas Creighton
               Europe - Monica Pidgeon

He also proposed some of the personalities who
ideally would be in charge of CAUSA study divisions:

History : Eduard Sekler
Aesthetics : Gyorgy Kepes
Structure : Jeffrey Lindsay
Sociology : Jaqueline Tyrwhitt
Landscape : Charles William Eliot
Technology : Wells Coates
Environment
Control, etc. : Serge Chermayeff

But in the summer of 1956, Wells Coates left
Harvard University to go back to his native country,
Canada, where he engaged in a project scheme in
Vancouver.
He moved to Vancouver full of enthusiasm, as he thought that his native land was the right place to establish his ideas and principles. In a letter to Alan Jarvis, Director of the National Gallery, Ottawa, Canada, on 11th November, 1956, outlining his principles, he said:

"I believe that all creative persons working in the field of the Visual Arts in Canada have great need to get together, not only with each other, but with many persons in ancillary fields, in order to establish a foundation of principles and of attitude, of a specifically Canadian kind. Ours is a new country, at times it would seem almost a primitive country, but surely therein lies some of our great strength, our potential value? (As Wang Wei said: 'to learn how to paint one must first cut off both hands.'"

He continued in the same letter:

"It is thought in many circles that the
battle for the 'contemporary' in the Visual Arts has been won; that the Past is all behind us; that the Future presents opportunities for untold advance along stated lines. I do not believe this is so; I do not belong to that school of thought; I believe that the 'Second Industrial Revolution' which is now taking place all around us presents entirely new problems to all those engaged in the Visual Arts."

He thought that CAUSA should have a building centre at Vancouver:

"Its first buildings would be a meeting place, a workshop and a hostel; gradually this would grow into a real 'Centre' for the Visual Arts, and be the venue for all kinds of meetings of a special kind. A part of the site would be occupied by a really dé-luxe hotel for its patrons, etc., other parts would be leased for studios and separate houses, etc. There would be a permanent exhibition."
But he proposed the formation of a nucleus composed of a Director of Studies, one staff officer and one executive secretary, which would operate before CAUSA obtained its own premises. This "core" would be responsible in the first instance for producing a certain framework of studies, meetings and seminars through contact with nominated persons in all the fields of the Visual Arts. Wells Coates divided the CAUSA STUDIES into fifty-seven subjects. (See Appendix No. VI\(^{(1)}\))

In the letter and memorandum he circulated to the Director of the National Gallery of Canada he said:

"I would be prepared personally to become the first Director of Studies of a Centre for Advanced and Unified Studies in the Arts and to take care of its formation and organisation; its maintenance, until such time as it would carry itself under its own momentum."
The main problem was to find the money required to start, and Wells Coates estimated that this would be $25,000 for the formation period, including capital costs for establishment etc. and covering his travel costs to interview three Masters, Frank Lloyd-Wright, Walter Gropius and Le Corbusier, for the first series of "OUTLINES". He wanted them to reply to each other and thus make up a dialogue-report. He considered this was the first real "job" for CAUSA preparation. It was thought that another $28,000 would be needed to complete the first year's work.

But unfortunately none of these ambitious aims were reached. Wells Coates's health had deteriorated by this time - 1957 - and it seems that it was not the right time to get the economic support from the Canadian Government.
Wells Coates studied philosophy and science against the background of the meticulous traditional Japanese art of living. Japanese tradition had achieved an austere order and dignity by practising a discipline which rejected the superfluous and this had coloured his whole outlook. He was an architect "of today", not because his principles and practice were up-to-the-minute; they were of-the-minute, just as his designs of everything were of that thing, and not merely in it, or vaguely applied to it. He always wanted to achieve "style", not to be concerned with architectural "styles" or to be "in the fashion". As he said:

"The social characteristics of an age determine the characteristics of its art, and this is more so in architecture than in any other art. By "characteristics" we mean the diversity of form over and above the sameness of general intention."
When Wells Coates settled in England he found an appalling contrast between its ugliness and disorder and the order and discipline he remembered of the Japanese tradition. Once he said, after a flight from Paris on a fine summer's day over England:

"My generation was born to expect to see England as a land of beauty - it has left it as a land of 'beauty spots'."

Once again he talked about it when he addressed the students of the Graduate School of Design at Harvard University on 12th May, 1955:

"When I came to the countries of my race - to Canada to go to University, to the United States where my mother's family originally belonged, and to England and the European countries of our Western heritage - when I came to the West, I could hardly believe that the people of my own race and blood could be quite so barbarous and savage as all that. I remember writing down then so sweeping a
generalisation as this:
(A man whose eyes have been born in the East
will only rarely wish to open them in the West) ...
... and so I just had to find out the reasons
that underlie this lack of order and sig-
nificance, the abuse of integration, the
presence of great diversity of form within a
framework of conflicting intentions."

When he had settled in England and begun to
work there, he was able to state some of the reasons
for the prevailing architectural situation. Addressing
the Architectural Society at Cambridge University on
6th November, 1934, he gave a lecture which he
called "Rackets over Architecture". He said:

"Society today is in a real state of transition
and reformation and therefore we are living in
an age when a new architecture is not only
possible, but necessary. For architects this
is a very bright conclusion, for it places
upon the architects an enormous responsibility."
"Now it is a curious thing that although human conditions and possibilities have altered more in the last hundred years than they had in the previous ten thousand, customs and habits of life change more slowly than conditions. You have a state in which the technical power to do new things is almost everywhere in advance of creative technique to control that technical power for the freedom and happiness of mankind. The timelag is most pronounced in those countries which were the first to invent that technical power. Such a country is England, and indeed it is in England that we have the modern dilemma in its most acute form."

He put down an outline of principles for a new approach in his article "Response to Tradition" in the Architectural Review of November, 1932:

"To place ourselves within the true channels of Tradition in Architecture, we must perceive the true intent of buildings in their own age."
Fortunately for all of us today, the "effects" in us of all the functions and qualities of all the old architectures can be imagined, experienced, remembered or reconstructed. Never has knowledge of these effects been so all-inclusive of world-culture....

"It is for us to know the difference between a merely surprising trick and a noble invention - to know what subtle combinations and resolutions of human impulse make up the values of an enclosed and habitable space - to know the ingredients which will create the further response of simplicity, grandeur; of practical usage, or of quiet splendour - to know the qualities which reside within a complex of spaces - closed and open, lit and unlit.

"Or, at closer range, to don blinkers and to see your design as one thing marked off from the rest of the immediate world of experience,
of events around you; then to see it as a thing, complex, multiple, divisible, separable, made up of its parts, the result of its parts and their sum - harmonious - and then to see it as that thing which it is and no other thing, so that if you removed a single part of it, it would not be that thing, but become another, lesser thing, or become nothing."

In the same article he summed up his creed:

"As architects of the human and material scenes of the new order, we are not so much concerned with the formal problem of "style" as with an architectural solution of the social and economic problems of today. Evidence of necessity of a new order reveals itself every other day in some new social or economic crisis. As creative artists we are concerned with a Future which must be planned, rather than a Past which must be patched up at all costs."

He explained in further detail the dynamics of
twentieth-Century architecture in his article "Materials for Architecture". (1)

"20th Century architecture begins from the plan as a generator, and makes explicit externally the processes, functions and qualities included in it." (2)

In the same article he wrote:

"Among the new materials for architecture (affecting its form) must be included the machines, engines and processes incorporated into the modern building. Such are heating, lighting, ventilating, refrigerating and sanitary processes, and the machines for vertical circulation. Instead of being added on to the completed building, they are, or ought to be, integral with it, a part of its construction, and therefore of its form.

The same principle of integration can be

(2) These words were Le Corbusier's in "Vers Une Architecture," 1923.
extended to include furniture designed into the house as part of architecture. Here again, a modern need precedes and reinforces the innovator.

"In this sense, the materials which the 20th century architect handles are many times increased. To order them, that is, to design them into place, is the very raison d'être of his art."

He was one of the earliest exponents of "Functionalism", (1) writing in 1931:

"In the strict sense of the word, our world — that is what the world is to us — is a functional world, the word "function" being used to denote the quality of activity-in-existence.

(1) In A.Rev., March, 1959, p.155, in the "Correspondence to the Editor", Dr.Reyner Banham asked if the word "Functionalism" was used in England before 1932, when Corbusier used it in his book Gli Elementi dell' Architettura Funzionale, Milan, 1932. James Burford used the word "Functionalism" in his article "Old Wine in New Bottles", A.Rev., Sept., 1930, p.131. Wells Coates, too, used it in his talk to the 20th Century Group on 26th February, 1931, from which this quotation is taken.
To take an analogy from mathematics, we can express ourselves algebraically, but not arithmetically. This should not be interpreted to mean that design is determined by consideration of efficiency only. In Architecture there are usually many equally efficient solutions of the mere problem of efficiency, including economy. The architect's aesthetic sense is exercised in the discrimination between various equally efficient solutions. The word "functional" as applied to the new architecture is capable of misinterpretation and even abuse, for all architecture has to a greater or less extent been "Functional".

He emphasised the necessity of the integration of art and science with architecture:

"For architecture - the surest and most complete art is both science and art. It is between these two, Science and Art, that architects must find a way for the reconstruction of the
Modern World. And it will be between these, also, that architects may lose themselves forever." (1)

Again in "Response to Tradition" he wrote:

"There are requisite Science - the science of the inside of things; science the identifier, measurer and calculator; and also Art - the science of the outside things, art the differentiator, selector and maker." (2)

It is clear that Wells Coates brought to architecture the training and knowledge of an engineer, an aesthetic sense, and a reforming idealism. His writings show his powers of analysis and his functionalist approach - as well as a certain tendency to rhetoric. His designs, however, are far from rhetorical: they are functional, demonstrate

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(1) A letter from Wells Coates to Larry Frank on 30th June, 1956.

an acute understanding of form and space, and use materials correctly. The next part of this study discusses Wells Coates's theories put into practice - his buildings, interiors and industrial designs.
Alec Walker, the textile designer, was the key figure in launching Wells Coates's architectural career. He first knew Wells Coates in Paris in 1925 and later, in the summer of 1927, found him out of work. Alec Walker and T.M. Heron were then partners (Managing Directors) in the silk firm "Crysede", formed in 1924. Their shops numbered forty and were sited all over the country, with a centre of sixteen shops in Cornwall.

Alec Walker employed Wells Coates in the firm to design their shop fittings and advertisements. Wells Coates moved with his wife to Cornwall where he lived for nearly nine months, working on trials to make standardised shop fittings with the use of plywood.

The first success was shown in his first completed commission, the Crysede shop in Cambridge in 1928.
This was a significant experiment and had many important results. Using plywood in interior design was quite new to the profession, and Coates had succeeded in using it logically. Since there were so few doing functional design, it was inevitable that the resulting publicity would bring more work. It did.

It was Wells Coates's ideas in producing standardised and cheap fittings using plywood that were admired by T.M. Heron and later by Jack Pritchard. (1) On the other hand, these ideas did not please Alec Walker, although Alec Walker's name appeared as part of the design in the interior of the Crysed'e silk shop at Cambridge. Walker at that time admired McKnight Kauffer's design more than Wells Coates'. So Alec Walker discharged him and Wells Coates left with his family for London in 1928. But it so happened that T.M. Heron had broken his partnership with Alec Walker and founded his own firm, "Cresta", in 1928. Heron always admired Wells Coates and his

(1) See Appendix p.223.
ideas, so six months after Wells Coates's departure, Heron asked him to come to Welwyn Garden City, in 1929, to design the Cresta model factory, with showrooms, and other Cresta shops in the country.

Welwyn Garden City, as a centre for Cresta, was chosen for many reasons; one of these was it was thought that it might be easier to develop and accept new ideas far from the stream of traditionalism. It was also easier for Wells Coates to find the firms who could erect his designs.

In shop design Wells Coates laid down principles in his article "Modern Shops and Modern Materials", (1) in which he divided shops into three categories:

"The large shop, where a large variety of goods of every kind, or of one general class, are displayed and offered for sale, is distinguished today by surroundings as pompous as gold and labour can make them.

(1) Building, Dec.1932, pp.564-5.
"The small shop, on the other hand, tends to become increasingly "individual" in its appeal. It takes the place of the tradesmen who used to go from one house to another, to display their wares in the very surroundings in which they would eventually be used and seen by the buyer.

"A third category of shops is a more recent development of modern commerce. The "multiple shop" or "Chain store", as it is called in America, is an extension in the retail dimension of the ever-growing principle of rationalisation and centralisation of industrial organisation."

On the materials and design used for each category he said:

"For the promotion of bigger and better sales in the large shop, the best psychological technique is assumed in most cases to be the exploitation of the desire to ape the rich, or the habits of a bygone era, and this technique is
responsible for the choice of grandiose "styles" of decoration, and luxurious materials of construction and equipment.

"The choice of materials for the design of the small shop is largely determined by the desire to create an "individual" atmosphere which the large shop cannot provide, and which will distinguish it from other small shops of similar class.

"The choice of materials and the design of the "multiple shop" presents important problems, both social and architectural. The shop-owner will prefer uniformity of design and therefore of materials, for the sake of economy, and for the sake of uniformity of appeal. "Scale" and "good manners", in relation to other buildings and to the street, and in relation to the character of the city or town itself, are not oftened considered at all.

"Thus, the pompous exteriors and interiors of
the large shops, the more and more blatantly "individual" small shops, and the monotonous and often ugly uniformity of the multiple shops, combine to make the streets of our commercial centres of population - one can hardly call them "cities" in the architectural sense any more - a nightmare of 'design' with a meaningless confusion of disharmonious materials.

"The time will soon come when the financial and industrial machine will be forced to decide, in the interests of self-survival, on a fundamental and drastic re-planning and reconstruction of the material scenes in which the daily routine and drama of life take place.

"The first principle of effective display technique might be said to be "interruption without irritation"."

For the question of the Name, and the place for the Name, he answered it by saying:
"In a large shop, this should obviously be incorporated into the general unity of the design of the building. The name should be part of the building rather than a series of letters stuck on to it or as is more often the case, all over it.

"In a small shop which is part of a row of shops in the same building, the place of the name as well as the type and size of lettering had better be uniform. Each shop may then be distinguished by its real name and distinctive display, or by the sheer quantity of lettering plus a rather uniformly encyclopaedic type of semi-permanent display.

"The design of the shop exterior is thus reduced to its simplest elements; there is the place for the name and the design of lettering; there is the display area in one or more shop-windows and there is the entrance door."

These principles were put into practice when
Cresta Silks Ltd. was founded in 1928 with the object of controlling every process in the production of its silk materials, "from the first thread to the last stitch". Wells Coates first built the model factory and the showrooms at Welwyn Garden City, to train the assistants for the service of their new shops. He did some other shops between 1929 and 1936. They were in Brompton Road, London, Bournemouth, Bath, Bristol, Brighton, Bromley, Baker Street and Bond Street, London. The components of the design used uniform standards of measurement and were arranged in perfect ratio. This was a sign of classicism rather than the functionalism characteristic of his other works. These shops could be described as "organic" lines, (1) as Wells Coates had succeeded in regulating their proportions according to the site, to the material used and to their specific purpose. In his article "Materials for

(1) This was written by Wheatley, D.C., in "Economy in Shop Fitting", The Shoe and Leather Record, 13th Feb., 1931, p. 35.
Architecture", in the Architects' Journal of 4th November, 1931, he wrote:

"New materials and new structure, craftsmanship, with intellect and action added, and all allied to art, these became the new forms, inherent in the new materials. (The new forms were of 'the thing itself, never on it', as my Japanese tutor first taught me). And the new forms made it possible to cater more perfectly for human needs. Conversely, new human needs were created, new habits, new activities were made possible by the new forms."

In the same article he continued:

"The forms of the 20th Century architecture are not concerned with "pencil-forms" but with shapes. A shape is achieved by clean lines, clean surface, clean purposes, "Clean" does not mean plain, but it does mean significant."

Wells Coates' conviction about the design of the shop front, irrespective of the trade for which it was
intended, was that it should be a combination of beauty and economy. Economy by the simplest, standardised fittings and equipment; and their smooth and aseptic shapes were machine-made beauty. This was very clearly demonstrated in Cresta shops. With their cheerful simplicity everything was clearly seen and T.M. Heron said:

"There was an order in making, integrity in selling and pleasure in buying which finds mutual expression."

Wells Coates used big Cresta lettering with external pinkish buff colour, which emphasised Cresta silk shops and expressed a certain "individuality" which was a necessity in a small shop front.

**Purpose-Designed Fittings for Cresta Shops:**

Specialised wall fittings of standard main-structural design to take a large variety of special fittings for all silk goods manufactured by the firm: Ditto counter and wardrobe fittings; Dressing room equipment; mirrors; Lighting fittings;
Chairs; Stools; Standard lettering for internal and external shop front; Gown stands and display fittings; Door handles (notably the patented secret-fixing door handle long-bow design, marketed by Taylor Pearce & Co. as "Tayloroid Handles"); Other metal furniture: Electric radiators (circular tube and streamlined tube later became standard commercial articles); Factory and workroom fittings; Cutting tables; Display tables, etc.
In 1928, as the B.B.C. was increasing in size and output, a new and a large building was necessary; this was designed and built in Portland Place in London by G. Val Meyer. The new building was heavy and built in a traditional way, so that one need say little about it. Really outstanding, however, were its studio interiors, which represented the outcome of a struggle between moribund traditionalism and inventive modernism. Broadcasting House was the first example of this type of work on an extensive scale, providing a great opportunity for the young designers engaged to experiment with their new ideas.

"To see a great public Corporation making some effort, however belated, to use the real talent available in this country was a rare spectacle and one for which, however irritating the procedures of that Corporation in other spheres,
it is impossible not to be grateful. Owing to the conscious antagonism between traditionalism and modernism which prevails at the present time, and to the issue of false but none the less influential morality which by some obscure English means has become involved in it, the action of the B.B.C. in employing specially modernist decorators was a courageous one." (1)

Mansfield Forbes' "Finella" house in Cambridge designed by Raymond McGrath in 1928, was the origin of the B.B.C. studio interiors. (2) This building had important repercussions. Many people flocked to see it, including in 1929, some of the B.B.C. Directors. There they met Raymond McGrath, who had decided to return home to Sydney just at that time. However, he was appointed as a Decoration Consultant to the British Broadcasting Corporation. Two other architects were chosen - in fact they were introduced

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(2) An interview with Raymond McGrath (Dublin).
by Raymond McGrath - Serge Chermayeff, the most admired exponent of interior design, and Wells Coates, who was known for his functional design of the Cresta shops. These three architects formed a group working in close harmony in an office in the Old Pantheon in Oxford Street. (1) They produced twenty-two studios for the Company. All were animated by the same desires and ideals. Raymond McGrath remarked with obvious pleasure that:

"The team spirit that produced these studios was something new in post-war English architecture."

