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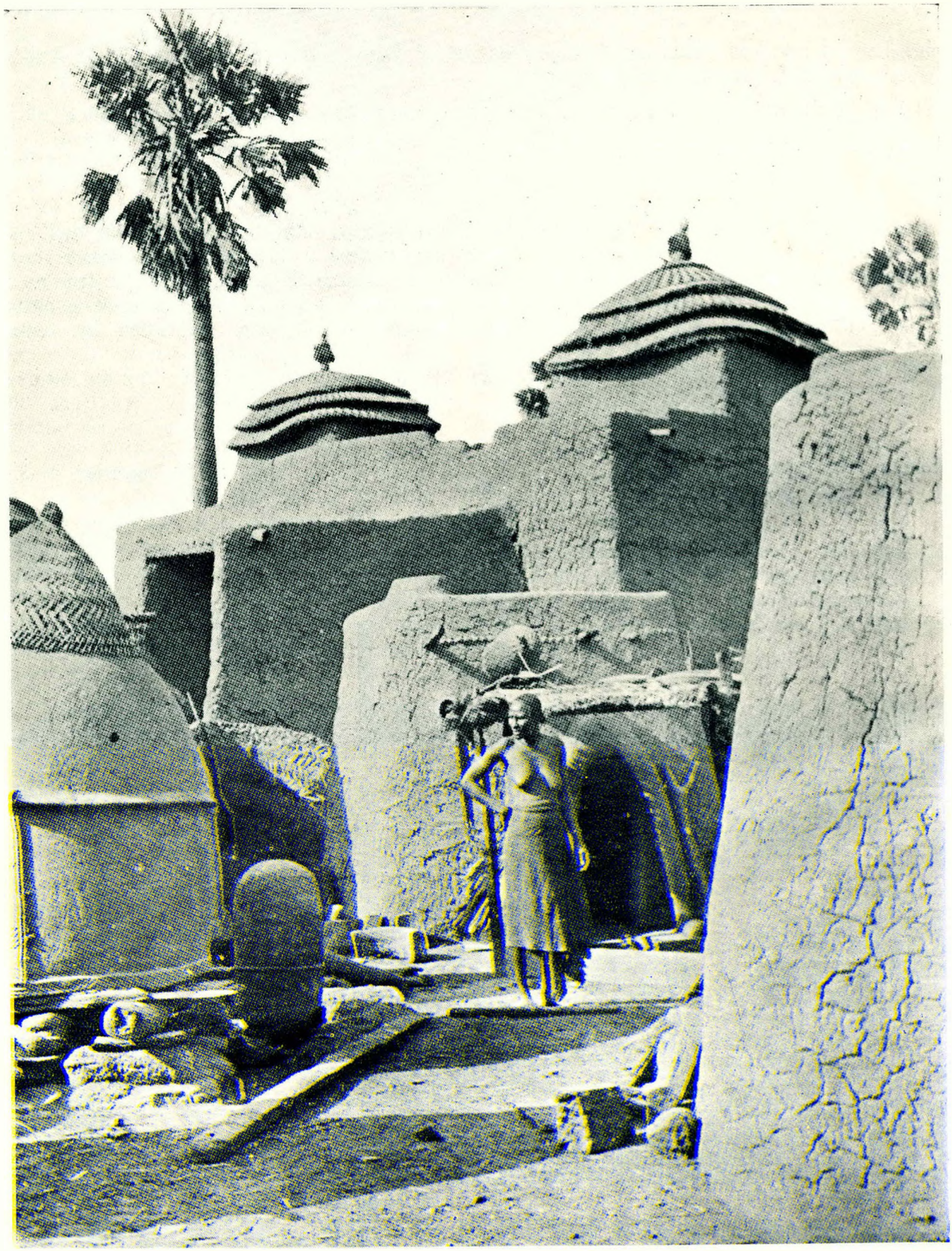

A Chief's House

French Equatorial Africa

ARCHITECTURAL EDUCATION

We reprint in this issue a curious document, which appeared in the May issue of "The Architect, Builder and Engineer," entitled "A memorandum regarding architectural education in South Africa as existing in June, 1936," by authors who desire to remain anonymous.

Perhaps this is just as well, for the document proves that they have little or no knowledge of architectural education in this country, nor can they have had any experience of the university trained man in practice.

However, as the document is a very serious attack on the schools of architecture and the young practitioner in this country, and following, as it does, a similar attack in a previous issue of the same journal, it calls for immediate reply.

We propose, therefore dealing with all the misleading statements in detail, and trust that the Central Council, which controls architectural education in this country, will give, without hesitation, and as soon as possible, a vigorous denunciation of the views expressed by these anonymous writers.

The authors state at the outset that "the necessity for compiling this memorandum has been made manifest as the result of a number of interviews with students and practitioners, old and young, in various parts of the Union over a period of many years."

We should very much like to meet these students and practitioners and discuss the matter with them, for there is little doubt that if they had an insight into what is being done in the schools they would change their opinions.

The statements that "the examinees for the final examinations precedent to official enrolment and the right to practice greatly exceed in number the market capacity for absorption," and that "the present position is that the professions concerned have reached saturation point," is not borne out by facts, at least as far as Johannesburg is concerned.

"No system of training of any kind has any firm foundation save in the law of supply and demand." This is rather an ambiguous statement.

The authors mention Mr. Thornton White's paper, which appeared in the R.I.B.A. journal in January, 1934, and in which, as they say, "effective remedies are so well set out that readers would do well to refer to this fine article."

We also commend this article to our readers, for in it the writer criticises the part time training prevalent in England, and states that "experience seems to show that several preliminary improvements are necessary before part time instruction can become really vital." He then proceeds to put forward suggestions for improvement in order to assist those unfortunates who are working all day and attending classes at night. Such a state of affairs existed at one time in this country, but with the co-operation of the Institute of Architects and the self-sacrificing efforts of a few professional men such evening classes have been discontinued.

With regard to whole-time training, Mr. Thornton White, in referring to the recognised schools, says: "The schools have been criticised in the past as being unpractical—we have all met the student misfit who never will appreciate the realities of architecture, but who takes an enormous interest in pretty drawings . . . . or the bullet-headed gentleman who enters a school to learn all about the artistic trimmings. . . . . If one may criticise the schools now, it is from the point of view that they look like becoming too coldly practical. . . . . "

Under the heading "As we are," the authors of the memorandum state that "since the establishment of the recognised schools of architectural education, few (if any) candidates have failed to pass the final examinations," and, further, that this "is in sharp contrast with the records of all the school of established reputation overseas." We recommend the writers to study facts and figures before making such foolish statements.

Following these remarks come a long series of statements which, if anything, show up the senior practising architects to considerable disadvantage.

In the first place, the authors state that " the architectural profession, as such, and through the Board of Architectural Education, exercises but little control over the training of candidates in the schools." Whose fault is this, we should like to know? As a matter of fact, the Board of Architectural Education, by which, we presume, the authors mean the Standing Committee on Education, has shown little or no interest in the work of the schools since they were established.

" That training includes a more or less desultory one year's experience in an architect's office, where the candidate is employed almost entirely in draughtsmanship because he is found to lack grounding of a helpful character in anything else. This is due to his training in the schools being of a purely academic character."

The one year's practical experience is laid down in the Architects' Act, and is approved by the Central Council. It is quite a simple matter for the Central Council to ask for an amendment to the Act and to insist upon two, three or more years' practical experience before registration if it considers it to be essential. This is not a matter which concerns the schools, and until recently this point has never been raised. The statement that his training is of a purely academic character and what follows is too ridiculous for words and very contradictory, but is a frank admission that the " not necessarily extremely well qualified practitioner " finds the school-trained man extremely useful and tempts him with " considerable pay."

This temptation, we are told, leads to " the undoing of the student and very often the drafting of the best draughtsmen-students into commercially successful but not necessarily professionally helpful or desirable offices." What an admission! " As a result the student forms no exalted idea of the dignity of his future calling, and is prone to adopt that superior attitude which attends upon a certain type of purely academic culture—the type that either owns the earth, or doesn't care who does."

Can one blame the student after experiencing what the authors have outlined?

" Neither at the beginning nor end of his office year, nor at the end of his school training and when registered and ready to practise, does the unfortunate would-be architect possess many of the essential pre-requisites for either the safe or distinguished performance of his chosen life work."

This statement, which one can only interpret as applying generally to architectural training in South Africa, is a deliberate untruth, and we challenge the authors to produce evidence in support of it. The description of the would-be architect and his first commission, is so applicable to a very large percentage of so-called architects in this country, trained a generation ago, that it is hardly worth commenting upon.