The three architects studied their problem, started with the acoustical requirements, organised the materials, and so by virtue of this organisation created a beautiful interior. By such a procedure, the functional became decorative as well and there was no confusion as to the essential character of the room. The original practice had been to take a

(1) In a conversation between R. McGrath and the writer.
room and instal the necessary acoustical materials, relying entirely on extraneous matter for the "architectural effect". A very important and noticeably successful outcome of the work of these architects was the standardisation of fittings throughout. Technical furniture, house telephones, signal lights, orchestral chairs, microphone stands, door lettering and signposting were all of good design and uniform type. The Manchester Guardian described the studios as "The New Architecture of Scientific Humanism".

Wells Coates had produced the finest and the most significant industrial interiors of them all. He was concerned with problems of a purely technical nature which needed functional design of space and equipment. He was responsible for designing two kinds of studio: the News Studio and the "Noises Off" or the Dramatic Effects Studio. Different as their purpose was, each was rightly designed on severely functional lines.
These designs suggested that the designer had assisted the engineer toward greater efficiency as the engineer had assisted him toward greater beauty.

So there was no need for him to comment or to lay down principles, as his work expressed them quite clearly.

His work in these studios brought in a large number of articles of "industrial design", notably door furniture (by James Gibbons, Wolverhampton), lighting fittings (various firms), specialised radio fittings; standard loudspeakers and control tables; microphone fittings, including a twin-balanced arm fitting which became a B.B.C. standard in a variety of forms (made in Electron and Bronze); noiseless door-latches (James Gibbons); first use in England of anodised aluminium frames for windows; electric light fittings and some other steel furniture.

After the great success of the London B.B.C. studio interiors, the Corporation improved its other studios; so in 1933, Raymond McGrath designed
the studios in Manchester; Wells Coates did the reconstruction of the Newcastle studios and Serge Chermayeff the Birmingham studios.
B.B.C. Studios
B.C. Studios

Chair in dramatic control room.

London.
Wells Coates's Venesta stand design was placed first out of 175 competitors in the competition that was organised at the end of 1930. He took the place of Le Corbusier, who had designed the previous Venesta stand at the Olympia Exhibition of September, 1930.

Wells Coates presented to the competition isometric drawings of the stand, the first time that this particular type of presentation had been used. The stand was built later on at the Building Trade Exhibition, Manchester in April, 1933. During that time he designed other stands which all showed Venesta products in use and the potentialities of plywood in action. These were at the British Empire Trade Exhibition of January, 1931, The Brewers Exhibition of November, 1931,(1) The Olympia Commercial Motor Show(2) and the Building Trade Exhibition, Olympia, September, 1932.

(1) A.B.N., 6th November, 1931.
(2) A.J., 18th November, 1931, p.673.
Exhibition Stand Competition: Winning Design.

Mr. Wells Coates, Architect.
VENESTA STAND
British Empire Trade Exhibition, Buenos Aires, Jan 1932.
ENESTA STAND

rewers Exhibition

iii) OTHER INDUSTRIAL DESIGNS

The positive philosophy which lives in all Wells Coates's work is a complete acceptance of the requirements of the age in which he lived. Most of the industrial design that Wells Coates did was incidental to his architectural practice. To escape from the inadequacy of "standard lines", he had to design almost everything that could be required: radiators, door-handles, latches, stools, stoves, light and display fittings, radios, chairs, and even cigarette-holders. Usually his design was then marketed for general use, and thus by a slow process of infiltration he shared in rationalising the apparatus of British life:

"In his work Wells Coates is quite clearly the sensitive engineer. Of the many variations of a design which will achieve its purpose as completely as may be, he chooses that one which looks best. His preliminary analysis of the conditions is singularly complete and
acute; his solution is often refreshingly original; he adds nothing for effect - and he gives us from time to time veritable glimpses of what I have called the New Beauty." (1)

Apart from the designs already mentioned (pp.138 and pp.186), his most important work was with the following firms:

1930-1932: Isokon Ltd.: Plywood Furniture:
Standard bookcases and other articles in plywood. (These items were first used in Lawn Road Flats.)

1932-1938: Hilmor Ltd. and P.E.L. Ltd.:
Standard range of tubular steel furniture: chairs, tables, office desks, nesting tables, beds, dressing-room curtain surrounds, stands, etc.

1934-1937: E.K.Cole Ltd.:
It has been said that the radio industry grew

up with plastic, for bakelite and ebonite had been used from the start. (1) In 1930 W.S. Verrells and Eric K. Cole, Managing Directors of EKCO, built the first large moulding plant for plastic in Britain, at the EKCO Factory at Southend-on-Sea. As the process of moulding was very expensive the manufacturers could not afford to speculate with ill-considered designs. (2) To achieve new ideas a competition was held for the design of EKCO radio cabinets in 1934, in which Wells Coates won one of the awards. Wells Coates, Serge Chermayeff, Raymond McGrath, Jesse Collins, Misha Black and F.C. Ashford had all designed cabinets for EKCO.

Wells Coates, by using a circular shape in his ingenious winning design, showed a complete understanding of the functional use of a radio set. (3)

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(2) In a conversation with J.K. White (EKCO industrial designer) on 1st November, 1965.
(3) In a conversation with Denys Lasdun on 25th Oct. 1965.
The shape was made to fit the circular loudspeaker; by rejecting sharp corners it exploited one of the potentialities of the new material for an aesthetic purpose; and at the same time it reduced the number of moulding tools. (1) The result was a simple design at a reduced cost. This made the radio set one of the most popular in Britain in the 1930's. To the firm, too, it proved that good design meant good business.

This introduced Wells Coates to EKCO and other commissions followed. He adapted the design of his first set (AD 65) to produce a second model (AD 76), making alterations in the band of station names and putting a straight line in front of the loudspeaker.

In 1937 he designed the plastic "Thermovent" fires, desks and kitchen trays. In 1936 he built the new EKCO Research Laboratory and designed all its specialised equipment. This building was

(1) In a conversation with J.K. White (EKCO industrial designer).
RADIO - RADIATOR Cabinet showed in "Minimum Flat" at Dorland Hall September 1933
illustrated in the first post-war edition of the Encyclopaedia Britannica as an example of good industrial design.

After the war, Wells Coates designed other radio cabinets. Making use of the new shapes of loudspeaker and new processes of manufacturing which had been developed by then, he designed his "Radio Time" set in 1946, with a rectangular shape, and the "Princess" handbag set in 1947, the last he did for EKCO. He designed a television set (TSC 113) in 1946.

1936-1939: P.E.Gane Ltd.:

Standard furniture in wood: wardrobes, dressing-tables, small tables, chairs and beds.

Apart from these and other industrial articles for building use, Wells Coates designed a revolutionary "Wingsail Catamaran". The "Wingsail" was an "aerodynamic" sail stiffened with battens, fitted to a revolving mast and held in a curve by a leech rope and articulated boom. This rigging was given
the stability of the catamaran hull with its twin floats. A prototype model of the "Wingsail Catamaran" was shown at the Britain Can Make It Exhibition in 1947. Later he built a 16-foot version and tried it out on the Norfolk Broads. Eventually he built his 30-foot Wingsail Yawl Fey Loong, the hull of which he designed with J. Laurent Giles. This boat, with its two Wingsails and its twin keels, was given trials in the Solent in the summer of 1954. But after that Wells Coates returned to America, and the "Wingsail" design was never marketed. It shows the diversity of his interests and abilities. He spent an enormous amount of time in working on the Wingsail designs, and the designs for Fey Loong, which changed from year to year. This was partly through his conviction that the Wingsail rig would bring financial rewards, but partly also because he loved boats and sailing and was fascinated by the theoretical and practical problems of yacht design. (1)

(1) From correspondence with Mrs. Laura Cohn and confirmed by Mr. J. C. Pritchard.
WINGSAIL" Catamaran

Wells Coates and Leslie Appleton

1946
The quality which seemed to mark Wells Coates so strongly among his contemporaries was his clear perception of the tendencies of modern life. He saw how the architect by accepting the challenges of his century could help to transform society itself. In a letter he sent to the Editor of the Week-End Review, 4th February, 1933, he said:

"20th Century economics creates not only the possibility but the necessity for a new dimension of plan and order in the arrangement and aspect of life. The function of integrating, unifying and synthesising a multitude of new material details, processes and conditions, and of new human desires, needs, and appetencies and of giving to the whole a formal aspect of significance, presents itself to creative architects today."

(1) This letter was sent to complete an article of Joseph Emberton: "Our Obsolete Housing".
In his article "Furniture Today - Furniture Tomorrow" in the Architectural Review of July, 1932, he wrote:

"It is not for us to assume the survival of a society already dead in order to excuse "fine architecture", or indeed to try to educate a "better society" to destroy the vulgar, the foolish and the repellent. For the people get what they deserve, or what they allow, or what is not completely beyond them to appreciate. It is for architects to invent, and to exhibit, a better architecture which will quite naturally be accepted and demanded by the people, for the people and of itself produce a finer society."

In the field of interior design, Wells Coates always believed in the integration of furniture as a part of architecture. He saw modern living as essentially dynamic: changing our homes with increasing frequency, spending less time in them
and expecting to do just as much, if not more, in them than before, with greater comfort. To achieve this, the modern house must be designed to fit the habit of the user. Everything that could reasonably be built in, was built-in in all his buildings. In "Furniture Today - Furniture Tomorrow" he wrote:

"The requirements of the society in which we live must determine the things we make and live with. Our society is above all determined to be free. The love of travel and change, the mobility of the worker himself, grows with every opportunity to indulge it. The "home" is no longer a permanent place from one generation to another.

"A new freedom which demands a greater comfort and a more perfect order and repose, and also a new type of intricacy in the equipment of the dwelling-scene."

About furniture, he said:

"'Furniture' in the dictionary sense will take
its place in the logic of construction, becoming an integral part of architecture. For the rest, clothing, bedding, crockery, utensils, books, pictures and sculpture will have the select value of a personal environment; will be, in fact, the only 'furniture' (personal belongings) in use."

This principle had a Japanese inspiration. Wells Coates once described a typical domestic scene:

"There is no furniture, properly speaking. Trays for food are usually provided with short legs, so that the tray forms the individual table for the squatting diner. Beds are simply mattresses and coverlets, pulled out of structural cupboard spaces. The Structure and internal organisation of the scene permits any room to be a bedroom .... and so forth."

There was, too, some other Japanese influence in his early work, as it is obviously seen in his
reconstruction of flats at No.1, Kensington Palace Gardens, No.2, Devonshire Street and Charles Laughton's flat at 34, Gordon Square, London - all in 1931 - in the use of sliding doors of shantung silk on cedar frames. Later in his flat at 18, Yeoman's Row, Brompton Road in 1935, rubber cushions were scattered over Japanese matting in the living room area.

Wells Coates's flat reconstructions and his blocks of flats were probably his most widely-known designs. In a combined Harvard-M.I.T. report on "Design Precedents", he was the only architect in the world mentioned five times under "apartment design". (1)

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(1) In a letter from Wells Coates to Peter Thornton, his partner in Vancouver, B.C., on 13th May, 1958. Wells Coates had been told about the report by John C. Parkins of Toronto. There is no trace of this report in any of the University libraries and the report may possibly have been a statement in a school problem.
HARLES LAUGHTON'S FLAT, London.
8, ADDISCOMBE ROAD, CROYDON

Lent reconstruction 1931
This building has an important significance to the history of the Modern Movement in England. It stands as a pioneer experiment and sign-post to the new order in the English architecture of the thirties. The building symbolised the economic and social liberty which was provided by severe functional design. Modern construction had made it possible to plan in a way which offered increased comfort and mechanical well-being, solving the housing problem of the educated class of people who had the ideas of the twentieth century and wanted to live up to them.

The history of these flats started when Jack Pritchard (the Managing Director of Venesta and later ISOKON Ltd. - the word ISOKON being portmanteau for "Isometric Unit Construction"), bought an expensive site on the fringes of Hampstead with the intention of building himself a house and nursery, fully equipped with ISOKON furniture. He had even
14th March 1929.

Mr. Wells-Coates,
52, Doughty Street,
W.C.1.

Dear Sir,

We understand you did an interesting job at Cambridge for Messrs. Crysede Ltd., in which you used Venesta Birch stained, we think, by Drytone Ltd.

The writer would be very interested to see this job as we are trying to make a collection of photographs where Venesta Plywood has been used in various ways. Could you, therefore, let us have the address of the job in question at Cambridge, and let us know whether we might be allowed to take photographs? Full acknowledgment, of course, would be given.

Yours faithfully,
VENESTA LIMITED.
commissioned a design for it, which had been hung in the Royal Academy. But somehow the design did not satisfy the Pritchards. So, when Jack Pritchard discovered such an architect as Wells Coates, who had used his plywood, Venesta plywood, logically in the "Crysed" silk shop at Cambridge in 1928, he asked him to design a layout for the site. This was in 1929. Wells Coates did so, but pointed out that one "ought not" to build a house on a London site, one "ought" to build flats. Later there was a great argument about whose idea this was, between Wells Coates and Mrs. Rosemary Pritchard, but it seems the idea came out of discussion, although it was mentioned in every article or note in the newspapers and magazines on the ceremony of the opening of the flats in July 1934 that the scheme was inspired and instigated by Dr. Rosemary Pritchard.

The object of the design was:

"Comfortable living for young professional

people who would otherwise be condemned to living in digs."

Briefly, the aim had been to simplify the mechanics of living and to end the irritation of ill-design - an irritation which might be due to aesthetic or practical consideration or both.

Wells Coates and Jack Pritchard exhibited one "cell" which Wells Coates called the "Minimum Flat" at the British Industrial Art Exhibition at Dorland Hall in September, 1933. This type of exhibition proved a useful method in these earlier days of the Modern Movement of revealing new architectural styles to the public, and in this instance public enthusiasm was sufficient to obtain enough forward deposits for the erection of the flats.

The block was a four storey building, comprising thirty flats: 22 of the "minimum" one room flats, 4 "double" flats at the south, with rooms divided by sliding plywood panels; at the north end, over the general kitchen on the ground floor, there were
three studio flats with large north windows, but also balconied windows to the south-west. On the flat roof of the block was one large apartment with accommodation for children, and adjoining the kitchen and staff quarters there was a garage for ten cars. At each end of the building were stairs, one enclosed at the north end, and lit by a vertically continuous window in a tower-like feature. The other led to the covered balconies which were normally the access to the flats, giving a robustly horizontal character to the Lawn Road elevation. Wells Coates showed his artistic sense in his treatment of the open staircase as a piece of sculpture - a treatment which Le Corbusier later used in the Unité d'Habitation, Marseille, after the war.

Wells Coates had studied his problem socially and technically and provided a "Castle" for the Englishman without wasting space and with functional equipment. His principles in architecture, which include furniture, are clearly demonstrated in his
design of these flats. He had done everything that could be done to eliminate worry, labour and expense, to avoid "clutter" and restraint, and to make the business of living easy and pleasant. The "minimum flat" signifies a flat containing the minimum space and equipment. Furniture problems were largely eliminated because all essential furniture was built-in in a strictly functional and unobtrusive manner and could not offend the individual taste. Furniture supplied was a structural part of the original design.

The "minimum flats" each had a bed-sitting room which contained: "Dining Space" of a sliding table and "Living Space" which was a divan and built-in bookcase with a radiator and a small cocktail bar. The Dressing Room had a wash-basin with mirror, over-hanging cupboard and other cupboards and drawer. The kitchen was a veritable "machine for cooking in" which contained a small refrigerator, electric cooker, sink, draining board, refuse bucket, cupboard for crockery, etc.
The equipment was made up of simple units of plywood and laminated board, sometimes painted, sometimes left in a dull polished wood finish. The flats were ingeniously planned so that bathrooms and kitchenettes intervene between the bedsitting room, and thus reduce disturbance of one tenant by another.

Constructionally, the flats were worked out to a minimum cost. On the principle, now commonplace, that a building stands on its own legs, the main stanchions bear the floors and roof, which provides a terrace, and support the cantilevered galleries. The external walls are of 4" R.C., finished externally with a rough texture plaster and insulated within with cork slabs, plaster-finished for colouring to taste. Party walls have pumice stone insertion for sound insulation.

The only criticism made about these flats was that there was no "Cat-Swinging Space" provided. Wells Coates wrote about this later in his article 228.
"Planning in Section", in the Architectural Review of August, 1937:

"I had provided a communal room and a roof terrace for the service of the "minimum flat" dwellers. Compactness of planning in the apartments of group-dwelling must be matched by the provision of space in another, I thought. In this (and in other ways) "if you removed a single part of it, it would not be that thing, but become another lesser thing ...." Such are the penalties of building to an inadequate financial programme."

Almost the only criticism ever made of the concrete building occurred after the war, when, as a result of repair, the Lawn Road Flats won the second prize for the "Ugliest Building" in a competition organised by the now defunct magazine Horizon in December, 1946. This result was a great disappointment to many, including Walter Gropius and Siegfried Giedion. In Correspondence to the Editor of Horizon on 4th April, 1947,
Walter Gropius wrote:

"To the Editor of Horizon

READING the December issue of Horizon I was baffled to find the Lawn Road Flats near Belsize Park, London brandished under the caption "Ugly Building Competition."

"I lived in these from 1934 to 1937 and remember the building, which I know very well, to be a cheerful study of contemporary living. If the colour of the building should be unattractive at present, this cannot veil the basic soundness of this handsome building, of which I thought London could be proud.

"I fail to understand the point of view of the jury making this derogative award.

Very truly yours,

WALTER GROPIUS"

Siegfried Giedion wrote in similar terms on behalf of CIAM to express its disagreement.