Suffice it to say that the school-trained man is fully equipped to carry out his duties efficiently and well, and is slowly but surely gaining the confidence of the public and bringing about that respect for the profession which is its due.

Finally, we come to suggested remedies for the improvement of our system of architectural education.

After referring to the ideals aimed at when schools of architecture were incorporated in our universities, namely, the establishment of a professoriate in arts and crafts and, lacking the old pupilage system, the necessity of practical training, the authors state: " There are two ways of achieving the ideals thus set forth, consisting of either extending the period and range of training of the young architect, or by remodelling the present system to include more intensive training within the limits of time now set. In either case the scope of the training must be enlarged. The paper architects we are now turning out in such large numbers are by way of being a danger to our craft and a menace to the public weal."

Then come statements to the effect that the architectural aspirant in the most efficient schools overseas has to serve a period on the building; to extend the period of his specialised training from five to seven years; to learn to handle the tools of one trade and make himself well acquainted with the processes in all of them; to have at least a sufficient and well organised period of time in an approved architect's office.

We know that it is customary in some of the continental schools to have practical training in one or other of the building trades or to serve as a clerk of works on a building, and much can be learned from such experience, but we know of no school in England where such a requirement exists.

Perhaps the authors could enlarge upon these proposals and suggest a method by which they could be employed without unduly lengthening the course.

The question of a sufficient and well organised period of time in an approved architect's office presents a further difficulty, as there are so few offices in this country in which valuable practical experience can be gained. With a larger proportion of properly qualified architects—and these are being produced by the schools—this might be possible. The fact that "construction companies, real estate agents, building consultants and the like are gradually but surely usurping the functions of the architect" is not in any way due to inexperience on the part of the school trained man, but rather to that of a large percentage of untrained men practising as architects.

The following suggestions are now put forward:

"No candidate shall be admitted as a student to our schools of architecture until he has been thoroughly examined (after he has matriculated) and found to have both a call to and aptitude for the calling."

We should like to know what tests the authors would apply to discover whether a candidate shows an aptitude for architecture at this stage of his career.

"He shall be trained in the schools and out of them in strict conformity and proportion to the discharge of his professional functions, whether artistic, craftsmanlike or businesslike, in the future."

This is rather vague, but, presuming that the authors mean a sound training in design, construction and professional practice, there is no doubt that these subjects are well provided for in the schools.

"A rigid training in the ethical and honourable aspect of his functions shall be insisted upon before he goes into practice."

Every effort is made in the schools to inculcate the principles of professional conduct and every effort is being made by school trained men to carry out these principles, but in most cases to their detriment.

"The examining bodies shall, without discrimination, mark all efforts of examinees, whether intra- or extra-mural."

This is a curious statement, as papers are set and the marking is done by carefully selected external examiners, specialists in the particular subjects in which they examine, and not by the examining bodies.

"Practising architects should be intimately related to the schools, in regard to both framing of curricula and supervision of studies, and representatives of the schools and of professional practitioners should confer on the full details of a revised scheme of technical training as soon as possible."

Practising architects are intimately related to the schools, both in respect of training and examinations, and the schools would welcome a conference on any revised scheme of training if it were put forward.

In conclusion the authors state that "statements made in this memorandum can be fully substantiated and documented if required, and the authors, who desire to remain anonymous, will be pleased to frame a further and more detailed statement should this be desired."

We take this opportunity of voicing the views of a large number of members of the profession on this subject, and would welcome proofs of the charges made against the schools in general and the school trained man in particular. No school of architecture worthy of the name is perfectly satisfied with its courses, and is constantly building up on its own experience and the experience of schools in other countries. When, however, the writers of a memorandum state that they are "inspired by a desire to offer constructive criticisms and suggestions in the hope that many glaring defects now apparent may be rectified in the very near future, to the benefit of the art, craft and business of architecture as practised under the best conditions attainable here and now," and then proceed to attack the existing school system in this country and to publicly state that the school trained man is bringing discredit to the profession, it is high time that strong action is taken by the Institute against such malpractices.

Overwhelming evidence could be given by practising architects, building contractors and clients in support of the University trained architect who is building up a fine tradition and, as we have said before, bringing about a respect for the profession of architecture which is long overdue.

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A Memorandum regarding Architectural Education in South Africa as existing in June 1936.

(from the Architect, Builder & Engineer).

Introduction.

The necessity for compiling this memorandum has been made manifest as the result of a number of interviews with students and practitioners old and young in various parts of the Union over a period of many years.

Experience has tended to reinforce the majority of the opinions expressed in such interviews, and has resulted in this presentation of the case which is inspired by a desire to offer constructive criticisms and suggestions in the hope that many glaring defects now apparent may be rectified in the very near future, to the benefit of the art, craft and business of architecture as practised under the best conditions attainable here and now.

Due regard is paid throughout to the facts (a) that architectural education in South Africa is in its infancy; (b) that the European population is a small one of under two million persons scattered over a vast territory; and (c) that since the examples of noble architecture, whether historical or modern, are difficult of access, there is special need for earnest and intensive effort to achieve the best possible results from our existing opportunities in order to minimise the disadvantage inseparable from our position.

Until thirty years ago, any sort of organised architectural education was unknown in South Africa.

Thereafter, attempts were made by voluntary professional societies in the Union and by schools with courses of training allied to architecture to provide certain facilities; but no co-ordinated and Union-wide effort to establish architectural education upon an effective and academic basis existed until the passing of the Architects' Act.

Tribute is paid to what has since been done by our recognised schools. There has been an undoubted advance in scholarship. The granting of degrees has raised the academic status of the profession in the eyes of the public.

Our school authorities for the most part frankly confess that, in these earlier stages of organised professional education, much that has been attempted has been very largely of an experimental nature, and it is believed that these authorities will gladly welcome constructive criticism and assistance from professional sources.

The Architects' Act laid upon the professions of architecture and quantity-surveying the duty of establishing proper means for educating and examining future practitioners, and conferred upon these professions, in its text and in the regulations framed in harmony, the necessary powers; as, for instance, Regulation 67, Subsection E.

Consistently with those duties and powers, the Board of Architectural Education was constituted by the Central Council of the South African Institute of Architects and Chapter of Quantity Surveyors, and in due course that body recognised certain Universities as fittingly providing educational facilities, giving to the Universities of Cape Town and the Witwatersrand the right to examine candidates both intra- and extra-mural.

These examinations have been brought into alignment, as far as possible, with those of the Royal Institute of British Architects.

The bodies concerned hold special examinations to determine the fitness or otherwise of those coming from overseas whose status does not automatically give them the right, in terms of the Act, to practise in the Union.

The recognised schools have a very full, if not excessive number of pupils, and the examinees for the final examinations precedent to official enrolment and the right to practise, greatly exceed in number the market capacity for absorption.

The present position is that the professions concerned have reached saturation point.

No system of training of any kind has any firm foundation save in the law of supply and demand.

The position of education in Great Britain and abroad is well set forth in a paper by Mr. Thornton White in the R.I.B.A. Journal dated January 27th, 1934 (page 299), where effective remedies are so well set out that readers would do well to refer to this fine article.

In architecture, the pupilage system had all but vanished a quarter of a century ago. Many abuses attached to it, and Charles Dickens, at an earlier date, makes the most of these in the extremely satiric delineation of the architect Pecksniff, in his relationship to his pupils, Tom Pinch and Martin Chuzzlewit, whom he received into his family for board and tutelage, or had, in the quaint phrase of the time, "done for." The system, however, had many advantages, and in the hands of honest and capable masters and pupils was almost ideal. We are told that the system has gone, never to return. That seems by no means certain.

As we Are

Since the establishment of the recognised schools of architectural education, few (if any) candidates have failed to pass the final examination. Any that have so failed have been diverted from professional practice by other circumstances than rejection of the candidates on the ground of unsuitability for the calling. This is in spite of the fact that there is no rigid extrance examination, and is in sharp contrast with the records of all the schools of established reputation overseas, where the constant and consistent resultant is the rejection of large percentages of the candidates at all stages of the professional examinations from the initial to the final. It is true that at our University centres there are discriminations in the passes at the various stages of a candidate's training and examination, and that at the final stage a candidate may be passed by the examiners as third, second or first class, and in the last event be further distinguished by recommendation for distinction, diploma, degree, honours or what not; but the trouble with the training and registration of architects as such does not end there. It only begins, as we hope to show. It would be tedious to rehearse the details of training in a memorandum intended for professional and school circulation only. These details can be obtained from the Institute's Kalendar and from the schools themselves. There are slight variations of method. We propose to concern ourselves with results only. The results are, to a large extent, conditioned by the following facts.