No such observation could be made today on the
flats, the exterior of which looks remarkably up-to-date, and justifies the architect's original brief "to provide a building which should not be obsolete in 1950". (1) The directness and simplicity of its planning shows that architecture had found an exponent not content to be merely influenced by modern forms and systems of construction, but using the logic of plan and order as a straight path to design. And Wells Coates, the architect, was able to give comfortable living accommodation to a number of artists and intellectuals. (2)

(1) A.Rev., Aug.1934, pp.77-82.
(2) See names in Appendix VII (These names were supplied by Mr. Jack Pritchard on the understanding that they are not reproduced by any unauthorised person.)
AWN ROAD FLATS , Hampstead , London .

OKON FLATS NO: 1 "

1930 - 1934
b) SUNSPAN HOUSES (1934) with David Pleydell-Bouverie

Wells Coates's ideas on home living developed in his ingenious planning of the "Sunspan" House which was exhibited at Olympia in April, 1934, for E. & L. Berg Ltd. P.Morton Shand wrote of it:

"The "Sunspan" House, now on exhibition at Olympia, is perhaps the first serious English contribution to domestic planning forms since that famous discovery of the "free, open planning" of the English country house took the Continent by storm at the beginning of this century." (1)

The Sunspan house was the only complete example on show at Olympia of a house furnished and equipped throughout to the architect's designs. The plan is completely flexible, enabling the shapes of rooms

to be altered by taking space from some of them and adding it to others. It is therefore equally adaptable for several different kinds and sizes of house: seaside or riverside bungalows, suburban villas, small country houses, etc. Moreover, it enables an entire estate to be laid out in the true community sense, dominated by ideals of unity, order and neighbourliness.

The basis of the plan is a plain square. Part of its design is its position: it stands not parallel to the road but at an angle to it, so that two sides instead of one get all the sunshine that comes with a southern aspect. The large reception-room, with its two outer walls spanning the southern horizon, gives the house its name.

Other "Sunspan" houses were built all over the country; three at Coombe Estate, two at Hinchley Wood Estate and one each at Burnham, Southsea, York, Three Bridges in Sussex, West Kingston and Inverness. The most important one was the "Sunspan" house built
to be altered by taking space from some of them and adding it to others. It is therefore equally adaptable for several different kinds and sizes of house: seaside or riverside bungalows, suburban villas, small country houses, etc. Moreover, it enables an entire estate to be laid out in the true community sense, dominated by ideals of unity, order and neighbourliness.

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Other "Sunspan" houses were built all over the country: three at Coombe Estate, two at Hinchley Wood Estate and one each at Burnham, Southsea, York, Three Bridges in Sussex, West Kingston and Inverness. The most important one was the "Sunspan house built
as a bungalow at Welwyn for Mrs. H. N. Hill. It was one of the first truly prefabricated houses in England; the floors, walls and roof were prefabricated from "LEWIS" dovetail steel sheeting in a hollow construction erected on concrete foundations, plastered internally and rendered externally on site. Wells Coates, however, would be the first to admit the limitations of this method - the amount of site-work and the rigidity of plan. Later after the war, when he was doing consulting work for the Aircraft Industries Research Organisation on Housing, he recommended a "sectional unit", a method which became the "AIROH" aluminium house. For it he was asked to design the AIROH houses, but he did not proceed as he did not believe in the emergency housing programme. (1)

(1) Wells Coates: Memorandum, "R.U.P. : Room Unit Production", project submitted to the special Industrial Design section of the "Britain Can Make It" Exhibition, September, 1946.
SUNSPAN HOUSE. Olympia Ideal Home Exhibition

April 1934
SPAN Houses
"THREE-TWO" PLANNING IN SECTION SYSTEM:
10, PALACE GATE, LONDON

After the Lawn Road Flats design was finished in 1932, a design for larger unit dwellings in multi-storey buildings occupied Wells Coates's thoughts for the next five or six years. During that time he built Embassy Court, the twelve-storey block of luxury flats on the sea-front at Brighton (1934-1936), designing its furniture and equipment. Although the design of these flats contained no innovations, it was a triumph for Wells Coates to get Brighton Council to approve his modern block, surrounded by Regency buildings along the sea-front. In 1936 he built "Shipwrights", a week-end house at Leigh-on-Sea for John Wyborn (the EKCO engineer). This house, which stands on a few slim columns and has continuous horizontal windows, shows the influence of Le Corbusier's Villa Savoie. (1)

(1) "The Homewood", a house at Esher, Surrey, appeared in the A.Rev.of Sept.1939, pp.103-116, under the names of Wells Coates and Patrick Gwynne. Ian Nairn (footnote continued on following page ...)

250.
"HOMeward": House at Esher
Wells Coates & Patrick Gwynne
1938
But at the same time Wells Coates developed his ideas of flat design by introducing a new system which he called "Planning in Section". (1) To get people to understand and accept the idea of his design he had to build a single unit with himself as client, showing the technical problems involved and his solutions to them. This was his flat at 18 Yeoman's Row, Brompton Road, London, which showed Wells Coates's three-dimensional imagination. This capacity was further demonstrated in his block of flats at 10, Palace Gate, Kensington, which R.M. Bell commissioned him to build in 1936.

(continued from previous page...) in his book Modern Buildings in London attributed the house to Patrick Gwynne alone; and it seems not to have Wells Coates character. The real story was told to the writer by Patrick Gwynne and confirmed by Denys Lasdun, both of whom were working in Wells Coates's office between 1934 and 1936. They said that when the job was first in Wells Coates's office he proposed a plan based on that of the Sunspan house. Gwynne rejected this design and he, Denys Lasdun and Eric Neel developed their own ideas; the resulting analysis of a country house is shown in the AlRev. article of Sept.1939. The job was taken out of the office in 1936, and the house was completely detailed and built by Patrick Gwynne. But both Patrick Gwynne and Denys Lasdun acknowledge the debt to Wells Coates, since, if they had not worked in his office, "The Homewood" as it now is would never have been erected.

(1) This system was invented in Russia. See E.L. Lissitzky Russland, Germany, 1930, p.19.
N OF MAIN FLOOR LEVEL

WELLS COATES own flat at Yeoman's Row Brompton Road SW3
The feature which distinguished this building was the introduction of the "three-two" system of planning for the first time in England.

As with Lawn Road Flats, to finance the block a full-size apartment was built and "advance leases" were offered: this "Three-Two" type unit was shown at Bristol in 1936, completely furnished for P.E. Gane of Bristol.

The system yields extraordinary flexibility in interior layout. It consists of using one-and-a-half storey living rooms with single storey rooms elsewhere, so designed as to yield two interlocking but completely separate duplexes in each multiple of three floors. Entrances and circulation are in the interlocking units at the middle of these three levels. By this arrangement, which gave the name of "three-two" to the system, for every three storeys of normal height, containing entrance halls, bedrooms and service rooms, there are but two storeys containing living-rooms.
It is a complicated system which is best left for plans and diagrams to explain, but what should be mentioned are the economic possibilities of the system. The restriction of approach to one floor in every three means that lifts can be installed with the minimum number of stops. Approach corridors are similarly dispensed with on two out of every three floors, thus leaving extra space for the provision of rooms and enabling units to be arranged with external walls on both sides of such floors. The system has the further advantage of permitting a wide variety of accommodation, i.e. - without structural alterations, while still retaining the minimum corridor approach.

A somewhat similar scheme was devised at High Point II, Highgate, by Tecton in 1936-38. There the system was based on a "two-one" principle, making the living-rooms twice the normal height, which was very expensive.

When Wells Coates used the "three-two" planning
in a large block of flats, he found a legitimate relief to monotonous fenestration in his treatment of the elevation. The western front of the main block expresses the "three-two" plan by the use of full length approach galleries in every third storey, the storeys above and below each gallery storey being occupied by fenestration. This effective expression is lost behind the presence of the central block - economically necessary to the site shape - which surmounts the projecting main entrance feature. For aesthetic reasons the front wall of this block, above the entrance, is curved throughout its height.

Dr. Reyner Banham considered these flats to be clearly influenced by Le Corbusier's "Pavillon Suisse".¹ The rear (eastern) elevation is most satisfactory aesthetically, for there the tempo of the design was maintained, the large windows of the living-rooms contrasting rhythmically with the windows of the smaller rooms between them.

Structurally, the building is also of great
interest. A reinforced concrete skeleton, employing the principle of continuous design, has an exterior wall system of precast concrete units. Elaborate precautions against sound and temperature were included in both exterior walls and interior partitions.

Later, when Wells Coates was in Canada, 1956-57, he tried to improve his "three-two" system by producing a Y shape plan. He wrote about it to Dr. Otto Lampel (Advisor on Foreign Affairs of the Coseley Group of Companies) in April, 1957:

"You know that Ten Palace Gate was only a partial expression of my "Three-two" planning ideas for apartments: I had to torture the design into the dimensions of site; but it was a successful building. I have since then vastly improved the basic design and have reached a stage of ultimate expression of principles, which I want to build right here in Canada, in four cities: Vancouver, Edmonton,
Toronto and Montreal. The general idea is not to design a building for the site; but to find a site to fit the ultimate economic expression of a building design: with about 260 units of apartments, mostly of the "Three-two" type and going for the market in this field; making each building the place to live in, in each of these cities."

But as with most of his projects in Canada, these ideas did not find enough support to move away from the drawing-board. The principles of 10, Palace Gate, however, were applied again in England in the 1960's, when Denys Lasdun built his luxury flats in St. James's Place.
Plot plan, showing entrance (right) and exit (left) to the garage.
FLATS IN PALACE GATE, KENSINGTON
UPPER LEVEL, typical "three-two" unit.

MIDDLE LEVEL, typical "three-two" unit.

LOWER LEVEL, typical "three-two" unit.
WIND FRAME
CANTILEVER
FLUSH SOFFIT TO MAIN LANDING
CANTILEVER
BEAM IN SLAB
WALL ACTING AS BEAM IN CONJUNCTION WITH SLAB BEAMS AT FLOORS 3 AND 4.
FLUSH SOFFIT TO GIVE HEADROOM
CANTILEVER
BEAM IN SLAB
CONCRETE SKELETON OF ONE UNIT
GRD. FL. & FIVE 3½ UNITS GROUND FLOOR PLAN
PLAN 3 1/2 WING AT MIDDLE LEVEL = LM
PLAN 3|3 WING - OCCURS AT ALL LEVELS
PLAN OF PENTHOUSE TO ALL WINGS
EPILOGUE

Wells Coates's professional life includes periods of success and failure. The body of this study has been concerned with his group activities, design work and writing in the decade 1929-1939, which saw his greatest achievements and success. There were various disappointments and setbacks; nevertheless he established himself as an important pioneer of the modern movement in England.

After the 1939-1945 war, British architecture in general adopted a sentimental and picturesque attitude which was a source of continuous complaint for Wells Coates. The rise of Swedish and "Empiricist" attitudes among those who might be expected to be his direct followers left him out of touch with the generation who set the style of post-war architecture, (1) and made it difficult for him to participate in the architectural life of London in that period. However,

(1) The result offered to Lawn Road Flats by the Horizon competition (December 1946) attracted little disapproval from English architects at the time.
the next generation, those whose training had not been completed until the beginning of the Nineteen Fifties shared his suspicion of the Picturesque tendencies, and for them he became an important link with the International Style and Le Corbusier.

This popularity came too late to bring him work, perhaps because it was not sufficiently influential to overcome his reputation for an excessively dogmatic approach to architecture and for very high fees. The total number of his buildings is small – less than a dozen (only one after the war) and he did not find, or get, the chance to express his talents fully. This was due to many factors, among which his character and temperament were perhaps the most important. His old friend Jack Pritchard has said:

"Wells Coates was always destroying himself, he was a total architect but not a total person, as he made life difficult for himself. But it was obvious that Wells Coates was as something across the river, he was a great innovator." (1)

(1) In a conversation with the writer.
Denys Lasdun put it this way:

"Wells Coates, as many others, was a prophet, and prophets can't build. His ideas took a long time to be appreciated by society and the time lag is nearly thirty years." (1)

At various times he entered into partnership with other architects, but there was not one such union which was both long-lived and productive. Idealism, pride and hatred of compromise may have been some of the characteristics which made it difficult for him to work with colleagues and clients. (2) With his employees and partners he could be egotistical and arrogant. Patrick Gwynne said:

"I always had the feeling that I was small beside Wells. He made you feel that he was the master and you, the young boy." (3)

(1) In a conversation with the writer on 19th Oct.1965.
(2) Correspondence with Mrs.Laura Cohn, October,1965.
(3) In a conversation with the writer on 19th Sept.1965.
In 1950 Coates formed an association with Jaqueline Tyrwhitt, to carry out large scale architectural and planning work if a commission were received. The association was a happy one, and they talked of several schemes; but under the conditions in Britain at that time, they were not able to get any work and their aims did not materialise. The association was ended when Jaqueline Tyrwhitt took up a teaching position at Yale University in 1951. (1) Apparently other partnerships ended in quarrels or a cul-de-sac where projects were abandoned.

Wells Coates had the spirit of the real artist and he lived like one. The understanding of every question was a challenge, because he maintained a spirit of inquiry and saw complex problems that needed solution. For this reason he had a tendency to go beyond the stated requirement of the client,

(1) From correspondence with Professor Jaqueline Tyrwhitt, 15th April, 1965
producing plans that were more ambitious than the client's and naturally more expensive. R.M.Bell (for whom Wells Coates built 10 Palace Gate) wrote:

"Wells was a person who had to have behind him a sponsor versed in the technique of building if he was to succeed. Meaning, that unless the financing client knew his subject, Wells would run away and would be improving and altering and so on, and this was an extremely expensive matter." (1)

No doubt there were many good ideas in such schemes, but perhaps they were not feasible at the time or for the job in hand. He drew plans for Television Studios for the Festival of Britain of 1951, a permanent building at the cost of some £150,000. This abandoned project was replaced by the "Telecinema" and the Television Pavilion. But in many other cases when large scale projects

(1) In a letter to Mrs. Laura Cohn on Oct. 1965.
fell through nothing was built in their place. His plan for the new town of Iroquois is the prime example of a very ambitious scheme originated and developed by Wells Coates - on his own - which he then tried to "sell" to someone who would finance it. Another was his post-war scheme for the "St. Lawrence Cliffs Hotel", using a structural scheme (Rooms into Frame) which had not even been tried in any form at that date.

The same lonely spirit and questing mind were responsible for Wells Coates's successes.

He became a close friend of Le Corbusier; both showed imaginative insight and an ingenious approach to architecture. Therefore for the young architects of the thirties and fifties, Wells Coates like Le Corbusier seemed a vital force in the modern movement. I hope this study will make a later generation conscious of the inspiration that Wells Coates gave to modern architecture in England.
RUP: ROOM UNITS; Project: St. Lawrence Cliffs Hotel, Thanet, Kent.
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I have often wondered why I really went to the war. This is a thought which has troubled many men, I suppose. I was nineteen when I joined up. I wanted to go earlier, but my family said no. I had lived in the east until the age of seventeen. I had not been brought up with a "British" bias — or even a "white" one. So then I did not go because of "patriotic" motives. No, I must have thought (subconsciously, perhaps)... "something important is happening on the other side of the world... I want to be where important things are happening." Some such thought, I presume. I had no idea what it meant for the world. But I knew it meant something to me. I had completed two years at the University when I joined up. Life there did not seem to be very important. Life at home was tight and hard... I could not do what I wanted. So I was very happy when the train pulled out of Vancouver, bound for "overseas."

Fourteen months in the artillery trenches taught me a great deal about myself — and of my fellow men. I felt I was losing myself. So I tried to cast about for means to lose myself from the threads entangling me. I discovered that what I was really afraid of was responsibility. Responsibility for things that happened to other men. Orders had to be given, parties sent out. I transferred to the Flying Corps. When I went to see the General commanding the Division to have my papers signed he asked me why I wanted to leave... adding some flattery, such as "We need men like you here." I said, in the flying game one is responsible for oneself alone. He nodded his understanding and let me go.

It was while flying that I found myself again, or rather for the first time. I began also to see what this game of war meant to the external world. My fear was transferred to groups of men, nations, the world. I was becoming self-conscious. The exhilarating game of flying kept me going. And then suddenly the war ended.

One day in June 1919 I received a cable from one of my old professors. He told me to interview a certain man. Out of this interview I received a scholarship to carry on my university work. Had this impetus to carry on with what I had started not come at that time, I might have been engulfed in the post-war feeling of "getting on" in the world. I had had tempting offers of employment. I had not taken them really seriously, but they were there. And then my family had not seen me for nearly four years. So I went back to Canada. I arrived in Vancouver on the last day of September, 1919. I registered the same day, and the next morning attended my first lecture — in uniform.
I found myself surrounded by a new set. They pleased me superficially. They flattered me. I did no work, until suddenly I realised that examinations were upon me. I worked hard for a month, and got my B.A. degree with first honours.

Two years after I received my B.Sc.

During these three years I enjoyed myself. I felt, like many other men, that I deserved to enjoy myself. It was an attempt to blot out the memory of those war years, which everyone assured me had been horrible. They told me so, therefore I remembered only the horror, and enjoyed myself. Superficially, I knew. My real enjoyment was in my work, science. I felt I must master this approach to reality, an approach which had not presented itself to me by the life of the east. I discovered that with no apparent effort on my part I was superior to most of my classmates, my professors, and my friends outside university circles, in understanding. This seemed quite natural to me. Therefore made few real friends. That is to say I did not feel compelled towards them in a real way. That was until one night Josephine Battle introduced me to you. You were the first person I had ever met who seemed to be in touch with reality in the way I too, felt it. You understood what was going on. You also happened to be a woman, and that made a great deal of difference. I did not think an intelligent woman existed, except my mother. That was a great discovery for me, finding you, Mark. And ever since then you have stood for something quite unique in my life. Something constant, in a world of ever-changing values.

I got another scholarship, and came back to England. To Europe, the centre, where important things happened. I was romantically eager to get on, in science. I had chosen my research subject after the most careful consideration, lasting several months. When I got here, they said: "This is something which has not been tried before. It is more difficult than you think. Why not try something easier...surer of success?" I said no. If I can't try this and succeed, then I'm not much good in science. So they agreed after many weeks, and the first year was spent in discovering the method. Once the method was found to work, the research would succeed.

Towards the end of July 1925 I had not yet discovered that method. There remained but one week in which to do so. The labs closed, on Friday. On Wednesday I had failed in my latest technique. Thursday I spent wandering about the streets of London. About five o'clock, while passing a shop in Cheapside where electrical apparatus was shown in the window, I noticed printed on a showcard this word: "Waterglass" It gave me an idea. The next morning I rushed to the lab and tried it. I had
only that day, until six o'clock, to try it. By three I had
left my thermojunction in the electric furnace long enough.
By six I had completed a full test. I had discovered the
method. The same day a truth was revealed to me, a truth
which I did not fully apprehend until many months later.
The next day you came to London, and we talked. It was
strange seeing you again. Although you did not know it, you
brought me back to reality more directly than did my bank
balance of five pounds — the last of that year's research
grant, overspent in buying equipment — with nothing further
in prospect until October. How you did it, I don't know, but
somehow you spaced out those things for me; love, science, and
understanding. In two years you had outstripped me in that
last: understanding; and for the first time I suffered an
inferiority complex. I did not like you for that, Mark, but
how thankful I am that you came just then!

I was at my lowest in August. Perhaps you will
remember. I cannot visualise very much of what took place
during those weeks. I know that instead of spending the proceeds
of the pawnshop on food, I bought Aristotle and Plato, and
Berkeley and Shaw.

And then things came my way. I took a job in Fleet
Street. From two p.m. to eight p.m. every Saturday. I worked
on the report which would bring me another year's research grant.
I got it, and continued the Fleet Street work. I was behind
in my payments. Again you came just in time, with a substantial
investment in my stock. Why are you always there when I most
need you, Mark?

And then you were ill, and went back to America, with
the Sonnets I gave you for Christmas. Of course that ribbon was
placed there intentionally!

One day in November I met Alfred Borgeaud. It was at
the College, where my tests were making astonishingly fast
progress. Six years my junior, Borgeaud towered above the heads
of all the other students there in intelligence and understanding.
He was the first male friend to come into my life. A few days
after we met we were walking up Regent Street, after going to
an exhibition of French Impressionist paintings — a new world
for me. I said, "What are you going to do when you get your
degree?" He said: "Oh, I dunno....Do this and that...live to
the full....for about ten years...and then toss myself over a cliff, I suppose." Borgeaud was
twenty-one, and full of life, romantic. He had been brought up
on D.H. Lawrence and a mistress who was a painter. She opened
his eyes to the world Cezanne, Van Gogh, Gauguin, Matisse and
Picasso have discovered for all eyes.
From that time on Borgeaud and I saw a great deal of each other. It was impossible for us not to. We worked and studied together, each bringing to the other's knowledge news of specialist fields, but each naturally sympathetic and agreed on the fundamental unknowns. In order not to spoil our friendship with any sentimental or bitter elements, we built up a marvellously acute and accurate unspoken language, which we used (indeed could only use) between ourselves. We only spoke on conviction and reflection, careful never to repeat arguments we had previously gone over. This was a very precious relationship, which we both treasured above all others. Borgeaud lived in St. Leonard's-on-Sea but was in town during the week in term time.

I continued my research, and in due course sent in my Thesis. This was June 1924. One day towards the end of May (1924) I went to dine with a Canadian friend who had just arrived in town from Vancouver. We went to the Canadian Club. On entering the doors we saw a figure whom we recognised at once as that of Fred Law, an old Vancouverite, journalist. "Where have you come from?" we asked, looking at the trunks and bags. "I have been conducting pilgrims to Palestine" he replied, "I landed at Liverpool this morning. I have six pounds in my purse, and the ambition to tackle Fleet Street in my heart. Let's have some dinner."

We soon decided to take a flat together. Don King, Fred Law and I. I had had to leave St John's Wood two weeks before — the house having been sold over my head — and lived in temporary lodgings. We found an admirable place in Chelsea and set up.

Fred Law soon entered into my life in a way few others have, or had, until then. I had known him in Vancouver only as a youngster, who left University in his second year to go into journalism. He had since been all over the United States, and during a nine months' sojourn in California with some people called the Hydes had received a new vision. Not an intellectual, but a mad man of sensibility and humour, Fred was a good example of the naif artist, besides being a very good companion. He taught me a great deal. He showed me above all that the crisp, dry channels of intellectualism presented a dusty answer to the soul's eternal question: "what shall I do with my life?"

In July I got my Doctor's degree. Strangely enough, it meant absolutely nothing to me. In fact, my actual scientific work was dull and uninteresting to me from the moment I had solved the particular problem I had set myself. It stirred my interest in other ways, however. I took up the study of the history of science, its philosophical and metaphysical foundations, and, along with Borgeaud, explored the fresh fields of modern poetry, literature and painting. I continued my work at the "Daily Express" — from June on taking a half-time job which kept me at the office from 5.30 to 8.30 p.m. every day, allowing me sufficient time to do what I wanted with the best part of the day, and a subsistence
wage. I read an enormous number of books, and generally, life was quite pleasant, though uneventful. I explored all the possibilities of further scholarships for research work, and was interviewed by a great many grand professors and scientists, but no further work materialized. The only possible openings were with large firms, with whom one was required to sign long-term contracts at a wage never more than Five Pounds a week -- and live out of London as well. I earned that much money by working (mechanically) for three hours a day in Fleet Street, with time to read and study and explore on my own, to see plays, hear music and meet people. I wanted to continue the researches I had made in fuels, but no one seemed to be interested, although I pointed out the importance of this sort of work. No, they would dictate the sort of work I should do. I thought: "I shall try for a "pure science" job at Cambridge, perhaps" and to this end I enlarged my knowledge of the essential mathematics. And so the months wore on. At the end of August Fred Law went to Africa as the "Express" correspondent with the Cape to Cairo Motor expedition, expecting to be away nine months. Our little menage broke up at the end of October, when King left for Vancouver.

The arrangement with the "Express" seemed to suit me more and more. I read and studied all the books and subjects which the pressure of routine academic studies had withheld from me, and saw only a few people. I found myself writing poems.

I was staggered during these months at the breadth of my ignorance. I passed through periods of the lowest depression, and these embittered me. I began to hate people, the world, and civilization. Borgeaud and I talked of quitting it all, striding forth into the new world, stripping ourselves of all the advantages of education and self-culture, and living simply just as other people. In other words, we touched the borders of romantic abnegation, and to counter this, we built up, slowly and surely, a framework, a barrier, from which we could laugh at the world without hurting ourselves. To amuse ourselves we started to compose a book of dialogues. We even became communists, and joined the 1917 Club. These were our distractions. We had not yet found ourselves. Then, one evening at a studio party, I met Marion.

That was in February, 1925, so she would be nearly twenty years old, then.

Marion was a revelation to me. I had entered the large studio, and as one does, looked round to see who was there -- about thirty people. I saw her sitting alone by the fireside, and in two minutes my hostess had introduced us and we were dancing. Her beauty was that of some rare bird, unheard of, unearthly, like a polished bronze by Brancusi. The "I of each to the I of each a kind of fretful speech," we became devoted to each other at once. Just as Fred had done in another way, she brought me
back from my brittle abstractions to the reality of a
xotic culture, with pulsing, throbbing personal life.
How small these words are! How can I ever show that
for the first time in my life I was in love?

I must race on. Marion and I saw each other constantly,
and then at the Easter recess we went away together, to a
little inn in the Chiltern Hills, "The Pink and Lily".

Marion was born in China -- the daughter of a railway
engineer. Leaving the East at the age of six with her
brother one year her senior, she had spent ten years at
a co-educational school in England, and at the time I
met her was attending the London School of Economics for
the B.Sc. (Econ.) degree. Her mother, a prominent theoso-
phist, had influenced her ideas more than she then imagined.
With me she learned of the existence of a new world, which
slowly changed her ideas, and consequently, her actions.
I soon discovered that she had not yet found herself -- even
with me, I thought vainly; she was young, very young.
I began to withdraw into my barrier, and she did not understand.
In June she went away with her family to spend the summer in
Germany. We wrote long letters to each other every day.

During these months I had given no thought to myself, which
was not in some way connected with her. All the daily decisions
one makes every day -- to do this, or that? -- were conditioned
by her. And then, late in June, there came an opportunity for
me to take over the assistant correspondence for the "Daily
Express" in Paris, for a month, and I leaped at the change of
a change from London. I returned to London for
a week in August, and my tenancy of the post in Paris meeting
with their approval, I was asked to go back and take charge
while the regular correspondent covered the Washington Conference
-- a "tour" of another three months. I went to Paris
I kept strictly to myself and my job there. I must have read
one book per day. I kept up my scientific and mathematical
studies. Life was full, and it seemed there was a purpose once
more. At the beginning of September she passed through Paris
(alone) on her way back to England. Somehow the quiet vegetative
life she had spent in Germany -- a far cry from London, and
studio parties and crowds of people -- had numbed her, and she
could not respond. The old feeling, the old vibrations -- were
there had they gone? She left me desolated, alone, more secluded than
I had ever been. The weeks dragged on. Josephine Rattle's
presence in Paris lightened my burdens a bit, but by the time
I left for England I had twice written to Borgeaud, suggesting
that now the time had come to clear this "civilised" life away,
and march out on a journey of discovery. But at Victoria
Station one day towards the end of October she was there to meet
me. The old vibrations, the old feeling, was there. My sweet
Marion.......
A number of members of the Group have expressed to me their surprise that, although one of the signatories of the original memorandum and invitation which called together the Group and a member of its Executive Committee, I have not expressed at any of the meetings my personal views on its aims and objects.

The discussion which arose at the last Executive Committee meeting which, more than any other, appears to me to have touched on the essential difficulties, has decided me to state my own convictions — convictions which, as several of the members know, have not remained unexpressed in private discussion.

The idea of the formation of a Group of contemporary designers arose in the first place out of private discussions following upon the announcement of the organization of an exhibition of contemporary "decoration" sponsored by a well-known advertising agency. It was felt that such an exhibition would fail — not necessarily financially — if it were left to the discretion of what were believed to be purely commercial interests to select, order and organise it. It was therefore proposed that unofficial meetings of professional designers and others should be held in order to canvas opinion and to formulate practical proposals with the initial object of furthering common aims by means of exhibitions and other activities.

I think it must now be apparent to all who have taken part in the discussions that the aims of the Group have, at times, been enlarged beyond the scope of the original intention, but it must be agreed that at no time have the aims and objects of the Group been clear. What I believe was an advance on the original intention was made when it was agreed that the whole character of the new movement in
the applied arts - which we, supposedly, represented - was architectural rather than decorative. This agreement naturally affected our views regarding the holding of an exhibition or exhibitions. It was with some surprise that I heard a number of members express their indecision in regard to, or perhaps even ignorance of, the canons of what has been loosely called "the modern movement." It has even been suggested that the movement is concerned merely with new shapes: meant, I imagine, in the purely decorative sense.

It seems to me that there has been a lack of appreciation of the undeniable fact that, if the character of the new movement is architectural rather than decorative, its basis is scientific. Scientific, in the sense that science has discovered new laws which have changed the very conditions of daily life. Scientific, in the sense that scientific analysis has opened our eyes to the existence of aesthetic traditions of the highest order, older, and unlike the Greek and Gothic traditions.

As architects, engineers, allied designers, and enlightened amateurs of to-day, we possess this knowledge. I take it that we all wish to make use of it: for the possession of knowledge is not for ornament but for practical use: indeed, the possession of knowledge without putting it into practice is the same as not possessing it.

In the development by our Group of a practical strategy for putting our knowledge into action, we must, I think, take note of the strategies already in action against us, even those of - shall I say - the unconscious enemy within our midst.

I would suggest to you that our Group can never be effective until it is united by a common aim. A statement of this aim would seem to be essential at this juncture.
Paul Nash has pointed out: "A knowledge of the basic values of modern aesthetic must be as necessary to English designers to-day as 200 years ago when Robert Adam wrote: "The detail of our profession comes naturally to the man who understands its great principles..... the architect who begins with minutiae will never rise above the race of those reptile artisans who have crawled about and infested this country for many years."

At the very commencement of my task I am faced with a very real difficulty. The higher up in the scale of intelligence and vitality people are found, the less do they care, or are they able, to associate with each other and lend each other help. The inherent weakness of this natural isolation, as Wyndham Lewis has remarked, is the cause of all human misfortune, since the inventive individual is constantly exposed to destruction in a way that the un inventive, mechanical, associational man is not. Had the best intelligences at any time in the world been able to combine, the result would have been a prodigy of power, and the result for men at large of the happiest. Again, the inherent weakness of an individual statement, or manifesto, or personal confession, as it might be called, is that it is invariably ascribed to egotism or self-seeking of some sort.

Wishing to avoid these tacit accusations on the part of my audience, wishing also to make my statement a précis of the influences that have shaped my attitude, I am taking a way out of my initial difficulty. By dramatising myself in the persons of three imaginary characters, they will act for you against the scenery that I shall describe. It may be that by this means I shall create an atmosphere in which the reception of practical and detailed proposals will be made easier.
The first of these three characters plays the role of differentiator, and for the sake of convenience I have imagined him as the child of an ancient and non-European culture. The second plays the part of identifier, and is essentially a man of our day. The third character I have imagined as a mature kind of rebel, a practical man, possessing the attitude and the knowledge of the first two characters combined, with, at the same time, the will to put his knowledge into action. This last character will present to you certain practical proposals.

These characters will speak in the name of a number of persons, dead and living, who have expressed clearly a point of view which seems to me to have remained unchanged throughout the ages. For the sake of effectiveness and also of convenience, their statements will be presented to you unsigned, as it were. The names commence with Confucius, Kawng Tse and other ancient Chinese sages and passing swiftly down the centuries include Shakespeare, Sir Henry Wotton, Samuel Butler, Henry Ford, Wyndham Lewis, Frank Lloyd Wright, W. K. Lethaby, Lewis Mumford, James Burford and other writers. Some of the statements are made by the three characters themselves, searching, perhaps for an Author.

I shall ask you then to project your senses in order to imagine the first character, a stranger to the West; one born and brought up according to the inflexible customs of the ancient civilisation of Japan. He "inheritance of culture" by the children of our epoch is a glib phrase inaptly applied to the study of, say, the novel writers of a certain era, coupled with a brief visit or two to the more important art galleries of Europe. In the East it is not so. The cultured man is one who is himself an artist, who has been trained sensually - above all visually - to the aesthetic apprehension; who inherits a culture...
perpetually resurrected in his own eyes, voice, hands and movements.

This character I shall call the Artist-Samurai.

9. The Samurai has travelled to Europe. His preparations are simple.

He has been told that a man whose eyes have been trained in the East will only rarely want to open them in the West. He has provided himself therefore with a temporary substitute for sight, of a kind of aesthetic X-ray. Indifferent to the confusion of appearances and re-appearances, the careless accretion of layer upon convoluted layer of architectural growth, he is able to track down its underlying shape, the sources of its traditions. Gradually there becomes perceptible a basic pattern. Its grandeur calls forth his admiration. This and this only of European traditions is the one comparable to his own. He describes it as at once rich and severe. It is the tradition of Greece. Here and there a fully-rounded and complete pattern makes its appearance - the true derivatives of Greek traditions; one or two whole streets and squares, one or two churches, a few houses - each design differentiated according to proper function. But the pattern, blotted and marred, and finally debased, disappears behind the monstrous banality of a commercial city.

The Samurai speaks. "How barbaric is your habit of overloading! How seldom does an object stand in the place which correlation appoints to it! How obtrusive your pictures are! And how rarely is a European aware that a room exists for the man, and not vice versa, that he, and not the curtain or the picture is to be given the best possible setting! What is the meaning of this ugliness, banality and squalor which meets his eye as it travels up practically any street in London, or wanders round any Hotel lounge or Restaurant, or delects itself along the wall of the official galleries at Burlington House? Exactly what set of circumstances, what lassitude or energy of mind working through millions..."
of channels and multitudes of people, make the designs on match-boxes
(or the jokes on the back of some), the ornamental metal-work on the
lamp-posts, gates, knife-handles, sepulchral enclosures, serviette-rings,
most posts, ornamented Menu cards, the scenery in the Musical spectacles,
chapter-headings and tail-pieces, brooches, bangles, embossments on
watches, clocks, carving-knives, cruets, pendants in Asprey's, in Dobson's,
in Hancock's windows in Bond Street; in fact, every stitch and scrap of
art-work that indefatigably spreads its blight all over a modern city,
invading every nook, befouling the loveliest necks, waists, ears, and
bosoms; defiling even the doormat - climbing up, even, and making absurd
and rapid the chimney-pot, which you would have thought was inaccessible
and out of sight enough for Art not to reach?

"You Englishmen are naturally averse to asking these questions. But there
is a point in your anti-intellectual armoury that has been severely pricked.
Your sense of order, of comfort - of practical life, that is. The
disagreeable litter of the countryside, the posters, the excrementa of
undigested form-content and colour-content, all the objectionable bits
and pieces and their alarmingly rapid increase by new methods of
reproduction - have begun to be nuisances, and you have formed Societies
for the mitigation of nuisances. A great deal of influential patronage
has co-descended to give its name to these Societies, a great many
remarks have been made, money has been raised.

Your Societies for the Preservation of Rural England, for the beautification
of industry, your highbrows, your art-snobs, who take up a merely negative
attitude, for the preservation or the conservation of this, that and the
other; who say to the commoners who, after all, know no better:
"You must not erect your sham Tudor tea-shop, or your sham Greek details
all over your petrol station...." all this is based on a completely
wrong psychology.
"You have debased the great traditions. You have converted a Greek temple into a bank, and plastered the already second-rate columns of the ancients onto Selfridge's the grocer's shop in Oxford Street. The petrol station is merely the logical conclusion. To abuse these petty tradesmen; simple and ignorant as they are, anxious to make an honest living and knowing no other necessity, is the most foolish of all possible proceedings.

If you must treat the public as animals in a vast zoo, you should at least observe the usual rule of such places: Do not irritate the animals.

"The futility of niggling highbrow interference is only too patent. The whole standard of art in your commercial, cheap and musical-cosedy civilization is of the basest and most vitiated kind. Practically nothing can be done, no public formed, until these false standards are destroyed and the place sanified. How, then, must it be done? The method proper to the West and the great age of scientific invention gradually will accomplish this.

"For I see - not among the highbrows, but among others, inarticulate as yet, the silent practical men, the technicians and scientists - the beginning of a new order. The surfaces of cheap manufactured goods, woods, steel, glass etc., the forms of machinery, factories, new and vaster buildings, bridges and works - all these are pregnant with significance. In mechanical inventiveness you Englishmen are the leaders. You are the inventors of this bareness and hardness - the Romance people are its defenders. The Latins are at present, for instance, in their discovery of sport, their futuristic gush over machines, aeroplanes etc., the most romantic and sentimental moderns to be found. It is only the second-rate people of France and Italy who are thorough revolutionaries.