The architectural profession as such and through the Board of Architectural Education exercises but little control over the training of candidates in the schools. That training includes a more or less desultory one year's experience in an architect's office, where the candidate is employed almost entirely in draughtsmanship because he is found to lack grounding of a helpful character in anything else. This is due to his training in the schools being of a purely academic character. He is found to be lacking in practical knowledge of craftsmanship and workmanship and to know nothing save in the vaguest and most theoretical way of the business side of his future calling. The architect who gives him office room has, as a result, neither the time nor the inclination to give him that intensive attention and assistance which might be of real service to the student. In many cases, if the student is a facile draughtsman, the busy, but not necessarily extremely well-qualified, practitioner tempts the youth to remain at the drawing board by the offer of considerable pay.

The manifest abuses to which such a state of affairs is open are obvious, and the results include, inter alia, the undoing of the student, and very often the drafting of the best draughtsmen-students into commercially successful but not necessarily professionally helpful or desirable offices. As a result the student forms no exalted idea of the dignity of his future calling, and is prone to adopt that superior attitude which attends upon a certain type of purely academic culture—the type that either owns the earth, or doesn't care who does.

Neither at the beginning nor end of his office year, nor at the end of his school training and when registered and ready to practise, does the unfortunate would-be architect possess many of the essential pre-requisites for either the safe or distinguished performance of his chosen life-work.

Let us suppose that he gets his first commission—a house.

Though inexperienced, he has managed to satisfy his client as to the design meeting requirements. Relying on the quantity surveyor, he is kept more or less on the rails while drafting the specifications and detailing the construction. The land surveyor fixes his boundary pegs and, perchance, even gives him the levels —in most cases he has not been taught to use a level nor acquired the knowledge.

He is thus unable to make himself closely acquainted with the variations of the site. He may be wise enough to have trial holes dug, but lack of knowledge of practical geology prevents him from taking full advantage of the opportunities and overcoming the difficulties which the trial holes disclose. The work begins! Not having mixed with building workers, he is at sea from the laying of the concrete footings to the application of the last coat of paint. As for the conduct of the business side of the work during its performance, or of the settlement of accounts at the close, he knows next to nothing; and if he knows anything of the legal side of his functioning in a fiduciary capacity between the two contracting parties, the owner and the builder, he knows it only through the theoretical training derived from lectures in the school.

It is all to the good that he has been taught enough of stresses and strains to design the structure with a sufficient safety factor; and is acquainted with the requirements of local authorities in such matters as light, air, sanitation, and so forth, and that he is able to appreciate intelligently the demands made upon his skill in designing to meet requirements relative to aspect, prospect and so forth, but—when the job is completed, his ignorance of craftsmanship and business has so wrought upon the mind of the client (and his wife) that the art, craft and business of architecture and the calling of the architect are linked in the lay mind with feelings of anger, disrespect or contempt. It is not to be wondered at.

What are the remedies?

We make no claim to originality in suggesting what may be done. That recently deceased and most inspiring of all scholars and architect-teachers of our day (Lethaby) was eloquent on the subject, even going the length of stating that the teaching of architecture as an art should cease and that the craft of building nobly should be born again among materials and tools. That counsel of perfection may not be practically attainable here and now, but we venture to offer certain suggestions for improvement which the present situation in South Africa appears to demand.

Doctors walk the hospitals while attending the University and before being granted the right to practise. Accountancy students are controlled by practising professionals.

Architectural students should not be treated on any different and less practical basis.

As we ought to be.

When schools of architecture were incorporated in our Universities, it was manifest to many thoughtful architects that the way to direct them efficiently to cultural and national advantage was to establish a professoriate of arts and crafts, and that, lacking the old pupilage system, it was further necessary to train our young architects in the practical side of their profession so as to fit them for the proper discharge of those practical, businesslike and economical functions which their future client would have a right to expect.

That view has now been demonstrated by the experience of recent years to be, beyond cavil, a sound one.

There are two ways of achieving the ideals thus set forth, consisting of either extending the period and range of training of the young architect, or by remodelling the present system to include more intensive training within the limits of time now set. In either case the scope of the training must be enlarged. The paper architects we are now turning out in such large numbers are by way of being a danger to our craft and a menace to the public weal.

In some of the most efficient overseas schools, the architectural aspirant has to serve a period on the building; in others, he is required to extend the period of his specialised training from five to seven years; to learn to handle the tools of one trade and make himself well acquainted with the processes in all of them, and to have at least a sufficient and well-organised period of time in an approved architect's office. The whole tendency of enlightened training in our day is to equip the man

for the job of work he has to do in life on the principle that the tools must necessarily be handed to the man who can use them. Construction companies, real estate agents, building consultants and the like are gradually but surely usurping the functions of the architect. We cannot rest content with the mere registration of our title and calling in terms of an Act of Parliament. We have got to get busy with reforms within our house, and that without any further waste of time.

Here are some outline suggestions as to how to do it.

No candidate shall be admitted as a student to our schools of architecture until he has been thoroughly examined (after he has matriculated) and found to have both a call to and an aptitude for the calling.

He shall be trained in the schools and out of them in strict conformity and proportion to the discharge of his professional functions whether artistic, craftsmanlike or businesslike in the future.

A rigid training in the ethical and honourable aspect of his functions shall be insisted upon before he goes into practice.

The examining bodies shall without discrimination mark all efforts of examinees whether intra- or extra-mural.

Practising architects should be intimately related to the schools, in regard to both framing of curricula and supervision of studies, and representatives of the schools and of professional practitioners should confer on the full details of a revised scheme of technical training as soon as possible.

Statements made in this memorandum can be fully substantiated and documented if required, and the authors, who desire to remain anonymous, will be pleased to frame a further and more detailed statement should this be desired.

NEW HEADQUARTERS FOR THE MASTER BUILDERS ASSOCIATION JOHANNESBURG

ASSESSORS' REPORT

We have made a careful study of the drawings submitted in the competition for the above and, whilst we feel that there is no outstanding scheme, we consider that, with slight modifications, many of the schemes could be greatly improved. Twenty-five designs were submitted, and of these we selected thirteen for final consideration, viz., Nos. 2, 4, 5, 6, 11, 14, 15, 16, 18, 19, 21, 23, 24 (No. 1 had to be disqualified owing to the report having been hand written instead of typed). From the above we have placed the following in order of merit, and present our detailed considerations below:—

First:	No. 24.
Second and Third:	Nos. 4 and 6 each to receive £75.
Fourth:	No. 23 to receive £25.

The design submitted by No. 24 is a very straightforward scheme with entrance from Polly Street. A large entrance hall is flanked by ample cloak room accommodation. The main hall is well planned for receptions and dances and has a terrace overlooking Polly Street. This, in our opinion, should be enclosed, and the windows to the hall carried up higher.

From the entrance hall, stairs and lift lead down to a large foyer in the basement, in which the supper room is placed.

The kitchen is well situated for service, and a chair store is provided immediately under the main hall platform.

No lavatories are provided for the kitchen staff, but if the transformer chamber were transferred to Kerk Street front, these could be conveniently arranged in its place.

Access to the heating chamber will also have to be considered.

The offices are well arranged on the first floor, are of ample size and well lit. The Council Chamber is set back from Polly Street and from the area, which provides small terraces on either side. These assist in the elimination of sound, which could be further improved by enclosing the terraces with glass. The lavatory accommodation could be improved

without interfering with the general scheme, and further lavatories could be provided in the cloak room adjoining the Council Chamber. The latter is rather small, but could easily be enlarged.

The Industrial Council offices are shown on the second floor, but these could be arranged, as the author suggests, in the mezzanine shown as a lounge in connection with the hall. The elevations leave much to be desired, but could be very easily improved.

No. 4.

The entrance is from Kerk Street into a large entrance hall flanked by two ample staircases. From this hall one proceeds, between the two cloakrooms, to the supper room. The kitchen is well placed, but the transformer room should be transferred to Polly Street front. Lavatory accommodation for the basement is well arranged. The chair store is placed over the boiler room, etc., and directly under the platform.

The hall is situated on the first floor, a questionable arrangement, and has a large foyer. The retiring rooms are well planned.

A mezzanine foyer or lounge is provided for the hall. The offices and lavatories are well disposed on the second floor, and the Council Chamber overlooks the area, and is thus cut off from street noises. The third floor is given up to the Industrial Council offices.

This scheme is more extravagant than No. 24, but is very straightforwardly planned. The heights could be reduced without affecting the scheme and would thus bring it within the limits of cost.

No. 6.

This scheme has a great deal to commend it, and a few slight amendments could be made without affecting the general arrangement. The entrance from Kerk Street is rather narrow, and from it one enters a large, well lit entrance hall carried up the full height of the main hall. Ample cloak room accommodation is provided, but it is questionable whether these should be carried up to what appears to be 17′ 0″. The hall has been planned acoustically and the ceiling designed accordingly.

From the entrance hall a wide, well lit stair leads to a foyer in the basement. Off this an additional cloak room is arranged, also a small bar. The supper room is well lit and the service kitchen well planned. There is, however, no lavatory accommodation in the basement.

The arrangement of the offices and Council Chamber on the first floor has been carefully worked out. The acoustic shapes have dictated the plan to some extent.

The Council Chamber is lit from both sides and has been considered from the point of view of sound. Advantage has been taken of the ceiling shape below to work in a stepped floor.

The Industrial Council offices and Committee Room are well arranged on the second floor.

No. 23.

This scheme provides for separate entrances to offices and hall, a point worthy of consideration. The entrance hall has a stair leading to a foyer in the basement, off which ample cloak rooms are arranged. The supper room and kitchen are conveniently planned and lavatory accommodation is provided.

The first or office floor is not very satisfactory, as the lavatories are awkwardly situated, and the offices are very small. The author has no doubt endeavoured to economise, and the plan has suffered as a result.

There is a fine quality about the treatment of the interior and exterior.

No. 16.

The entrance is approached from both Kerk and Polly Streets. The entrance hall is somewhat cramped and is flanked with a large women's cloak room. The lift is not well placed. A stair leads down to a very restricted foyer in the basement, off which the men's cloaks are arranged. The hall is well planned and has stairs leading directly to the supper room below. These stairs, while attractive, may prove rather awkward or unpleasant in practice. The position of the chair store is not very convenient.

The Industrial Council offices are placed in a mezzanine and have no lavatory accommodation. The first floor is given up to offices and Council chamber, and there is a great deal to be commended in the arrangement, but the offices are scattered and there is little flexibility in the plan.

The lavatories could be improved without seriously affecting the plan.

The Council Chamber is carefully thought out, but the lighting is not altogether satisfactory.

No. 11.

The entrance from Kerk Street leads to an entrance hall which serves the lift and stairs to the offices.

From this entrance hall one may enter the foyer of the main hall, which has a separate entrance from Polly Street.

The women's cloaks are entered from this foyer and stairs lead to the basement, where the men's cloak and lavatories and women's lavatories are situated.

The supper room in the basement is lit from both sides and has a good kitchen service. The transformer room and heating chamber are at a lower level and the chair store is arranged in a mezzanine under the hall platform.

The hall is well lit.

The offices on the first floor are well disposed, the Council Chamber being rather small.

The lavatories are not very satisfactory.

The Industrial Council offices are on the second floor and also the women's lavatories with additional offices.

The native quarters are on the roof.

No. 2.

A carefully though out scheme, but weak in many points in plan. The staircases are not too well situated. The cloak rooms are unsatisfactorily placed and cramped. The chair store is inconveniently situated. The introduction of a gallery destroys the hall and elevations to some extent.

The office plans are very good on the whole.

No. 5.

The entrance is from Kerk Street. An ample entrance hall and stair are provided. Women's cloaks are situated on the ground floor, men's cloaks in the basement. The chair store is inconveniently placed. The offices are scattered and the Council Chamber is extravagant.

No. 14.

The entrance is from Polly Street, women's cloaks being arranged off the entrance hall. The hall is well planned. Stairs lead to a foyer below, off which men's cloaks are arranged. The supper room and kitchen are satisfactory. The chair store is placed over the boiler room, etc.

Offices are on the first floor. The Council Chamber is not well proportioned. The lavatories are small. The Industrial Council offices are on the second floor and the arrangement of the lavatories here is unsatisfactory.

No. 15.

The entrance is from Kerk Street. The cloak rooms off the entrance hall are well placed. The arrangement of stairs from main hall to supper room is unsatisfactory. The chair store is inconveniently situated.

The position of the Industrial Council offices on a mezzanine is good.

The Association's offices are on the first floor. The position of the lavatories is questionable and the Council Chamber is not very good.

The construction is awkward as the Council Chamber is cantilevered over the area, thus destroying the lighting of the main hall.

No. 18.

A very interesting and well presented scheme with many points to be commended, but the cost is prohibitive.

No. 19.

The supper room and lavatories are awkward, as is also the Council Chamber. The lavatories to offices are badly situated.

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In general, the competitors have arranged their main hall on the ground floor, with supper room in basement, with one entrance hall serving offices and hall.

The latter was asked for in the conditions, but one or two competitors have made provision for two entrances according to a strict interpretation of the by-laws. This raises an important point, and the assessors are given to understand that this difficulty can be overcome as the building is not to be let as offices.

The Council Chamber, with one or two exceptions, is placed either at the end of a corridor with lighting both sides or overlooking the area with lighting on one side or from small courts.

The Association's offices are, in general, placed on the first floor, the Industrial Council offices on the second floor.

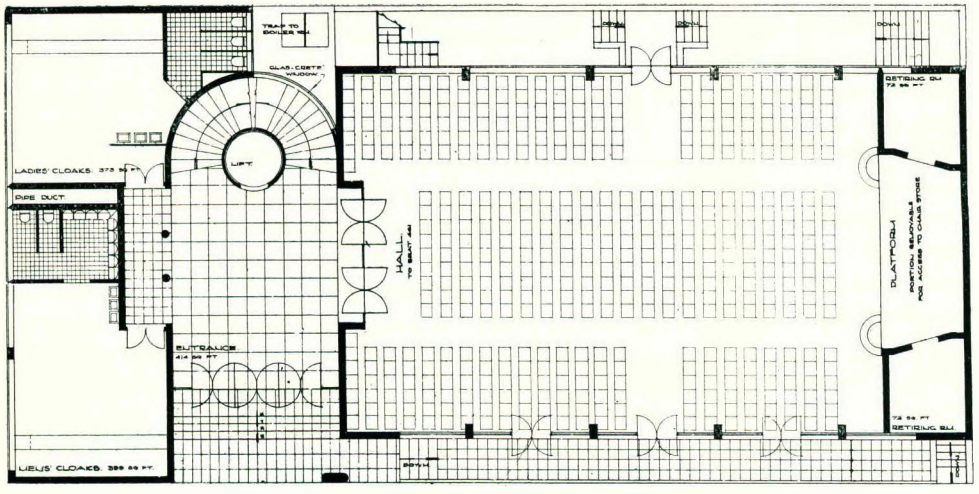
The assessors have looked upon the designs submitted as sketch schemes carried out in a comparatively limited time, and hence one cannot expect to find such details as exits, stormwater drainage, etc., or elevational treatment fully worked out.

Yours faithfully,

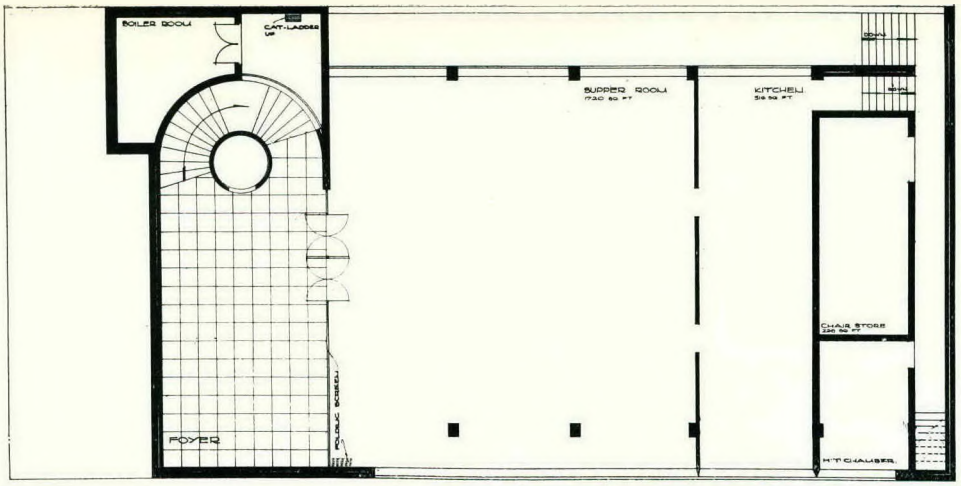
(Signed) G. E. PEARSE
A. STANLEY FURNER.
J. HAMLIN.