In England, on the other hand, there is no vulgarity in revolt. Or rather.
there is no revolt. It is the normal state of the right-minded Englishman removed from the influence of his wrong-minded superiors. Once a conscious sense of the new possibilities of expression in present life has more developed it will be the legitimate property of you Englishmen than of any other people in Europe. It should also, as it is by origin yours, inspire you more forcibly and directly. Incidentally, it will sweep away a narrow and pedantic realism at one stroke - that realism which is the final debasement of the great tradition of Greece.
The second of my imaginary characters now takes the stage. He is described as the "identifier" — a scholar, and a man of today.

I shall name him the scientific-Mandarin.

Adopting the technique which the cinema has made it easy for us to follow, he will project on to the screen of our problem a series of close-ups and sub-titles, definitions and precisions, attracting our minds now this way and now that. He does not expect each close-up to be completely seen: it is the composite picture, and the composite attitude, which he desires to present by this "montage" technique.

To those whose talents are above mediocrity, the highest subjects may be announced. To those who are below mediocrity, the highest subjects may not be announced. To the mediocre, one extends, with a few well-chosen words, the courtesies that are their due.

The Chinese term for truth is tse li, meaning supreme reason. It was defined by Tsu Tse as composed of two elements, one the one hand "why is it so" and on the other, "it is as such." Truth is indeed as strange a bird as ever flew in a Chinese forest.

A man is made, not born, and he is made, of course, with very great difficulty. He does not want, if he can possibly help it, to be a man, not, at least, if it is so difficult.

A man is an entirely artificial thing, then, like everything else that is the subject of our grudging admiration. Or if there is an exception to this rule, it is the abnormal or exceptional man, whom we worship as a 'hero' and whose unnatural erectness arouses almost more hatred than surprise. Prostration is our natural position. A worm-like movement from a spot of sunlight to a spot of shade, and back, is the type of movement that is natural to men.

Not that Adam that kept the paradise, but that Adam that keeps the prison... he that came behind you sir, like an evil angel, and bid you forsake your liberty.

We must honour what Heaven has conferred upon us. Let us ask ourselves, "do we want to be men?" If so, we must be independent and honour that "self" of ours, and not follow the footsteps of others. The superior man enslaves things, the inferior is enslaved by them.

There are only the wise of the highest class, and the stupid of the lowest class, who cannot be changed.

Let men therefore study those arts whereby the opinions of a minority may be made to seem those of a majority.
Continuity, in the individual, as in the race, is the diagnostic of a civilized condition. If you can break this personal continuity in an individual, you can break him. For he is that continuity. It is against these joints of the personality that an able attack will always be directed.

The multitude wants a fine myth for its money or its life; and it is not critical of the technique that produced it.

This is the age of the diatribe and nothing is thought to have been stated until it has been stated in words.

The way to say it, is to say it.

What can be stated, can be stated clearly. What can be chewn, cannot be stated. What can be imagined, can be imagined clearly, and so, will some day come true.

What can be stated about architecture, the greatest of the visual arts, can be stated clearly. For the rest, architecture must be shewn, seen, and used. In England, now, architecture is only heard of.

In the strict sense of the word, our world — that is, the world is to us — is a functional world, the word "function" being used to denote the quality of activity-in-existence. To take an analogy from mathematics, we can express ourselves algebraically, but not arithmetically.

This should not be interpreted to mean that design is determined by considerations of efficiency only. In architecture there are usually many equally efficient solutions of the mere problem of efficiency, including economy. The architect's aesthetic sense is exercised in the discrimination between various equally efficient solutions.

The word "functional" as applied to architecture is capable of misinterpretation and even abuse, for all architecture has to a greater or a less extent been "functional."

Architecture is the scientific art of making structure express ideas. An idea: that is, a forcible emotion, wrapped up in an ideologic covering, fixed, and, as it were, embalmed in the intellect.

Architecture is not merely building, not even building well. It is not so simple as that. Architecture is building ordered and controlled to express an idea or an emotion appropriate to its purpose, its position in Time, and above all, to its creators.

Architecture is the triumph of human imagination over materials and methods and men, it is man's sense of himself embodied in a word of his own.

Surface is to architecture the light-reflecting element of mass. Mass is the bulk of construction. Both are products of structural causes. Neither is more than superficial. They are results.
The new sense of depth that characterises architecture is integral, rather than sculptural, is a spiritual sense of the third dimension.

The new sense of form that characterises architecture is organic.

Form is organic only when it is natural to materials and natural to function. An organic form grows its structure out of conditions as a plant grows out of soil, both unfold similarly from within.

Good form is good sense, put into some effective shape appropriate to some material.

Simplicity when organic is spontaneous inevitable result.

Simplicity and style are both consequences never causes.

Buildings are like trees, when both are allowed to be themselves. Who would say the oak is greater than the elm, the willow superior to the birch, the beech more noble than the pine, the apple-tree superior to them all, except for specific purposes.

Specific purpose is the qualifying aim of all creation.

Nature is nothing unless specific. Organic buildings are likewise.

Buildings like trees are brother to the man. Buildings, trees and man are all "out of the ground into the light."

Monotony is impossible to the working of this principle, because all then lives. Standardization could live similarly.

A matter of taste is usually a matter of ignorance.

Creation never imitates, creation assimilates...the creature imitates and simulates.

In organic architecture decoration is desecration, because to decorate is to apply. "Of the thing itself...never on it" applies to every feature of an organic building. "from the ground up" is good sense in building: beware of "from the top down."

Solemnity, sincerity, sobriety, gaiety -- all may characterise architecture, but humanity will best love creative work characterised by joy.

Shibui is a Japanese word for deep quiet in architecture, quiet requiring studious acquaintance before realised. A more subtle evidence or profound feeling than repose itself. Therein lies the highest fruit of the human soul in architecture, belonging especially to organic architecture.

The Chinese sought qualities in colours and materials, with greater sense of depth than any other race. Their glazes produced in little all great qualities seen at large in external nature. Their textures
were as soft skin to the touch, as flowers in sun or mosses in rain, for colour, their sense of form found joy in the pendant. Only a very old civilization, subtle and profound could have reached the last word in refinement of form. Such are the sensibilities of organic architecture.

All art must be a political expression to some extent, and science exists seeing to its usefulness. All art today is more involved with science than at any former period.

Science is the science of the inside of things, art is the science of their outside. Art is the differentiator; science the identifier.

Science, in making us regard our life as a machine, has also forced us, to be dissatisfied with its sloth, untidiness, and lack of definition, and given us in our capacity of mechanics or scientists the itch to improve it.

We should remember what we owe to our machines, which are our creatures. "Remember the machines!" would be a good watchword or catchword. We are imbuing them with our own soullessness.

To tell the imperishable English labourer today to keep at all costs his home and castle in one and continue to cling to this phantom of authority, is to urge the continuance of a stupid torture. The poor become poorer every day: you cannot, unless you are a heartless fool, do nothing.

"Quality" — the word as much as the thing — is probably a greater fetish in England than in any other country.... The Englishman refuses to realize that whole classes of goods have come into existence recently which it would be almost physically impossible to make by hand, and in which hand finish could not hope to be so satisfactory as machine finish.... He will have to accustom himself to the idea that handmade and machine made goods are essentially different in their nature, and that the era of unbridled individualism with its concomitant handmade goods has gone for ever.

If a machine requires no judgment at all to operate, then it is better to make it automatic than bother a man to attend it.

Whatever the politics of a country may be, the machine is always a communist.

The earlier machines had such a limited field of work that the designers of products were also limited to crude essentials. Today machines are so much more capable than they used to be that the designers are not limited. The tradition of handwork is a serious hindrance to the minds of designers. Designs which will take more advantage of the power of machines to go beyond what handwork can do, will give us a whole new art.

Modern industry demands more highly skilled men and more of them than are in the world today. The situation is exactly the reverse of what it is commonly supposed to be for instead of industry requiring a constantly lessening proportion of skilled men, it is requiring a constantly growing proportion. These men require not only skill but versatility, and it is harder to get versatility than it is to get skill.
The modern way of building must be flexible and vigorous, even smart and hard. We must give up designing the broken-down picturesque which is part of the ideal of make-believe. The enemy is not science, but vulgarity, a pretence to beauty at second hand.

Modern design is based on the principle of conspicuous economy.....The old-fashioned house was a species of private museum, and one of the chief occupations of the housewife was that of curator.

We can enjoy these new forms to the full only when we no longer ask them to satisfy irrelevant interests: the impulse to display oneself, the impulse to dominate one's fellows, the impulse to demand homage, not for what one is, but for what one has.

Modern armoured concrete is only a higher power of the Roman system of construction. If we could sweep away our fear that it is an inartistic material, and boldly build a railway station, a museum, or a cathedral, wide and ample, amply lighted, and call in our painters to finish the walls, we might be interested in building almost at once.

We cannot forget our historical knowledge, nor would we if we might. The important question is, can it be organised and directed, or must we continue to be betrayed by it? The only agreement that seems possible is agreement on a scientific basis, on an endeavour after perfect structural efficiency. If we could agree on this we need not trouble about beauty, for that would take care of itself.

Experience must be brought back once more as the centre of architecture, and architects, must be trained as engineers are trained.

The modern way of building must be flexible and vigorous, even smart and hard. We must give up designing the broken-down picturesque which is part of the ideal of make-believe. The enemy is not science, but vulgarity, a pretence to beauty at second hand.

To conclude: The great line, the creative line; the fine exultant mass; the gaiety that snaps and clacks like a fine gut string; the sweep of great tragedy; the immense, the simple satisfaction of the surest, the completest art: you could not get if you succeeded in eliminating passion.

Well-building hath three conditions: Commodity, Firmness and Delight.
Mr. third character now takes the stage. He is described as a mature kind of rebel, and above all, one who possesses certain knowledge, desires to carry it into action.

We are at the beginning of a new epoch, indeed, the first baby of a new and certainly better day. The advocates of the order that we succeeded are still in great majority. The obstacles of the dead period will be protracted and naturally extensive. But that period is nevertheless as nailed down, cold, but with none of the calm and dignity of death. The past acts has shown it to be suffering from every conceivable ills.

No time has ever been more carefully detached from the one it succeeds than the time we have entered on has been by the Great War of 1914-18. It is built solidly behind us. All the conflicts and changes of the last ten years, intellectual and other, are terribly symbolized by it. To us, in its immense meaningless shadow, the war appears like a mountain range that has suddenly risen as a barrier, which should be interpreted as an indication of our north.

There is no passage back to the lands of yesterday. Those for whom that yesterday means anything, those interested and credited are on the other side of that barrier, exhort us daily, or frenziedly to scale that obstacle (largely built by their blunders and egoisms) and return to the Past.

On the other hand, those whose interests lie all ahead, whose credentials are in the future, move in this obstruct shadow with satisfaction, forward and away from the sealed and obstructed past.

We know that all our efforts indicate a desire to perfect and continue to create; to order, regulate, disinfect and stabilize our life.

What I am proposing is activity, more deliberate and more intense, on the external we know, and on our present very jejune stock.

When I put forward this opinion -- that the aspect of life, and the forms that surround us, light, perchance -- without too great sacrifice or too great a disturbance maximizes for dear conservativeness and delicate obstretionisms -- might, be modified, I start from Buddha rather than from Lipton, Vimalakirtana or Taduma Tassaud. But I start from Buddha with so much of the fashion and spirit of our time as we should have developed living in our midst today: familiar with delights and delighting in the pleasant inventions and local color of our age: drinking Buchanan's Scotch whisky with relish, smoking Three Muses, familiar with the smell of Harris tweeds, Cathay wool, and the hot pestiferous Tube wind. I do not recommend any abstraction of our mental structure, or more definite unclotting than to strip till we came to the energetic lines required.
Modern humanity has destroyed the form whose development made our ancestors profound, and while we are inventing the new form to replace the old, men are becoming more superficial and more evil from year to year.

Every possibility which has been exhausted, creates, phoenix-like, new possibilities from within itself.

So we then, are the creatures of a new state of human life, as different from nineteenth Century England as say the Renaissance was from the Middle Ages. We are, however, weak in numbers as yet, and, to some extent, uncertain and untried. What steps are being taken for our welfare, how are we provided for?

There is no mature authority, outside of creative and active individual men, to support the new and delicate forces bursting forth everywhere today.

I think we should begin to regard ourselves as drawing near to a remote future, rather than receding from an historic past. The time has perhaps arrived to do that! Have not a few of us been preparing?

Our transformation comes in the incandescence of some endeavour.

All any true scientist or true artist asks is to be given the opportunity, without interference, indifferent to glory, to work.

If the creative minds of the world are indeed for ever cancelled and rendered ineffective by the agency of the 'unprogressive' mass of men, then they should be protected and rescued.... Left at the mercy of this vast average, its 'creative hatred' and conspiratorial habits where 'the new' is concerned -- we shall always checkmate ourselves. The more we 'advance!' the more we shall lose ground.

Instead of the vast organisation to exploit the weaknesses of the Many, should we not possess one for the exploitation of the intelligence of the Few?

Gentlemen: I propose that our organisation should form the nucleus of a new Group, to be called the Alpha Group, "alpha:" signifying beginning.

I propose that it be composed of all those creative individuals within whatever category or specialised unit, whether artists, scientists, or technical experts, industrialists, manufacturers or enlightened amateurs, whose interests lie all ahead, whose credentials are in the future, who are united by a common aim: to perfect and create, fashion and compose the new order in its three-dimensional and visual aspects: all those who are, in this sense, truly the architects of the new order.
Remembering that there are many people who would be eligible under these categories, who are highly intelligent, well-informed, possessing excellent taste and who are yet nothing, who are quite ineffectual, I propose that a condition be imposed: that our Group should include only those who can produce material evidence of their agreement with our great aims, in the form of actual work done.

Among men enlightened and intelligent, there is no difficulty of assessing this condition.

Further to safeguard our organisation from the diseases of stagnation and decay which characterise nearly every society in England, I propose that we should require further evidence of this kind to be deposited each year by every member.

Remembering that practicability depends on the urgency with which an object is desired, and upon the inconveniences which men are prepared to undergo in its pursuit, I propose that every member should perform a definite function, preferably of his own choice, to the attainment of our common aims.

Remembering the old saying, that when laws and regulations multiply, the world will be full of robbers and thieves, I propose that our Group be constituted with simple and effective rules, directed towards practical action.

Remembering that when we want to put anything into practice, the only road to success is to practice it, I propose that individuals be at once asked to produce their credentials, and to be asked to play their practical functions, as they may choose themselves, or choose to be directed.
APPENDIX III

STATEMENT OF ARTS AND CRAFTS OF CONTEMPORARY

THE ORIGINS OF THE GROUP.

1. The Group was formed in July, 1930. Serge Chermayeff, Wells Coates, Fansfield Forbes, J. C. Prichard and Howard Robertson met privately to discuss proposals for a specific exhibition of Modern British Design.

In the course of their discussion they found themselves in close agreement on the following points:

(a) That only the best examples of modern design should be exhibited.

(b) That for this reason the selection of exhibits should not be left either to the trade or the organisers, but be controlled by a committee selected by the designers themselves.

(c) That its purpose should be to express as comprehensively as possible the significance of modern design in the life of the modern community. It should envisage the needs of all classes of the community, the municipality, as well as those of commerce and industry. It would be mainly architectural in nature and would be concerned with groups of dwellings, factories, offices, houses, shops and places of entertainment and units of transport in common use, as well as with furniture, fabrics and fittings.

2. As the next step towards achievement of such purposes, invitations were extended to other designers to join in further discussions, and to certain individuals who were believed to be sympathetic towards the aims of the Group to join in further discussions.

These names are set in in List A.

3. In the course of subsequent meetings of this larger group, general if not unanimous agreement with regard to the following points was reached.
(a) That whether this specific exhibition was held or not other opportunities for exhibitions, not necessarily as comprehensive could offer themselves or could be created.

(b) That there existed sufficient common interests and enthusiasm for such projects to justify the formation of a definite group.

(c) That since the Group's wider aims were to further the interests of the community, it was not the object of the Group to promote the sale of work of individual members.

(d) That since the purpose of the Group was to protect and maintain the integrity of modern design from elements of aesthetic commercialism and personal eccentricity, unity of aim among members was of first importance. This would involve a careful selection of members and aesthetic control of any exhibition in which the Group might participate.

(e) That to this end a Council composed of professional and non-professional members should be elected to act when necessity arose as final authority in both these respects.

On such a date the Group elected a temporary Executive Council of three Officers and seven members, with power to co-opt other members. This Council was composed of:

Chairman - Col. E. B. Tilney
Vice Chairman - R. M. Fielding
Secretary - A. Wickins

The Council was requested to draw up a statement of aims and draft the outline of a constitution.

Thus the Council now present for the
consideration of members.

AIMS OF THE GROUP. (B. 1.)

1. To define the principles to which contemporary design should conform.

2. To make known these principles by writing, lectures, and discussions, etc. and by contact with Government authorities, with manufacturers and other business enterprises, and with existing Societies interested in design.

3. To co-ordinate the efforts of modern British designers, with a view to the achievement of architectural unity.

4. To promote exhibitions of contemporary design in relation to architecture and interior equipment.

RELATIONS TO OTHER SOCIETIES. (B. 2.)

When the occasion demands the Group will seek the co-operation of Societies with common purposes.

OBJECTS OF THE ORGANISATION AND GOVERNMENT OF THE

SECOND-THIRTY GROUP. (C.)

1. The title of the Group shall be the "20th Century Group."

2. The Group shall at present be limited to 150 members of equal status of which 90 shall be architects, practising structural engineers and allied designers, and 60 other members. A record of the profession of each member will be kept by the Secretary. The proportion of 60 - 40 shall be maintained.

3. Honorary memberships shall be open to Dominion and foreign designers of distinction who are nominated and seconded by at least five members and approved by the full Council. There shall be no other honorary members and no patrons.
4. The foundation members of the Group will consist of all those who have attended any of the general meetings of the provisional Group who signify in writing their consent of its aims and bye-laws.