Design Placed First

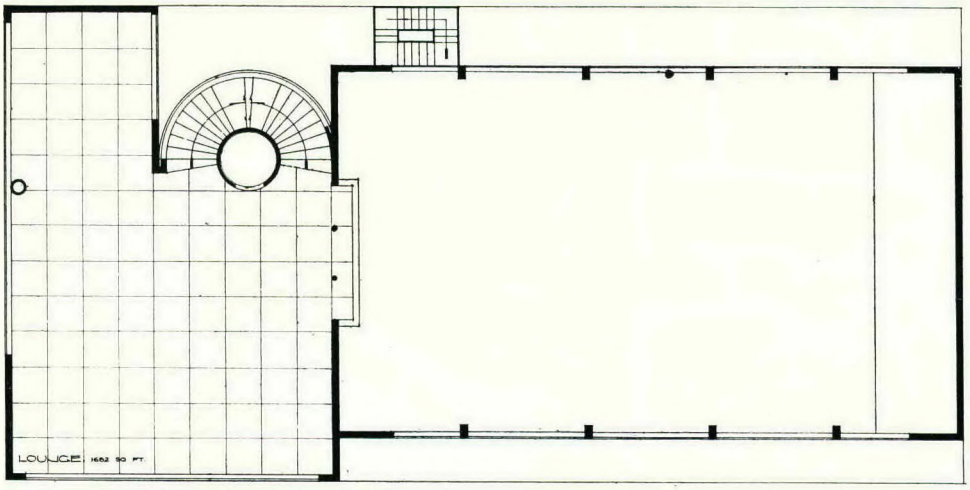
Nurcombe & Summerley



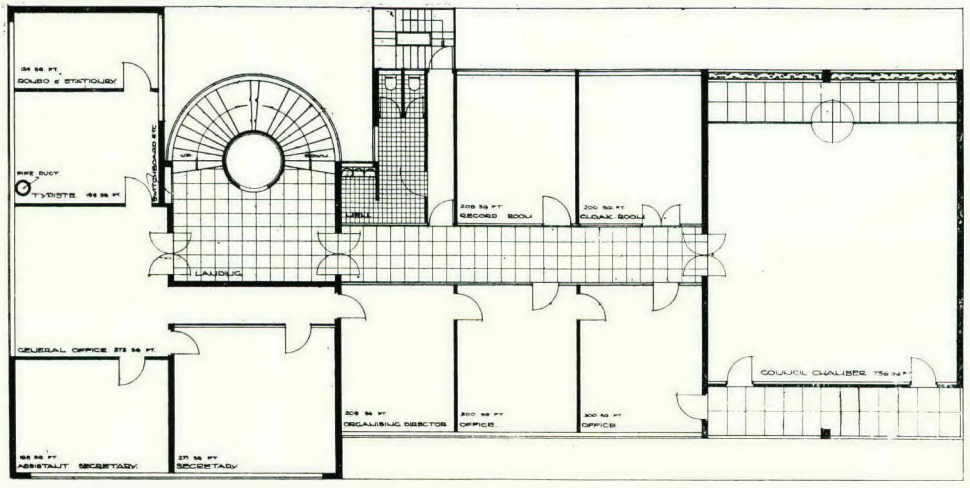
Ground Floor



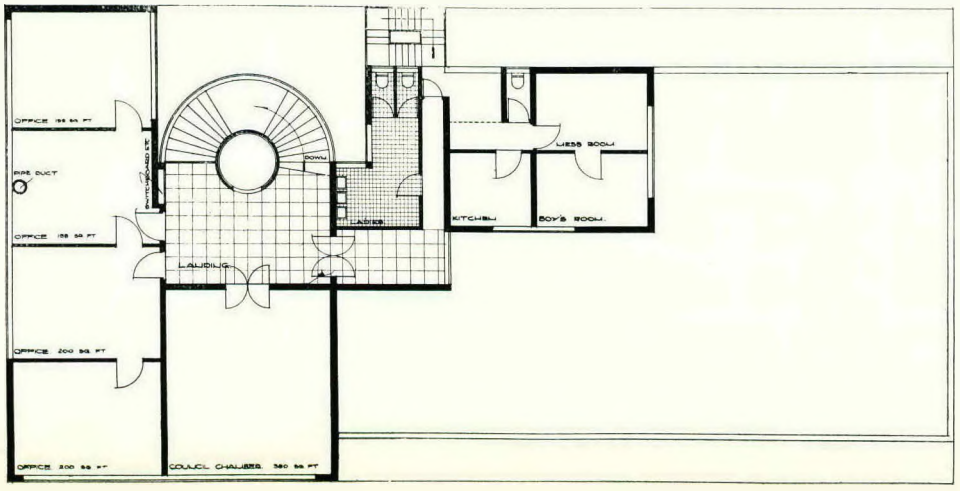
Basement



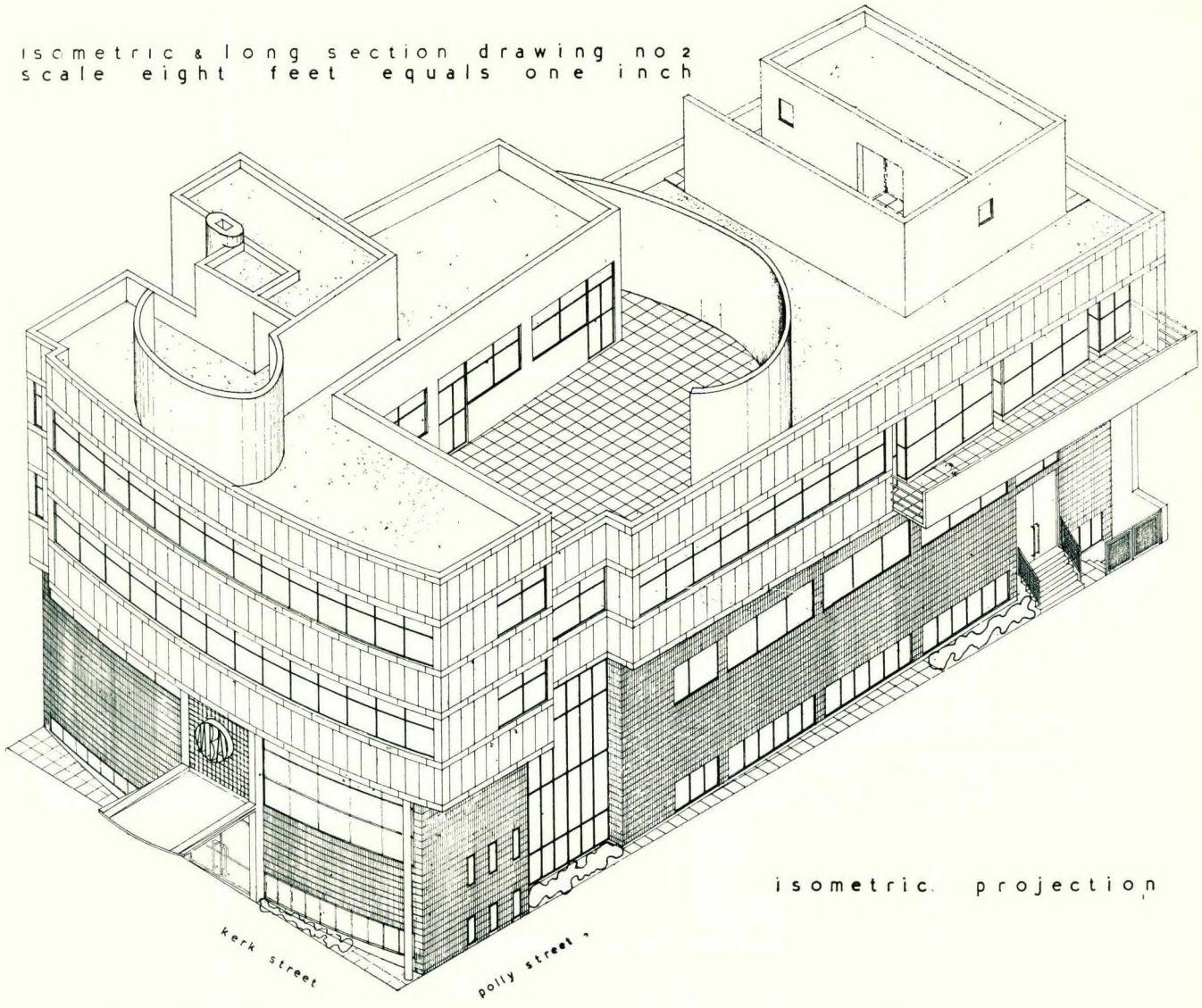
Mezzanine



First Floor

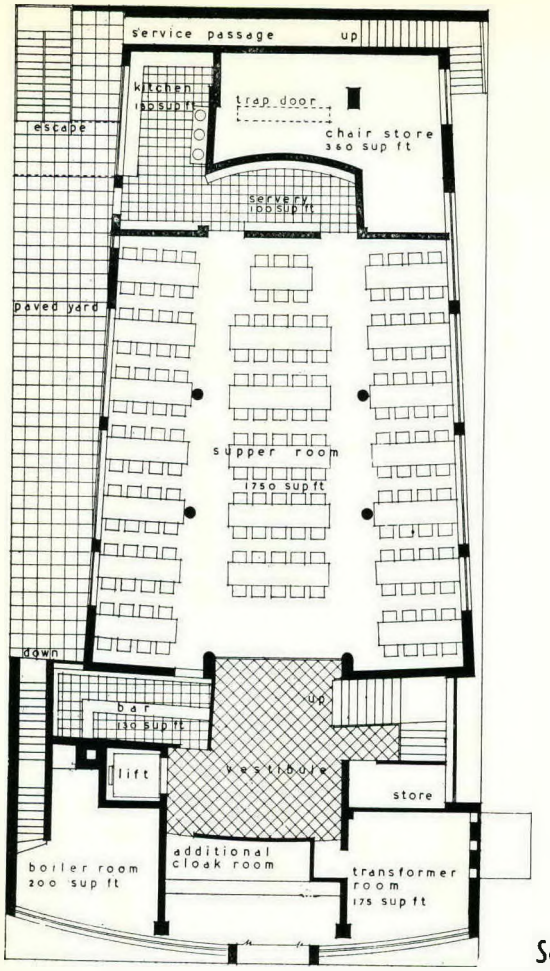


Second Floor

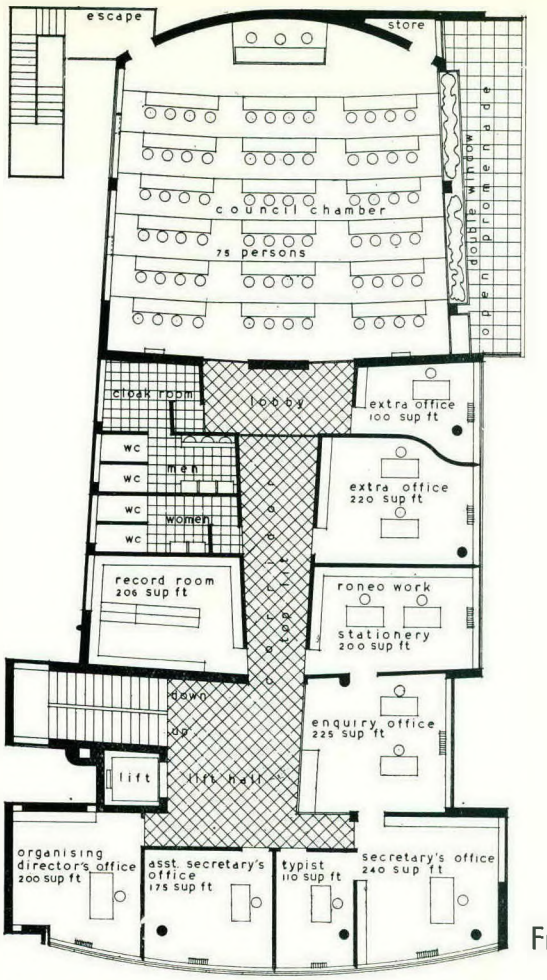


Design Placed Second

Hanson, Tomkin Finkelstein



Semi-Basement



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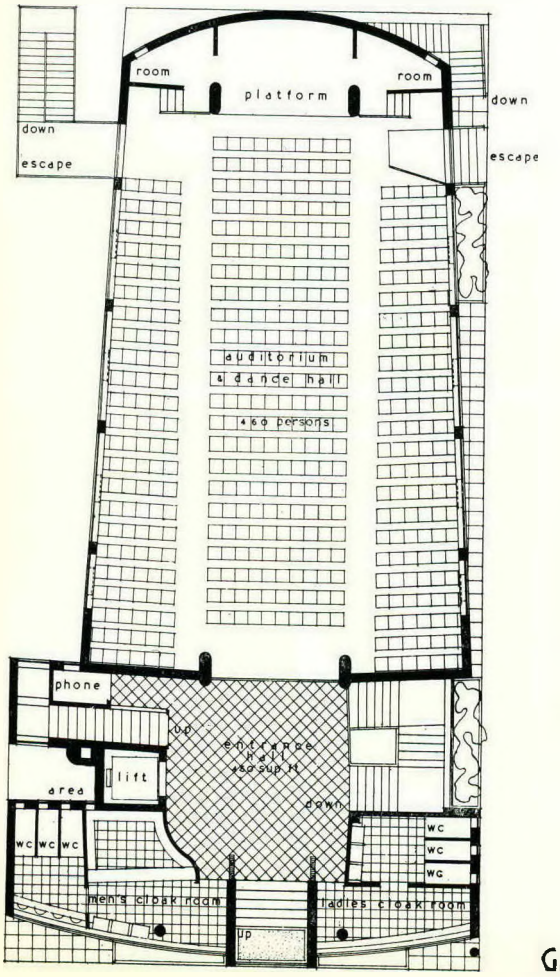
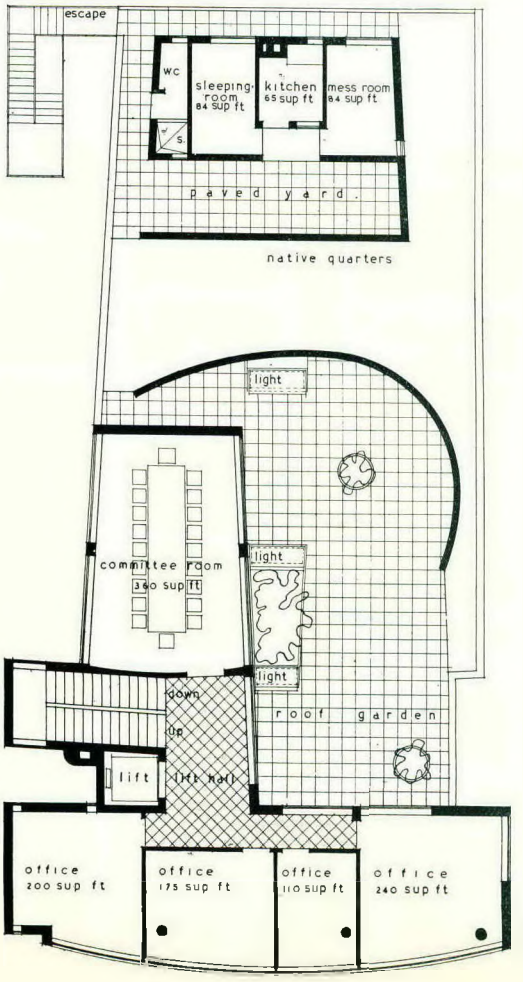