5. The subscription shall be one guinea per annum— to be paid in January of each year.

6. New members shall be admitted on nomination and seconding by at least 5 members subject to the approval by a three-quarters majority of the executive Council voting by secret ballot. Nomination forms having been completed should be sent in to the Secretary without loss of time.

7. (a) The conduct of affairs of the Group shall be in the hands of an Executive Council responsible for keeping all members of the Group informed of events and proposed actions relevant to its object.

It will be composed as follows:— Chairman, Vice-Chairman, Treasurer and Secretary and six members.

(b) Of the Council 6 shall be practising and 4 non-practising members.

(c) A quorum shall consist of 3 non-practising and 2 practising members.

(d) The Chairman when necessary shall have a casting vote at any meeting of the Council.

(e) The Council shall have power to co-opt other members for temporary or specific purposes and to call upon non-members for specialised advice.

(f) Two non-practising members and three practising members shall retire each year and be eligible for re-election.

(g) Those five places, viz., three practising and two non-practising, shall be filled by a majority vote of those present at the annual general meeting. Nominations supported by three members being sent to the Secretary fourteen days before the meeting.
(h) It should be a matter of strict convention that the name of the group shall in no case be used by individual members to further their individual interests.

In the event of any members contravening the rules of the Group or in the opinion of a majority of members present at the Annual General Meeting, acting contrary to its purpose or spirit, that member shall be excluded from further meetings and activities and his membership shall lapse forthwith.
1. It is important that the Group should be constituted as soon as possible in order that we may be able to utilise any opportunity that presents itself.

2. Though the Group holds itself ready to co-operate in the organisation of relevant exhibitions, the Council believe that the first and most important specific activity of the Group is the holding within three years' time of a comprehensive exhibition, comparable in scale to the Swedish exhibition including a complete housing scheme with mass produced and standardised equipment. We propose that this exhibition be spoken of as actually projected, on a "three years plan", with the Group as organisers and adjudicators.

It is proposed that a special meeting be called to consider the nature and size of this exhibition, and thereafter that actual plans and projects be drawn up in sufficient detail to indicate its scope to all concerned.

The Council trust that all members of the Group will be willing to perform a definite function during the various stages of this "three years' plan", either in the drawing up of plans or by serving on such committees as are necessary or in approaching the Government and other bodies, or by establishing contact with various manufacturers and trades concerned.

3. Further, that as soon as convenient after the completion of these plans for the large exhibition, a smaller exhibition be organised at which the plans and certain models would be shown privately to a selected list of persons, as a complete and detailed project which the Group has originated and intends to carry out.

4. The Council also propose that a Committee of designers be appointed to present a report of the Group's constructive proposals for the revision of building regulations and bye-laws now being discussed by the present Government and the L. C. C.
Re Project for a Twentieth Century Group Exhibition
to be held in conjunction with the "Daily Mail"
Ideal Home Exhibition, 1933.

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Preliminary

§1. It was decided at the meeting held at the Arts Club
when the members of the Council met Eros Shapland, that
plans would be commended with a view to capturing the
"Ideal Home" Exhibition, at Olympia, 1933. A further
meeting, which was attended by Mr Eicholls, Mr Chermayeff
and Mr Wells Coates, was held on Wednesday 2nd December
at Mr Eicholls office to discuss further the project.
Suitable plans of Olympia were not available at this
meeting. On Thursday 3rd December Mr Wells Coates
had prepared a 1/16" scale plan of the Hall in question,
for discussion at the meeting later in the day to be
held at Mr Grinling's house in Hampstead.

PROPOSALS to
be presented

§2. The following is a gist of the proposals which I
think might be presented to this meeting, followed by
suggestions regarding procedure.

a) That the Group should elect one architect-member to
be the organiser of the exhibition from the point of
view of design generally, and that this member should
select his panel of architects for the schemes in view.

b) That this Committee, under the leadership, it is
suggested, of Mr Frederick Eicholls, should be responsible
for the exhibition, and that it should have powers to
coop other members for specific work, and also non-
practising members for the purpose of organisation work
generally.

c) That one member be given the job of laying out and
printing a comprehensive catalogue of the exhibition as
a whole, and that this catalogue should be, in fact, the
real "manifesto" of the Group. (Mr Francis Maynell suggested)

d) That a sketch plan, and, possibly, a perspective view,
of the proposed lay-out of the exhibition, be prepared as
soon as possible by Mr Eicholls and his assistants, and that
a short report on the scope and ideals of the exhibition be
prepared at the same time, and that the scheme be then
presented by Mr Shapland or other suitable members to the
Daily Mail authorities, with a view to putting over the
idea at once.

e) That absolute secrecy regarding the exhibition is
imperative at this stage, and indeed, for some time to come.

f) As regards finance, it would be suggested that the
proposal to organise "sparehead" exhibitions on actual
building sites near tube stations (as suggested by Mr Mansfield
Forbes) might be combined with the Daily Mail exhibition idea
in some specific way: Contractors, would for instance, be asked
to put up the actual exhibition structures and undertake to
carry out actual buildings on a selected site, at a selected
figure, and that this information would be given out at the
exhibition. Mr Pick or other influential people would be
approached before the exhibition opened, but not until it was
decided definitely that the exhibition was going to be held.

g) I would propose that no smaller exhibition of the group
be held before the Olympia exhibition, nor should a Manifesto be issued until it is decided that this Daily Mail project is under way, and actually being proceeded with. The real "Manifesto" would be issued with the catalogue of the exhibition.

Scope of Exhibition

1. The Exhibition generally is to be a "housing" exhibition, under the name "The House of To-day" — with no adjectives like "modern" or "muntrip" or whatnot.

The exhibition would take the following form:

1. There should be large open spaces for the circulation of traffic. The usual method of the "Ideal Home" exhibition, in this respect, would be spurned entirely. Thus, a large open space would actually form the street itself, of a group of houses as mentioned below.

2. The "Street of Today" would include, say, three or four houses, all designed to be occupied by persons possessing $5 a specific income:

<table>
<thead>
<tr>
<th>Type</th>
<th>Income of £</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td></td>
<td>detached house</td>
</tr>
<tr>
<td>Type B</td>
<td></td>
<td>detached house</td>
</tr>
<tr>
<td>Type C</td>
<td></td>
<td>semi-detached do.</td>
</tr>
<tr>
<td>Type D</td>
<td></td>
<td>would be a small tenement house, with flat of single-rooms, double-rooms, and three or four rooms, with certain communal services such as heating, washing space, etc. but not &quot;service flats&quot; in the usually accepted sense.</td>
</tr>
</tbody>
</table>

There would probably be room in the main area of the hall for these buildings to be erected in the open. In addition, under the gallery space, there would be room for the erection of various types of flats or apartment houses, each scaled for different incomes.

3. Uniformity in the scheme would be secured by erecting dummy facades round the ground floor, rising to a height just above the existing balcony railings. There would be room for any one-floor flats under the gallery.

4. There would be large gangways, and spacious openings to and from the exits and lift points, etc. The main entrance to the housing exhibition would be placed in that area dividing this hall from the main Hall. This would be left open, or nearly so, the existing columns being boxed in to form part of the actual scheme.

5. Some of the space under the gallery would be reserved for the display of collected exhibits of furniture produced on mass-production lines (or able so to be produced) frames designed by specific architects, and produced by specific firms.

6. The whole of the gallery space over to be divided into stalls for the display of specific materials, fittings, furniture and equipment by selected firms. The firms to be selected by the architects, and allowed to show only those articles which they selected. These firms would pay for their space, and the cost of erecting and illuminating etc., their stands, to the architectural design, including layout of lettering, etc. Certain materials, equipment, etc., would be "keyed" into the actual houses on the ground floor below, by means of lettering, and in the catalogue, but no actual firms would be mentioned, apart from contractors and certain others, in the actual houses exhibited below.
7. Apart from the open area or the ground floor of the hall in which the three or four buildings would be erected, the following are approximate areas of spaces available under the gallery area, for the erection of one-floor schemes for flats.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Dimensions</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Wall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To the West of the Entrance Area</td>
<td>50' x 50'</td>
<td>1'</td>
</tr>
<tr>
<td>One Fascade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To the East of ditto</td>
<td>50' x 50'</td>
<td>2'</td>
</tr>
<tr>
<td>(which could be combined with)</td>
<td>30' x 30'</td>
<td>3'</td>
</tr>
<tr>
<td>East Wall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Fascade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One large area, which would be split up, if necessary into the following</td>
<td>50' x 40'</td>
<td>4'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Wall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Reading from East to West) The following areas would be available, leaving large and ample spaces for access to lifts, staircases, etc., and a gangway along this wall, necessitated by the position of Messrs Lyons' quarters, staff quarters, etc., on this wall</td>
<td>50' x 50'</td>
<td>5'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Wall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Fascade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To the South of the central entrance area</td>
<td>40' x 25'</td>
<td>11'</td>
</tr>
<tr>
<td>To the North of ditto</td>
<td>25' x 20'</td>
<td>12'</td>
</tr>
</tbody>
</table>

The remainder of the ground floor area to be left open.

Thus there is room for twelve different flat schemes; with the possible grouping of areas 4 5 and 6 into one, to form, say, the ground floor social rooms of an ideal tenement house scheme.

8. The external walls of partitions forming these flat-schemes etc., facing the open areas for the circulation of traffic in the vicinity of lifts, entrances, and staircases, etc., would be available for the exhibition of drawings, and other matter such as graphs of population, housing density, air-maps of congested areas, etc.

9. An area of approximately 40' x 50' would be available in the southwest corner of the hall for the purposes of a store-room and exit for the service of staff for the exhibition itself.

10. The Gallery area would have an open gangway on the balcony side, with stalls of required depths and widths as required for specific exhibits.

(Notes prepared by Wells Coates)
APPENDIX IV

Private & Confidential

MINUTES of Meeting between Wells Coates
E. Lambell Fry
D. Pleydell-Bouverie
P. Lorton Shani

held at 36 Sutherland Terrace, S.1. 28th February 1933.

relative to the formation of a British group of the Association of
The INTERNATIONAL CONFERENCE OF MODERN ARCHITECTURE

The letters exchanged between Dr Cieciorn, the Secretary of
the International Association, and Wells Coates, authorising
the latter to form a British group of architects and engineers
allied to the national groups organised in nineteen other
countries to work in collaboration with the International
Association, were formally read to the meeting.

Wells Coates then announced the formal constitution of the
group as from this date, 28th February 1933. The following
had been informed, prior to the meeting, of the proposed
formation of the group, and had consented to support it:

Architects
Wells Coates
E. Lambell Fry
D. Pleydell-Bouverie

Non-Professional Adherents
Lorton Shani
de Cronin Hastings
John G-long

Varvings out of a discussion of the formation of the Interna-
tional Association, and of the various enquiries which have
in the past been made by the Secretariat at Zurich in regard
to the possibility of representation in Great Britain, and
finally of the recent formal authority given to Wells Coates
to form a group in Great Britain, Lorton Shani was asked to
prepare a short statement of the genesis of the Association.
This statement to be used in communicating with prospective
members.

The various items on the Agenda Para.(2) prepared by Wells
Coates were then discussed, and the following outlines of
principles and policy of group were agreed:

a) That the British Group does not compete or coincide
with the aims and objects of any existing association,
society"Institute of architects or engineers nationally
organised in C.B.

b) That the group exists primarily to correlate ideas and
principles with the groups in other countries, and at
the International Congresses.

c) The following abstract from the Statutes of the Interna-
tional Association was adopted as the rule under
principles of the Group: The Association exists

1. To formulate contemporary architectural problems
2. To represent the modern architectural idea
3. To cause this idea to penetrate technical, economic and social circles
4. To work towards the solution of the contemporary problems of architecture

a) That the group must allow the prospect of a journey to the forthcoming Congress at Moscow (June 1-10 1933) to attract members who are not qualified to carry out the ideals of the association.
b) That the membership of the group must therefore be kept select and small, and be restricted to those who are willing and able to carry out effective work for the group and for the association, according to their qualifications and functions, "without personal interests."
c) That the direction of the group must in some sense be recognized as dictatorial during the period of its formation and organisation, by all its members.
d) That the group must steer clear of all tendencies, both in principles and policy, inherent in most British organisations, to develop into happy hunting grounds for personal interests, or 'prayer-meetings' for impersonal ones.
e) In the discussion of qualifications for membership the exclusions — even in a list of 'possibles' — must necessarily be more numerous than inclusions.
f) The technical organisation of methods of recruiting membership from schools, both architectural and engineering, must be carefully elaborated.

j) The following classes of members was suggested and approved in principle:

a) Architects, engineers, town planners, and also allied technicians and experts, who are able to present suitable credentials, and are furthermore able to present proofs from time to time, in the form of actual work done, of their adherence to the principles of the group and of the association.
b) Non-professional adherents to the ideals of the professional members, prepared to collaborate and work actively towards the aims and objects of the group.
c) Professional or non-professional 'good' names of the
It was decided not to mention the formation of the Group at the informal meeting of architects taking place on March 1st 1933, at Godfrey Samuel's rooms, relative to a proposed exhibition of international architecture in London.

The possibility of transferring the exhibition at the forthcoming congress in Moscow, to England in the autumn, or at some other convenient time, was discussed, and approved in principle.

A list of names of prospective members was discussed at some length, and a short list tentatively approved. A statement outlining the specific qualifications for the three classes of membership will be prepared and issued shortly by Wells Coates. To illustrate the discussion, it might be added that on the evidence of the published designs for the Low Olympia Exhibition Building, it was decided to exclude Joseph Emberton from the group.

The question of the first public announcement of the formation of the Group was then discussed. Morton Shand pointed out that further detailed information relative to the forthcoming congress at Moscow would soon be published internationally and that the existence of a British group, officially constituted, would have to be made known in any case some time before the date of the Congress.

It was therefore decided to make a public announcement shortly, but not before an opportunity had occurred to sound certain prospective members privately. The terms of the announcement to be as follows:

"At the invitation of the President and Secretariat of the International Congress of Modern Architecture, Mr Wells Coates has formed the nucleus of a British section of this International Association of architects, engineers and townplanners.

It will be recalled that the First Congress was held at Le Souris in June 1928, the second at Frankfurt in October 1929, and the last at Brussels in November 1931, when official delegations from 19 other countries—not, however, including Great Britain—attended.

It is hoped that it will be possible to send a small official British delegation to the Fourth Congress which is to be held at Moscow June 1 to 10th of this year.

The British Group will be known as the ................."
It was decided that this announcement should be sent out on plain notepaper to the following:

<table>
<thead>
<tr>
<th>Societies etc.</th>
<th>Journals (Technical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R I B A</td>
<td>Architects Journal</td>
</tr>
<tr>
<td>A A</td>
<td>Architectural Review</td>
</tr>
<tr>
<td>Surveyors Inst.</td>
<td>Arch. &amp; Building News</td>
</tr>
<tr>
<td>Builders Inst.</td>
<td>Builder</td>
</tr>
<tr>
<td>Town Planners Inst.</td>
<td>Building</td>
</tr>
<tr>
<td>Structuring Inst.</td>
<td>Master Builder</td>
</tr>
<tr>
<td>D I A</td>
<td>Brick Builder</td>
</tr>
<tr>
<td>Royal Soc. of Arts</td>
<td>Arch. Design &amp; Constr.</td>
</tr>
<tr>
<td>British Steelwork Ass.</td>
<td>The Engineer</td>
</tr>
<tr>
<td>Reinforced Concrete Ass.</td>
<td>Engineering</td>
</tr>
<tr>
<td>Architectural Schools</td>
<td>The Studio</td>
</tr>
<tr>
<td>throughout C.B.</td>
<td>The Parthenon</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Other Journals -

The Times
Manchester Guardian
Yorkshire Post
The Scotsman
The Weekend Review
New Statesman and Nation
Spectator
Listener
Everyman
Time & Tide
New English Weekly
The Twentieth Century

Wells Coates proposed Morton Shand as 'Corresponding Secretary' of the British Group, to be responsible for all communications between the Group and other national groups, and the International association headquarters at Zurich, Switzerland. Accepted

Wells Coates proposed de Cronin Hastings as General Press Representative, to be responsible for all announcements, etc. in British Press, technical or otherwise. Accepted.

The meeting adjourned at 12.30 a.m. 1st March 1933

[Signature]
Wells Coates
The following notes arising out of last night's meeting, minutes of which are enclosed herewith, are communicated for your comments, approval or necessary action. Please confirm receipt.

Please refer to para. Numbers, in any communications relative to these notes.

1. To members present at last night's meeting: Please note that slight additions and alterations to last night's agenda have been made, in the transcription to the enclosed minutes.

The form of the proposed announcement has been slightly altered. The words "of architects, engineers and townplanners" has been added at the end of the first paragraph, and the "with headquarters at Zurich" phrase left out. The dates and places of the former congresses have been included, instead of mentioning only the last one. It may be that before the announcement is made further details may be included in the announcement: e.g. Dr. Ciesion may communicate some important information. This will be circulated before the actual announcement is made.

I have also added, at the bottom of the proposed announcement, the phrase: "The British Group will be known as the......blank." I do not propose to include any address, but you are asked to say whether you think this would be a suitable name:

"G.B.M.A." — i.e. The Group of British Modern Architects

"Gee Bee En Eh" rolls off the tongue easily enough. "Gee Bee" also aurally associates "Great Britain" with the name.

Any other suggestions welcomed. I think that 'constructed' words, such as the CIRPAC (Le Comité International pour la réalisation des problèmes architecturaux contemporains"

—the committee which is elected by the International Congress — are not suitable for consumption in G.B.

Compare RIBA, AA, FII, EIIA, EIIA, RII, etc. and SPCK

73. Membership of Executive Council

a) I propose that the Executive Council be composed of nine members, six professional and three non-professional adherents, the latter to have voting powers. The professional membership to include at least one 'pure' engineer-member.

b) The non-professional Executive Council members to be as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. Morton Shand</td>
<td>Liaison with national and international groups</td>
</tr>
</tbody>
</table>
Private & Confidential Memo

H. de C. Hastings
Function: Liaison with G.J. Press

John Gloag
Function: Liaison with British Trade Organisations and professional societies, institutions, etc.

These offices might be called 'Liaison Secretary'.

c) I propose Maxwell Fry as Vice-President or Vice-Chairman

d) Other offices (if any): please make suggestions. I suggest that the Secretary-Treasurer, who will be technically responsible for Minutes, local correspondence, etc., be a professional member, and although attending meetings of Executive, not necessarily a member of the Executive, and in any case not possessing Executive vote. That suggests the type of man. I propose F.R.C. Yorks for this position. Please comment, or suggest other names.

Q4. Group Membership.

It is obvious that the initial selection of architect and engineer members will be extremely difficult and delicate affair. It is difficult to lay down any hard and fast rules. Certain people who are popularly and notoriously known as 'modern' architects obviously do not qualify in our sense e.g. Howard Robertson, Grey Wornum, Oliver Hill, Walmsley Lewis, Oswald Milne, etc. Others working in the modern idiom, and professing what have been called 'functional' principles, are really professional 'assemblers-practitioners, or decorative-specialists, or colourists, etc.

As suggested last night, I think the word 'structure' best expresses the accent in design, and in personal character, required. Does he think in terms of structure?

As far as possible I should like to see the first members of the group represent, in some specific sense, one particular aspect of structural design ('design' includes also concepts such as purpose, function, and intention) e.g. at least one for 'town-planning' (i.e. W.R. Fry), one for design in steel (a 'pure' engineer) etc. In this way it may be possible to include certain individuals in a specific sense, even though they do not fully qualify in other senses, i.e. 'doubtful' people who might better be asked in than continually 'kept out.'

Non-professional adherents in other professions, i.e., doctors, psychologists, etc. co-opted as experts, to give advice, etc. Names would be welcomed, please.

Q5. Finance

Suggestions as to subscriptions, and methods of raising contributions for specific exhibitions or meetings, travelling expenses etc.

Q6. Meetings

Suggest, for time being, second and fourth Saturday
1. Services
   a. Water and Sanitation
   b. Heating and Ventilation
   c. Illumination
2. Mechanical Equipment
   a. Lifts, Escalators, Conveyors
   b. Moving parts generally
   c. Specialised equipment
3. Fittings, Furniture, Furnishings

D. Building Industry Organization

1. Finance
   a. Public
   b. Semi-public
   c. Private
2. Professional
   Architects
   Engineers
   Surveyors
   Building Lawyers
   Specialists
   a. Education
   b. 1st Subject matter
   II Methods
   b. Practice
   Relations:
   Public
   Clients
   Executants
   Operatives
   Other professions
   Own profession
3. Building Research
   a. State
   b. Commercial
   c. Private
4. Merchant
5. Contractor
6. Operatives

II. Standardization
1. Raw materials
2. Production
3. Distribution
4. Application
5. Maintenance
6. Weights and measurements

IV. CO - RELATION

V. PRESENTATION
   a. Printed matter
   b. Exhibitions
   c. Designs
A. Planning

1. Non-structural
   a. Land
   b. Regional
   c. Town
   d. Zone

2. Structural
   a. Agriculture
   b. Industrial
   c. Commercial
   d. Transport
   e. Administration
   f. Educational
   g. Health and Sport
   h. Assembly
   i. Clubs and Hostels
   j. Dwellings

B. Materials

1. Uses
   a. Frames
   b. Floors
   c. Walls
      1st Internal
      1st External
   d. Openings
   e. Finishes
      1st Vertical
      Internal
      External
      1st Horizontal
      Internal
      External

2. Properties
   a. Weight
   b. Strength
   c. Age
   d. Resistance to:
      1st Water
      1st Fire
      1st Heat
      1st Sound
      1st Light
   e. Specific
   f. Visual

3. Methods and Processes
   a. Natural
   b. Manufactured
   c. Synthetic
   d. In situ

4. Costs
   a. Raw material
   b. Production
   c. Distribution
   d. Application
   e. Maintenance
The following are the detailed headings of subject matters I, II, III, IV, & V.

I. ANALYSIS OF HISTORICAL CONDITIONS

A. Physical Conditions
   1. Social
   2. Legislative

B. Individuals
   1. Biographical Notes
   2. Sayings

C. Technical Conditions
   (see subdivisions under III.)

II. ANALYSIS OF NON-TECHNICAL CONDITIONS

A. Social
   1. Physical Statistics
      a. Density of population
      b. Birth rates
      c. Family
      d. Health
      e. Occupation
      f. Property
      g. Migration
   2. Economic
      a. Agriculture
      b. Industry
      c. Commerce
      d. Finance
      e. Professional
   3. Political
      a. General
   4. Educational
      a. General
         1st State
         11th Private
      b. Technical
         1st State
         11th Private
   5. Psychological
      a. Individual
      b. Group
      c. Industrial

B. Individual
   Reports of statements and attitudes

C. Legislative
   1. Planning & Zoning Regulations
   2. Power and Transport
   3. Ownership of property
   4. Hygiene
   5. Fire
   6. Structural
   7. Design
be clearly shown when the following is a catalogal list of the headings.

International Congresses for Modern Architecture

Outer Circle individuals

Other National Groups

liaison

M A R S

liaison

Professional Societies

Other Research Bodies

INNER CIRCLE MEMBERS

PERMANENT COMMITTEES

ACTIVITIES

Short Term Congress Programme

Long Term Committees

TECHNIQUES

Contact

Search & Research

Accumulation of Facts

Analysis of Facts Accumulated

Synthesis of Analysed Facts

To Subject Matter

I. ANALYSIS OF HISTORICAL CONDITIONS

II. ANALYSIS OF NON TECHNICAL CONDITIONS

III. ANALYSIS OF TECHNICAL CONDITIONS

IV. COHESION

V. PRESENTATION

For detailed subject matter under these headings see next pages.

ACCENTS

on all activities

Facts

Necessary

Contingent

Odd

Verbal

diagrammatic

graphical

three-dimensional

full size 3-dimensional

diagrammatic

graphical

three-dimensional

full size 3 dimensional

diagrammatic

graphical

three-dimensional

full size 3 dimensional

verbal

etc. etc.
Dear

With the close of the Provincial travelling exhibition this month Unit One will come to an end.

The events which led up to this are as follows. At a meeting held at the Mayor Gallery on October 5th, 1934, a proposal was carried that in future a unanimous vote only should insure membership. The majority of the Unit supported the suggestion and a private ballot was arranged. The result of the ballot was that Henry Moore and Paul Nash were elected. As a first step in reconstruction Wells Coates was invited to complete the representation of the three arts constituting the Unit. Owing to the enforced absence of Paul Nash from London several weeks passed before a meeting could be held. In the meantime discussion was carried on by correspondence. Edward Wadsworth accepted an invitation to rejoin but later withdrew. As a result of this and the opinions expressed at a meeting held on it became obvious that the continuation of the group known as Unit One was not desired. Such an association was felt to be inadequate to meet present needs, especially in view of recent developments in regard to industrial art. It was agreed therefore to end the Unit
completely in form and name. The ideals embodied in Unit One, however, will find expression in a new development under another name. Details will be announced later.

Notes.

Exhibits from the Provincial Towns will be returned to the artists by the Arts Exhibition Bureau at the end of April. The Exhibition opened at the Walker Art Gallery, Liverpool, last May; over 30,000 people visited the Gallery. It has since been shown at Manchester, Derby, Swansea, and Belfast.

Subscriptions still due.

John Armstrong, Tristam Hillier, Edward Burra.

Will the above kindly send their subscriptions to Douglas Cooper, C/o The Mayor Gallery, so that accounts can be finally settled.

Signed:

Henry Moore.
Paul Nash.
Wells Coates.
APPENDIX VI

FOREWORD

to Memorandum dated 23rd January, 1957, attached.

This Memorandum contains proposals for the formation of a new organization concerned with the study of problems in inter-related fields of the Visual Arts, with special reference to the Canadian scene.

These proposals are addressed to persons in the following categories:

- Painters, sculptors, architects, industrial designers, urban designers & planners, & allied technicians.
- Artists in related visual fields: graphics, TV, films.
- Writers, critics, historians, gallery & museum directors & others primarily concerned with these Arts.
- Lay persons, patrons of the Visual Arts, whether individuals or firms, companies or associations.

An association of the kind here proposed should essentially be flexible in nature, and organic in form: it should start from a small firm nucleus and contain within itself the principles and aims of its future growth; it should also be capable of obtaining strictly limited objectives at each stage of its development.

The Memorandum includes a detailed and specific program of advancement towards the eventual goals of the proposed association. A first objective is the preparation of a series of presentations in a somewhat novel form, of 'background material' in the inter-related fields of the Visual Arts, against which the association's future studies of the Canadian scene would be seen in the proper perspective. From these initial publications, the association would derive its first income.

A provisional Budget of Expenditures and Estimate of Income for the formative stage of development is set out in Appendix I to the Memorandum. A further statement, prepared with the assistance of a firm of chartered accountants, is being prepared for the subsequent stages of development and will be available shortly.

Marginal notes are provided as a running summary of the detailed proposals set out in each paragraph.

Prepared and submitted by WELLS COATES, CBE, RIBA, FRAD, PhD

2050 Comox Street, Vancouver, B.C.
23rd January, 1957.
MEMORANDUM

on the formation of a new kind of association in the field of the Visual Arts, together with proposals for a new form of publication arising therefrom.

preparation and submitted by WELLS COATES, OBE FIUBA MRIA FRI D B A RS
Chartered Architect, Industrial & Urban Designer

FIELD OF THESE PROPOSALS 1.0 THE PROPOSALS outlined in this Memorandum are concerned with the field of work broadly described by the term "Visual Arts" and are addressed to persons in the following categories:

1.1 Painters, sculptors, architects, industrial designers, urban designers & planners, and ancillary technicians.
1.2 Artists in ancillary visual fields: graphics, TV, films &c.
1.3 Writers, critics, historians, gallery & museum directors and others primarily concerned with the Visual Arts.
1.4 Lay persons, patrons of the Visual Arts, whether individuals or firms, companies or associations.

CENTRAL THEME 2.0 THE CENTRAL THEME of those proposals are outlined as follows:

2.1 The need for all persons engaged in the practice and advancement of the Visual Arts to get together, and
2.2 To work along closely allied principles of action, in the shaping of our developing Canadian culture, and
2.3 To set up standards, to create the appropriate 'climate of acceptance' for, and advance in every way, new creative work in the inter-related fields of the Visual Arts.
2.4 To devise such instruments of persuasion as may promote the aims of the association here proposed.

BACKGROUND 3.0 THE BACKGROUND to those proposals may be sketched in as follows:

Radical Changos in our Environment 3.1 During the past thirty years Canada has been growing up: radical changes have taken place in our economy and in our standing in the world of nations.
3.2 The pace at which changes have taken place, particularly during the last ten years, is unprecedented in the history of any country, as is, indeed, the very nature of these changes.
3.3 We have modified our environment so radically that we must modify ourselves in order to exist in this environment. We need to become aware of the new norms of the new environment, as well as the new norms at our disposal for meeting, shaping, and controlling those norms.

Technical vs. Creative Power 3.4 The most significant change in our environment is the advance of technical and economic power: almost everywhere this power progresses beyond the creative power to use it and to control it for the freedom and happiness of mankind.
3.5 Every event is controlled by a large number of specialized technical elements which, though closely inter-related, are at the same time disconnected in their impact and impact upon ordinary people living in communities.
3.6 Educational trends are more and more directed towards minute specializations even within a given field of learning or endeavour; thus the general disconnectedness of events, the lack of a clearly apprehensible pattern of understanding, is increasingly obvious to the younger generation and leads to the promotion of many frustrations.

Physical shape of our environment 3.7 In no field of endeavour is this lack of connection between events and principles of action more easily seen than in the physical expression of our developing culture: in the shape and form of towns and cities, and in the wide divergence between theory and practice in design, in the visual scene of our environment.
Educated Lay Public

3.7 The experience and knowledge of even the educated lay public in matters of visual design is sketchy and limited to an association with or appreciation of, a certain taste.

Control of projects

3.8 Many of those persons are placed in positions of importance and authority in the procedures for acceptance of projects in which the visual aspect is least, or last, considered: it is the technical or economic aspect which is of primal importance; beauty, significance and appropriateness of form, is barely considered.

Beauty and form not considered

3.8 Such a situation demands, in our advancing culture, the getting together of the best minds in the field of the Visual Arts, and with the sciences and professions most closely allied to them, in a consolidated and comprehens ive effort to form and publicise standards of criticism and of performance in all questions of visual significance.

Situation demands now Association to promote standards

3.9 The proposals set forth herein attempt to prescribe the form, content and purpose of a new kind of association through which all the elements of information, knowledge, experience and opinion in the Arts and Sciences of the prescribed field will be...

as Plato urged when speaking of the necessity for men and women to be trained and fit to guide and guard the State. (Republic 537)

Content of those proposals

4.0 THE FORM OF AN ASSOCIATION of persons engaged in the field of the Visual Arts must necessarily be organic in nature; that is to say, it must start from a small nucleus with a precise and immediately attainable first-target, and thereafter proceed through an orderly progression to aims, subject matters and expressions of a more complex character.

FORM OF ASSOCIATION

4.01 Thus, it should be so designed as to be complete in itself at every phase of its development and growth, and at the same time contain within its structural form all the necessary ingredients for its future expansion.

Small nucleus

4.1 Such an association would therefore begin with the common agreement of a few persons on principles and on the necessity and purpose of associating together, and

Agreement on principles

4.2 Through discussion and agreement attain the adherence to its aims and objectives selected list of persons in the field of the Visual Arts and of patrons of these arts, for

Adherence of others

4.3 The furtherance of its ultimate purposes and the advancement through specific and detailed means of persuasion, argument, and presentation, of its specific and itemised goals.

Means of persuasion

5.0 THE PURPOSES of the proposed association may be summarised:

PURPOSES

5.1 The exchange of ideas and experience between persons actively engaged in the creation of works of art in the prescribed fields.

Exchange of Ideas, New Concepts

5.2 The development of new concepts in the inter-relation of the Visual Arts and their significance in our rapidly developing technical-economic Canadian society.

Unified Studios in the Visual Arts

5.3 The promotion of specific studies within this inter-related field, towards the development and expression of those new concepts, as a unification and not merely an integration, of visual and technical scenes.

Means of Expression

5.4 The promotion of means of expression and presentation of the results of such unified studies in a form easily apprehensible by the lay public, as an interpretative objective of the association.

Advancement of the Visual Arts

5.5 The advancement of the Visual Arts in Society by whatever means of communication and presentation as may be available.

Research Projects

5.6 The carrying out of specific research projects within the prescribed field, sponsored by individuals, firms or associations with stated objectives.
AN ASSOCIATION of the kind here proposed is somewhat novel in form and purpose and therefore it lies outside the normal denominations. The first necessity is the selection of a name to denote its aims and describe its purpose.

Educational Aims?

6.1 The general aims of such an association could be described under the term 'educational' — but the proposals here discussed go far beyond this, although they may include it.

6.2 It should indeed be stated that such a formation as is here proposed could not be suitably located within the confines of an educational institution, an university. Many of the persons it would attract as adherents and workers may not have the usual qualifications for graduate work, nor be attached to the formal and formality of such an institution.

6.21 There would not be any intention of granting diplomas or other rewards for the unified studios intended within the basic framework, the freely-organised structural form, of this association: the basic intentions are far removed from these objectives.

6.3 It would seem therefore advisable to find a name which would be plainly descriptive of the purpose and intention of the association and at the same time be capable of assuming a short-descriptive and easily remembered form. It is proposed that the association be called

"C.A.U.S.A." and for short: "C. A. U. S. A." obliquely signifying 'the cause' — or the beginning.

Development Sequence for C.A.U.S.A.

7.0 THE SEQUENCE OF DEVELOPMENT of the formation "C. A. U. S. A." demands a type of organization flexible in nature and organic in form: it must start from a small firm nucleus and contain within itself the principles and aims of its future growth, allowing development to take place naturally and freely in accordance with a design suggested by its progress at each phase: it must also be capable of attaining strictly limited objectives at each stage. In the three stages proposed below, these intentions are expressed:

FORMATION STAGE: six months. The establishment of a nuclear organisation comprising a Director of Studios, and an Assistant Director, a full-time Secretary, a small office, conducting the following operations:

Personal Contacts

7.2 PERSONAL CONTACTS with a selected list of persons in the fields of the Visual Arts and ancillary professions, to secure their adherences, support and participation in the C.A.U.S.A. program.

ACTIVE MEMBERS PATRONS

7.21 Two main classes of Members would be sought: ACTIVE MEMBERS, participants in the program of unified studios, and PATRONS: persons, firms or organisations actively supporting the Visual Arts.

Loading Personalities

7.3 PERSONAL CONTACTS with leading personalities in the Visual Arts in Canada and abroad, whose participation and patronage of C.A.U.S.A. activities would be sought in active and passive roles.

Program of Activities

7.4 DEVELOPMENT OF A PROGRAM of activities, with the collaboration of its first adherents, a provisional program would be set forth, initiating the 'Development' Stage of C.A.U.S.A. operations.

Publications

7.5 PUBLICATIONS: The first stage of work on the proposed new form of publication would be started and forward arrangements made for an expansion of this division of the C.A.U.S.A. program.

Publicity

7.6 PUBLICITY: After the initial formative period, C.A.U.S.A. aims and purposes would be publicized in every available manner, to secure support for its eventual program of work and activity.

DEVELOPMENT STAGE: Six Months. The nuclear organisation would continue the development of its program including:

8.1 FIRST PUBLICATION of the new form of C.A.U.S.A. publication (described hereafter) under "Background Material".

8.2 PREPARATION of Outline Studios in the related fields of the
8.3 PROGRAM FOR SEMINARS: a detailed program for the holding of Seminars, Workshop sessions, Studio researches, etc.

8.4 ADVANCED PUBLICATIONS: a program for further publications of and appointment of personnel for, advanced studies.

8.5 PLANS FOR PERMANENT PREMISES: a detailed program for the acquisition of permanent premises for C.A.U.S.A.

9.0 THE FINAL STAGES of C.A.U.S.A. organization would be entered into after the first year of formation and development: at this stage its Director and Assistant Director of Studies would be required to work full time positions at C.A.U.S.A. and a larger central nucleus of staff would be required.

The program would include:

9.1 INITIATION OF FELLOWSHIPS: in order to carry through its program of "advanced and unified studies" financial support for the granting of Fellowships to selected persons would be sought, and arrangements made for a suitable place for such studios.