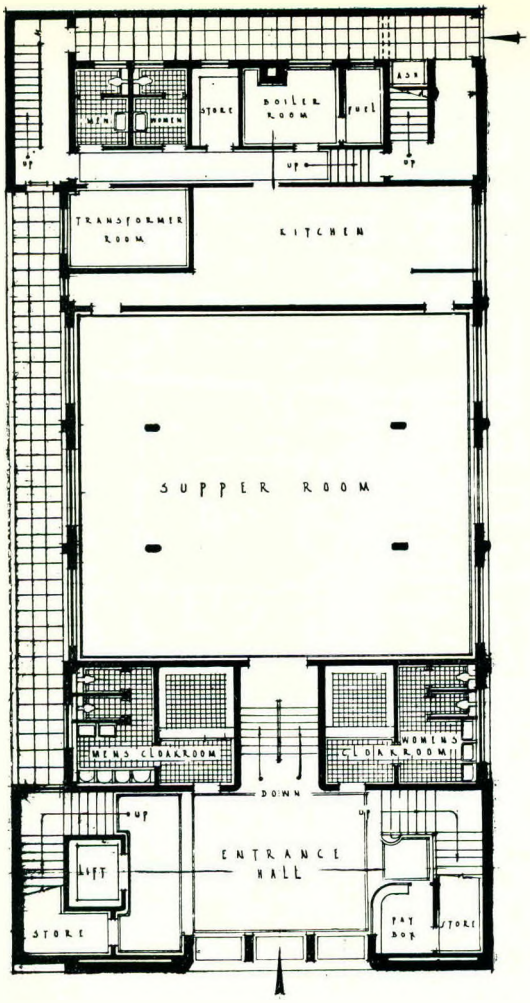
Ground Floor



Second Floor

Design placed
Second (tie)
J. McFadyen

1. Ground Floor
2. First Floor
3. Second Floor
4. Third Floor



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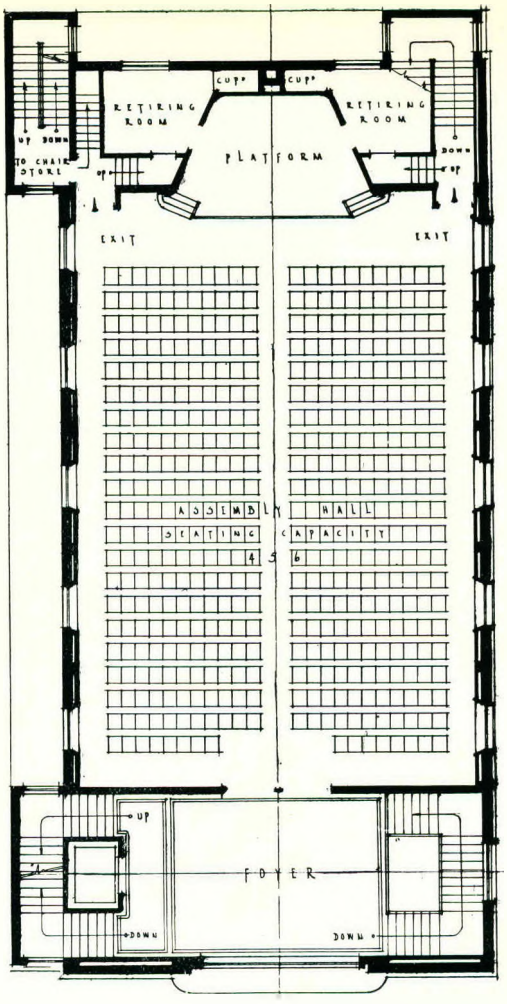

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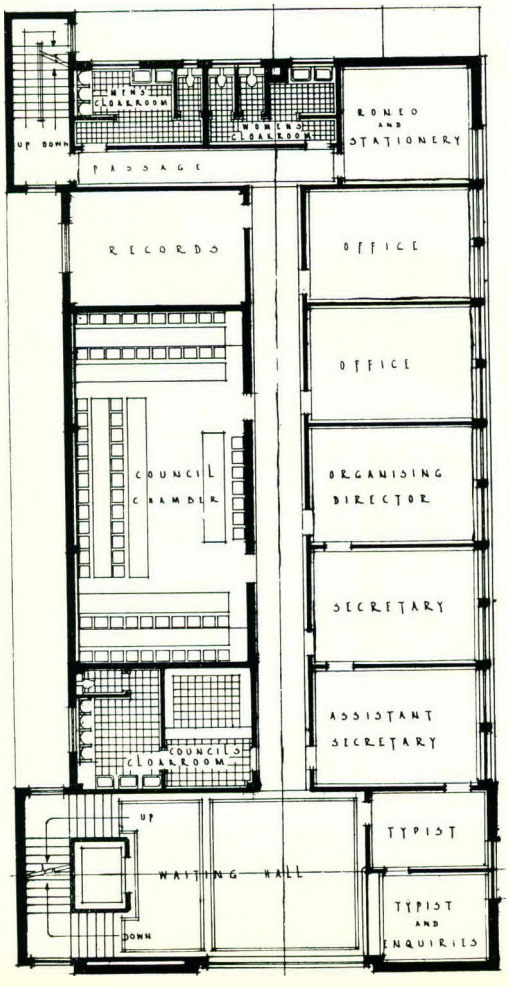

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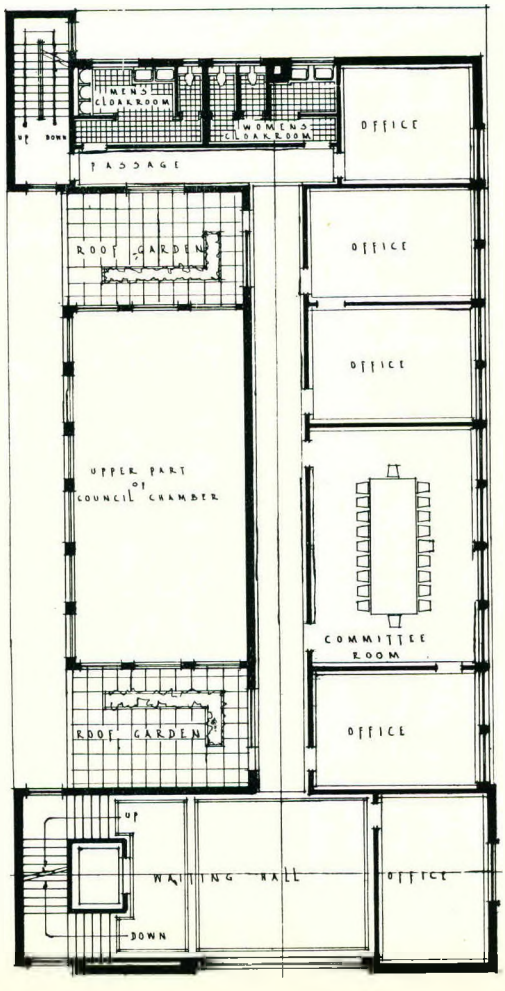

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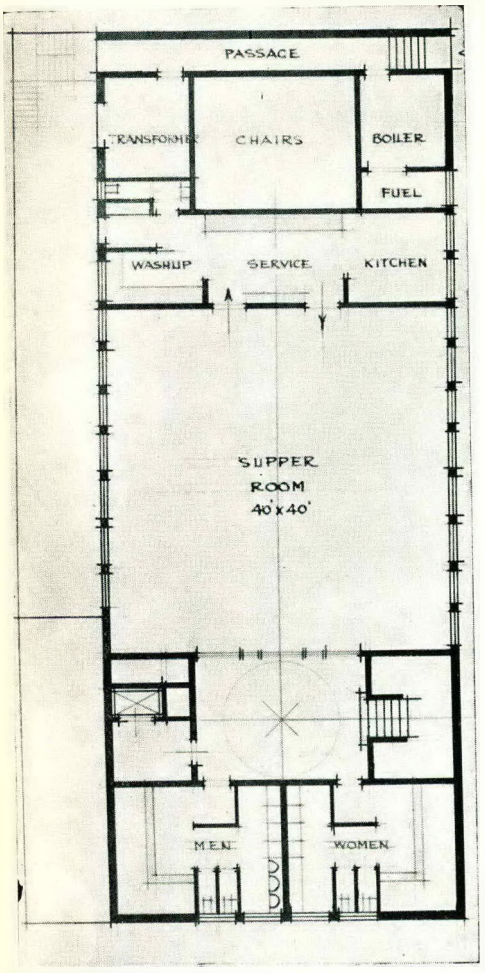
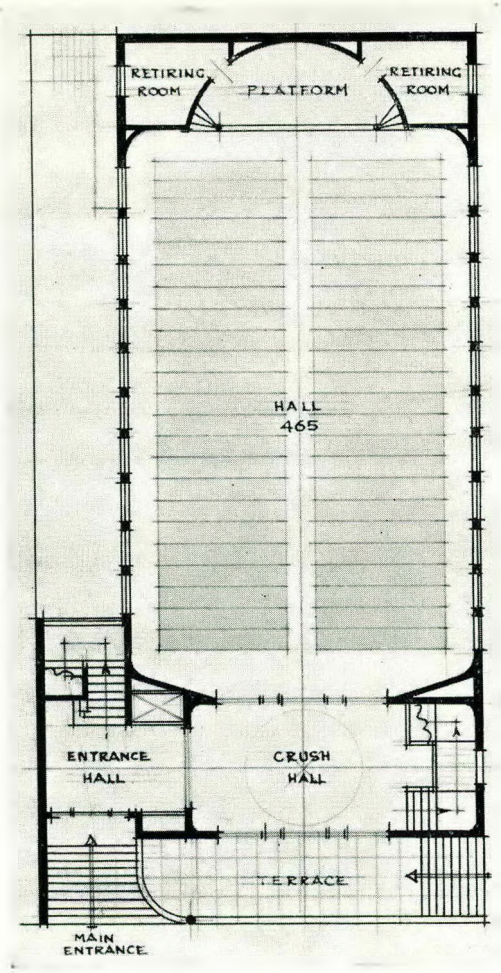
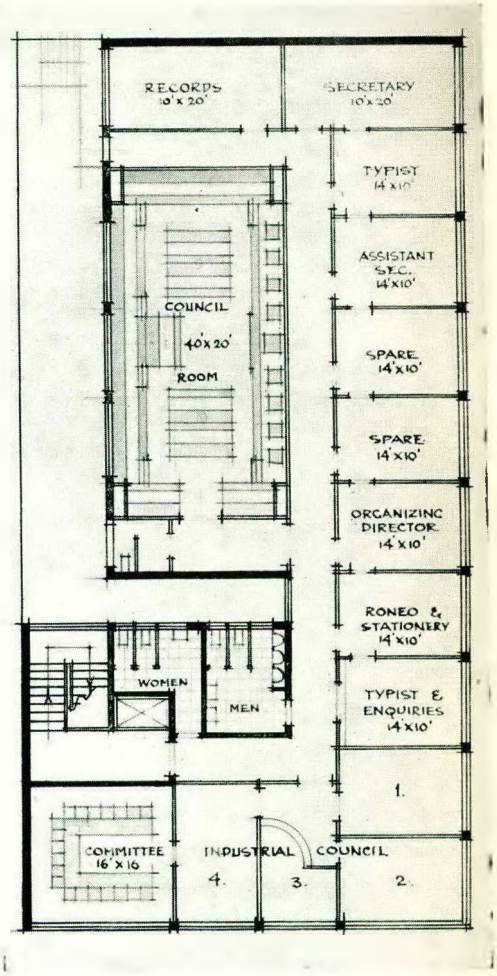