9.2 PROJECT RESEARCHES: a program for the carrying out of project researches linked with specific design problems in industry, manufacture and commerce would be outlined, and financial aid or commissions secured from those sources for the advanced phase of C.A.U.S.A. operations.

9.3 EXTERNAL ACTIVITIES: a start would be made in the organization of external activities of many kinds, to promote the principles and results of C.A.U.S.A. studios, through films, radio, TV, public lectures, conferences, exhibitions & special publications.

10.0 SEQUENCE OF C.A.U.S.A. DEVELOPMENT: Summary:

10.1 During the first six months of its operations, C.A.U.S.A. would complete its formative phase, prepare for its eventual program and publish its first reports under 'Background Material'.

10.2 During the second six months, C.A.U.S.A. would enter an intensive development phase, and enlarge its field of activities and plans for the future.

10.3 After one year, C.A.U.S.A. would seek a permanent establishment, extend its list of activities, its membership, and patronage.

11.0 One of the main objectives of C.A.U.S.A. is the publication of material developed from its discussions, seminars, workshop sessions, and studio researches.

11.1 A major complexity of the contemporary scene is the vast amount of material published on every conceivable subject matter.

11.2 Now in the history of mankind has so much been written, said, recorded, in words: we might add, and so little said, to so many.

11.3 Ordinary people are confused by the plethora of words bandied about by over-increasing media of communications they live in a whirlwind of words and wordy words: specialization has taken command, and the voices of simple reason and understanding are drowned by a multiplicity of 'expert opinions' un-related to each other.

11.4 It is the intention of C.A.U.S.A. to remedy this in the actual form and content of its proposed publications, and relating its subject matter to the ordinary drama and routine of life and the visual scene of our physical environment.

11.5 It is necessary to devise a new form of publication which will appeal to the widest possible public without confusing them with words, phrases and formulas beyond their comprehension.

11.6 In the field of the Visual Arts this is particularly important: for "THEY CAN BE SAID, CAN BE SAID CLEARLY: WHAT CANNOT BE SAID, MUST BE SHOWN." (Wittgenstein: Tractatus, page 1)

11.7 C.A.U.S.A. PUBLICATIONS will contain more than the usual amount of visual material; pictorial representations and visual diagrams which at a glance will say more, and say it more directly, than any formula of words will allow.
12.0 From the above considerations has arisen the thought of a new kind of publication, which will be termed "C.A.U.S.A. OUTLiNES" of which a general description follows:

**Format**

12.1 FORMAT: OUTLiNES will be printed on letter-size sheets (11"x8.5") in a clear, simple and concise design and layout of text, diagrams, plans, photos and other pictorial representations, in most cases in two or more colours.

**Size**

12.2 SIZE: most OUTLiNES will comprise no more than two sides of the letter-size sheet: 2 pages. Others would be composed of two folded sheets: 4 pages. In certain cases additional sheets in a given Series might contain additional visual material, folded in with previous sheets.

**Binding**

12.3 BINDING: all sheets of OUTLiNES would be provided with a patent form of edge-fixing so designed as to enable adjacent or related material to be linked together in folder-form; the same strip would provide for vertical filing in standard cabinets, and would receive key-symbol reference indications. (Note: Format and binding copyright and patented by the writer of this Memorandum.)

**Cross References**

12.4 CROSS REFERENCES: each OUTLINE would be provided with a notation allowing, for example, for broad general statements in the first of a Series to be cross-referenced to future issues developing in greater detail and with amplified illustrations, the subject matter initially introduced.

**Background Material**

12.5 All OUTLiNES would contain bibliographical references and acknowledgments, credits, etc.

**Content**

12.6 CONTENT: OUTLiNES would take various forms in accordance with related subject matters in a given Series.

**Analysis**

12.7 Specific OUTLiNES would contain 'background material' for the closer understanding of other OUTLiNES in which opinions, critical views, variant viewpoints, are expressed.

**Synthesis**

12.8 A given series might start with an historical background: the growth of forms and ideas: GENESIS.

**Bibliography & Credits**

12.9 Each OUTLINE Series would have a complete 'story' related to normal world.

**Exhibitions**

13.0 THE PURPOSE OF OUTLiNES is to provide a systematic and co-sequent alignment of information, experience and opinion within the prescribed field, in a form most easily accessible to, and apprehensible by, its audience.

13.1 OUTLiNES will form a continually increasing store of related information and opinion.

13.2 OUTLiNES will not be a magazine, nor yet a book of reference merely: they will form a continuously growing and instantly available source of guidance and reference on all the subject matters of its field.

13.3 ANCILLARY MATERIAL related to the printed OUTLiNES would be available for selected Series in the form of coloured slides, tape-recordings and films for injection and distribution through radio and TV channels, for use in schools, colleges and universities and for public lectures.

13.4 EXHIBITION PANELS: Selected OUTLiNES would be available in photo-enlargement form, enhanced by the addition of special symbols or extra colours, for Exhibitions and displays.

13.5 Each OUTLINE Series would have a planned and developing sequence in the selection of material and its treatment: each Series would become an entity in itself, without reference to other Series.
14.0 THE PROPOSED SEQUENCE OF MATERIAL for OUTLINES is

**Formation Stage:** during this period the nuclear staff of C.A.U.S.A. would be seeking adherents and participants for its activities and its future program.

14.11 As 'background material' for its discussions and future work, it is proposed to secure interviews with leading personalities in the field of the Visual Arts and record those in dialogue form.

14.12 A series of 'burning questions' would be addressed to those persons firstly by correspondence, and eventually through live interviews, tape-recorded. It is possible to secure a dialogue between three or more persons without the necessity for those to be present in the same place at the same time, by 'citing'.

Series I of OUTLINES

14.2 The first Series of OUTLINES would comprise such talks, and the following program is proposed, the names given being a selection from many others: all are personally known to the writer.

**The Master's Voice:**

**Architects:** Frank Lloyd Wright, Walter Gropius, Louis Corbissier.

**Designers:** Mies van der Rohe, Neutra, Rogers, Albini, Jose Luis Sert, Oscar Niemeyer amongst the architects;

**Sculptors:** Brancusi, Eddy Mauro, sculptors; Picasso, Braque, Ben Nicholson, Lawren Harris, Bert Binning and many other painters;

**Specialists:** To wind up this Series I, interviews will be held with a selected list of critics and writers and others engaged in the promotion of the Visual Arts: Sir Horace Bond, Lewis Mumford, Dr Pronowsky, Dr Panavsky, J. F. Richards, Osbert Lancaster, Clive Bell, Sir Alan Herbert, Sir Kenneth Clark.
Section 4

14.34 INDUSTRIAL TECHNOLOGY: the development of modem...

industrial techniques and its effect on the urban and
rural scenes: the design of products; the new industrial revolution
brought about by atomic physics, electronics, automation. For
this section the writer will be general editor and will seek
the collaboration of specialists in the various fields.

Section 5

14.35 PROCEDURES IN DESIGN: a sequence of 'first cases', with studies
and examples of design throughout the ages, and in all related
fields of the Visual Arts: a CASEBOOK of DESIGN. The advice of
Dr Gideon will be sought in the development of this Section,
and Dr Sokler and the writer will be responsible as editors,
to complete Series II as 'background material' for C.A.U.S.A.

SERIES III

OUTLINES

14.41 LATER STAGES of C.A.U.S.A. operations will have brought forward a large body of material
for critical analysis and assessment: through a series of
Seminars, workshop discussions and Studio researches, the
beginning of a BOOK OF CRITICISM will be made and developed into
a CRITICAL METHOD for the proper assessment of current plans and
projects in the Visual Arts, with direct reference to the Canadian
scene, in all its variations of climate, race, geographical
and historical characteristics.

If real
criticism of
Visual Arts
anywhere:
Task for
C.A.U.S.A.

14.41 It should be stressed here that not merely in Canada but almost
everywhere in the world, there is at present very little real
criticism in the field of the Visual Arts such as exists currently
in the arts of literature, drama, ballet or the fine arts.

in those fields is one of the objectives of C.A.U.S.A. operations.
15.0 During the first year of its development, C.A.U.S.A. would enlist the support of individuals, firms and groups in its purposes and activities. The following categories of membership and of executive control, would be suggested:

**Lifo Governors**

15.1 **LIFE GOVERNORS** (founder members): distinguished Canadian personalities in finance, industry and commerce would be asked to support the institution of C.A.U.S.A. through donations from $5000 and act as Life Governors of the association, & Patrons.

15.2 **LIFE MEMBERS**: drawn from similar fields, this category would be patrons of C.A.U.S.A. with a subscription of $1000 or over.

15.3 **GOVERNING BOARD**: A selection of Life Governors and Life Members consenting thereto would be asked to become the GOVERNING BOARD of C.A.U.S.A., who would select an Executive Council with powers to co-opt for specific purposes, which would generally administer the activities and funds of C.A.U.S.A.

15.4 **EXECUTIVE COUNCIL** would be formed from a selected list of distinguished persons in the Visual Arts and ancillary professions, one or more of which would act on the Executive Council from time to time, for specific issues.

15.5 **TRUST AULD**

15.6 **TRUST FUND** would be set up and administered by a firm of chartered accountants appointed by the Life Governors and Patrons: disbursements being made against a specific and approved Budget of Expenditures. All subscriptions and capital donations, Debentures or Loans would be deposited in this Trust Fund. The accountant would be a Member of the Executive Council.

15.7 **DONATIONS**: would be sought from individuals, firms and associations, foundations and the like, allocated to specific purposes as might be desired. Thus Research Fellowships, preceded by the name of the Donor, could be set up for specific purposes, and the single condition of such Fellowships would be that the results of work would be available to C.A.U.S.A. for publication through its **GUTLESS** series of publications. Donations could be allocated to such other purposes as specific Building Fund, or allied uses.

15.8 **BUILDING FUNDS** outline series of publications. Donations could be allocated to such other purposes as specific Building Fund, or allied uses.

15.9 **LEGAL ADVICE** is now being sought regarding the technical formation of C.A.U.S.A. as probably a non-profit making entity, so that donations to its Trust Fund would be free of Tax. It may be that its publications division, which would be organised to make a profit, would be a separate entity linked with C.A.U.S.A. and operated within its organisation.

15.10 **EXECUTIVE STAFF** would be composed initially of the Director of Studies, an Assistant Director of Studies, and a Secretary for the first year, with an expanding staff list as C.A.U.S.A. activities and support increased during succeeding years. The Director of Studies would be a Member of the Executive Committee.

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15.12 **SPECIFIC PROBLEMS relating to organisation, program development, finances and permanent premises, will be examined during the formation and development stages of C.A.U.S.A. Some notes on the location of C.A.U.S.A. are included hereafter.**

15.13 **PROVISIONAL BUDGET** for the first stages of C.A.U.S.A. operations is included in APPENDIX I hereto. Some notes on future financial needs are added therein, for further evaluation.
16.0 The activities proposed in the C.A.U.S.A. program demand careful consideration of its location as a Centre. Its initial requirements call for a small office of say three rooms and during the 'Formation Stage' its Director of Studies would be doing some travelling to secure interviews for Series I of 'CULTURES' and generally to promote the idea of C.A.U.S.A.

Plans for future premises The selection of a site for C.A.U.S.A. activities must be directly related to the kind of activities and perhaps more importantly to the kind of people involved in its studies.

16.1 In the second stage of 'Development' plans for a future location and more permanent premises would be explored.

Accessibility A Centre of this kind should, It is submitted, be located in or near a metropolitan centre with suitable amenities: an International Airport with world-connections; a place to which participants in C.A.U.S.A. operations from abroad would be glad to come.

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Climate: 16.3 A location for C.A.U.S.A. should have regard to climatic geographical setting conditions; an equable temperature through all the seasons, particularly spring and summer. Its geographical setting should possess the qualities of a 'resort' place.

Seclusion 16.4 Finally C.A.U.S.A. should be located in a restful and secluded place, set apart from the rush and hurry of a city, but close to it and to all the amenities of a metropolitan Center.

The claims of Vancouver, British Columbia, are here advanced as a splendid location for C.A.U.S.A. because it possesses all the requirements set out above.

16.6 Vancouver's International Airport is fast becoming the busiest in Canada: already more world-routes are centred upon it than any other in this country. In the new trans-Polar air-age, Vancouver is equi-distant from more world-capitals and centres than any other Canadian city; flight-times will soon be reduced by up to one-half as turbo-jet and prop-jet aircraft come into regular service. North over the Pole to Europe; East and South to the Americas, and Northwest and West to the Far East and Australasia: Vancouver's claims from a transportation aspect are likely to make this city one of the most important of world-contacts of population.

16.7 Vancouver is surrounded by the splendours of mountain: sea, prairies, parks and recreatioral spaces lie at its backdoor; yachting, boating, fishing, ski-ing, hunting — all the outdoor pleasures are immediately at hand.

A site in West Vancouver is suggested as a suitable location for C.A.U.S.A. as a permanent entity: it comprises some 70 acres of virgin high-land accessible within the next year from the Upper Loyola Highway (an extension of Trans-Canada Highway) and thus bringing it within 20 minutes' drive from the centre of the City of Vancouver. It commands magnificent views over Howe Sound and across the Bay to Vancouver Island and the Straits of Juan de Fuca.

16.9 This site is owned by the Municipality of West Vancouver and could be secured on leasehold at a reasonable ground rent which would increase as a comprehensive scheme of development took place; it will shortly be served by the necessary utilities. Part of the proposed development would produce an income from sub-leases of lots for private use.

16.10 There are a number of precedents for such a site for a cultural Centro: one of the best known is Aspen, Colorado, where yearly international conferences and seminars take place in a fine geographical setting.

LOCATION OF C.A.U.S.A.

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16.8 A site in West Vancouver's outermost boundary, near Horseshoe Bay, is suggested as a suitable location for C.A.U.S.A. as a permanent entity: it comprises some 70 acres of virgin high-land accessible within the next year from the Upper Loyola Highway (an extension of Trans-Canada Highway) and thus bringing it within 20 minutes' drive from the centre of the City of Vancouver. It commands magnificent views over Howe Sound and across the Bay to Vancouver Island and the Straits of Juan de Fuca.

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PREMISES FOR C.A.U.S.A.

17.0 In keeping with the principle of starting C.A.U.S.A. from small beginnings and faith and its way towards its eventual goals, the question of premises would follow a sequence of the kind:

Formation Stage 17.2 During the formation and development phases, a small office of three rooms in the City of Vancouver would suffice.
At the Development Stage, consideration would have to be given to planning the first series of Seminars and discussions, for which, in the absence of a permanent location and premises at that time, would require the rental of suitable accommodation in Vancouver.

If C.A.U.S.A. could start its operations by March 1957, it would be possible to organize the first Seminar during the summer of 1956, which is British Columbia's Centennial year, with a full program of cultural events including a Festival of the Arts. Many notable artists will be visiting Vancouver that summer, and would be able to participate in a C.A.U.S.A. program.

It is suggested that if advance arrangements for the securing of the proposed site in West Vancouver could be made, it might be possible to have temporary accommodation for C.A.U.S.A. open by the summer of 1956, as outlined below.

It would be necessary first to build suitable access road to the site from the Upper Lovelace Highway (negotiations needed with Provincial Highway Authority) and to provide essential services.

A portion of the site would be cleared and the first building, a Hostel, with meeting rooms and restaurant facilities, could be constructed by the summer of 1956. In accordance with a progressive and comprehensive development scheme for the site, a further portion of it could be cleared for the construction of cabins and chalets which, in off-season periods, could be rented.

During the next two years, the comprehensive scheme would be advanced: a Hostel, leased on concession, of a deluxe character, open all year round, would be available during C.A.U.S.A.'s external activities for patrons and participants, and suitable amenities would be added to make this one of the finest 'resort hotels' in the Pacific Coast.

As the scheme developed, lots would be leased to private owners for the construction of homes, and a permanent income from this development would accrue to C.A.U.S.A. Some of these homes would be rented to artists, and would be provided with suitable studio facilities, etc., in a restful and secluded atmosphere.

The eventual construction of Studios, workshops, offices and other facilities for C.A.U.S.A. not already included in the Hostel scheme, would be entertained at some later stage.

The whole of the LOCATION AND PREMISES aspect of C.A.U.S.A. self-liquidating is designed to be a self-liquidating venture from the financial aspect: a 'comprehensive development' of the kind outlined will meet the requirements of the West Vancouver Municipality's Town Planning regulations; indeed this is just the kind of development they most need, as their principal endeavour is to secure income-bearing developments, both from a residential and a tax aspect.

The submission of proposals for such a development at an early date is advisable, in view of the length of negotiations needed.

In this Memorandum the main outlines for the formation of a CENTRE FOR ADVANCED AND UNIFIED STUDIES IN THE ARTS - C.A.U.S.A. have been set out, together with a parallel formation for its publications "OUTLINES". The ideas and proposals contained herein are the result of some past experience in the formation of Groups and Associations within the field of the Visual Arts on the part of the present writer, as outlined in APPENDIX II.
APPENDIX (1)

CAUSAL STUDIES:

I Inter-relation of the Visual Arts:
(a) In conceptual relationships.
(b) Relationships - individual building projects.
(c) Outward scenes; landscape, parks, playgrounds, spaces.
(d) Community Planning.
(e) Urban design - redevelopment - street scenes, signs, furniture.
(f) Shape of Cities for B.C.
   Alberta - prairies.
   Ontario - Quebec - Maritimes - The North.

II Architecture - Urban Design - Planning -
Engineering - Sociology:
(a) Conceptual relationships between these specialisations.
(b) Relation to shape of cities.
(c) Transportation - traffic - parking
(d) Electronic - atomic age - automation problems - relationships.
(e) Leisure - 3.5 day week - problems.
III Visual Arts and Mass-Communication Media:
(a) Conceptual relationships - problems and solutions.
(b) Standards of design.
(c) Standards of criticism.
(d) Standards for projection of visual ideas.
(e) Communication to children - new generation.

IV Visual Arts and Writing - Criticism:
(a) Conceptual - standards
(b) Painting
(c) Sculpture
(d) Architecture and Urban Design
(e) Graphics - commercial art - signs
(f) T.V. films
(g) Dramatic Arts - visual aspects
(h) Industrial Design
(i) Design for children

V Visual Arts and Economics:
(a) Conceptual - meaning of arts in technical-economic society.
(b) Specific applications.
### APPENDIX VII

**LAWN ROAD FLATS, HAMPSTEAD, LONDON: (1934-1940)**

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