Basement Plan



Ground Floor Plan



First Floor Plan

Design Placed Fourth

A. A. Telford

The Theseion Athens

FROM HELLAS ● MONTE BRYER

Mr. Bryer who graduated from the University of the Witwatersrand in 1935 is at present at Oxford making a study of Greek Architecture. The following paper was written after a tour of Greece and the Islands.

Modern historical research postulates an evolutionary conception of the development of human destinies. The creative historian, in striving to eliminate error, to magnify and accentuate the truth, seeks to establish a compact generalisation that will express all the problems of history in terms of time and the human race. Similarly, in studying any aspect of human development, it is essential for us to realise the indispensable relation of the part to the whole, of which the part is an integral element. This scientific attitude towards a given historical phenomenon enables us to estimate its significance in the main current of epoch-making events.

If we are to understand and appreciate Hellenic art we must discover its relationship to the civilisation from which it sprang. We must determine the character and the attitude of the society, the intellectual outlook, and the spiritual temperament that influenced the choice and development of art-forms, and the reciprocal effect of those forms on the psychology of the people.

Let us consider the forces which moulded the forms of Hellenic architecture.

The primary experience of the student in Hellas is a sharp sensual response to the geographical conformation of the country; the even texture of the atmosphere, the inspiring contours of the land. The sky is a vast bowl of fleckless blue, intense and vibrant like polished steel. Upon this limpid background the sharp-edged mountains of arid Hellas are projected crisp and clear. Nothing intervenes between the simple aspects of sky and earth that Nature has devised for the drama of man; nothing surcharges the landscape. The external world imposes on the eye a series of forms at once simple and precise. Absorbing these impressions, the Hellenic artist became reconciled to them without forfeiting the freedom of his spirit. Favoured by the temperate climate of the eastern Mediterranean and stimulated by the variety and restlessness of his physical environment, he developed a nimble, critical habit of thought. His open-air life fostered a taste for clarity and order, a repugnance for complexity and excess, characteristics that were manifested in all forms of Hellenic art. In his search for clearness and simplicity the architect rejected every element that implied division, distraction, superimposition. He sought to achieve the broad outlines, the central statements of his ideas and emotions by profiles that impinge upon the eye, by the play of light on precise arresting forms. We are justified in regarding the Doric temple as a triumph of simple, solid geometry, a crystal of space and simplicity. It partakes of the stern qualities of its natural surroundings, the magnificent modelling of mountains in marble.

●

But geography alone does not explain the flowering of Hellenic art of which the Doric temple was the ultimate unrivalled achievement. With the development of the primitive races and the formation of groups, states and a society, Hellenic architecture passed from the construction of the early sacred shrines to a formal plastic system which culminated in the temple, symbol of political power, the focus of the nation.

Let us consider the interplay of Hellenic life and its architectural setting.

The Dorian conquest of Hellas towards 1100 B.C. marks the birth of pan-Hellenism. The

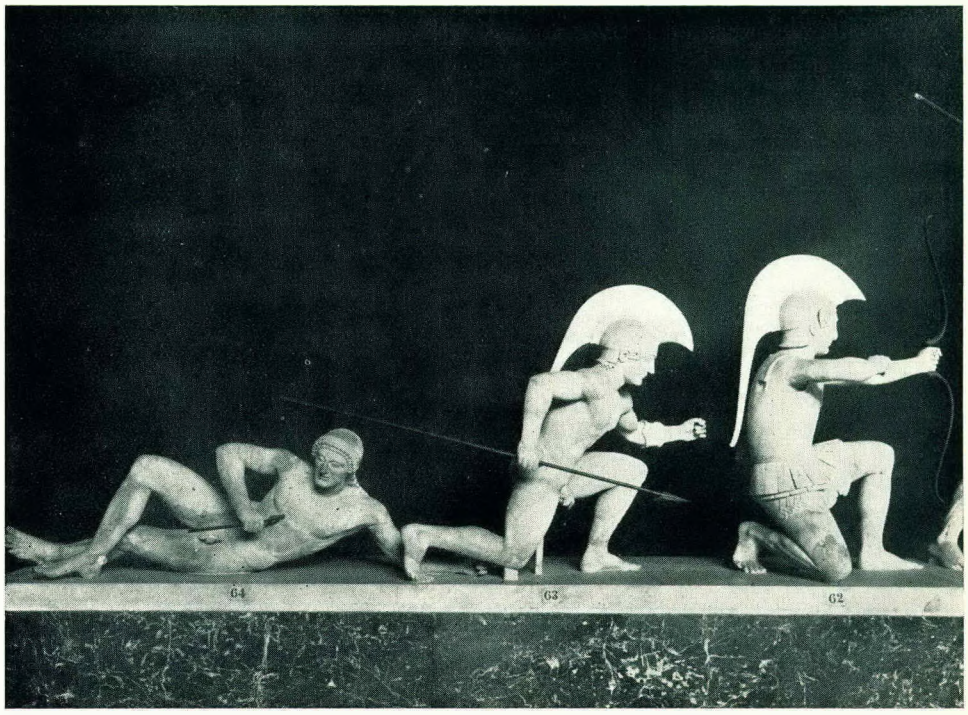
pressure of invading Dorian tribes drove the peoples of mainland Greece and the Peloponnese on to the coast of Asia Minor, and there, under the influence of their Oriental neighbours, they underwent a change which determined their subsequent character. The geographical structure of the Aegean encouraged them to intercommunicate with the peoples of the west, and the reciprocity of cultures that followed them defined the Hellenic civilisation. The incessant interchange of ideas and creations between the two different spirits, their mutual concessions and racial interactions, all combined to produce in a limited area a prodigious intellectual development. It is worthy of note that in the history of Hellas the west coast of the peninsula was intellectually barren. Elis, Tryphylia, Aetolia and Acarnania are flat uninspiring plains, but it was the provocative country of the Ionians in the east that insured a high destiny for the Hellenes. Thus Athens, by her unique strategic position, was predestined to become the centre where the two streams met, and where their differences of Hellenism were reconciled.

The magnificent contribution of the Dorians to this confluence of cultures was the life-giving energy, the "tonos" which they injected into Ionian thought. Herakles was the Dorian god of work and endeavour, the apotheosis of that ruthless concentration that subjugated Ionian effusiveness. The Dorians inaugurated ideas and, with extraordinary efficacy, the Ionians carried them to completion. The drama of Aeschylus, the sculpture of Phideas, the dialogues of Plato, all bear the double imprint of Dorian "tonos" and exuberant Ionian sensuality. The Parthenon represents the fusion of majesty and grace, rigour and abandon, sobriety and richness.

In the age of Hellenic colonisation between the 8th and the 6th century B.C. a vast circulation of ideas superseded the local currents that flowed between the east coasts of Hellas and Asia Minor. The colonies outwitted their motherland in acquiring wealth and power, and great building programmes were undertaken in Asia Minor, Sicily and Italy. But at the close of the 6th century the collapse of the colonies restored the commercial supremacy of the Mediterranean to Hellas, and during the 5th century the mainland produced a generation of brilliant architects, sculptors and painters, and the fine arts gravitated to the centre of economic activity. In the same period of colonisation urban life replaced the patriarchal life of the country. The town became the emblem of a superior civilisation, a higher culture. Architecture advanced accordingly, for urban life develops the great problems of planning, which, in turn, are determined by public discussion and action. By 450 B.C. the social status of the architect, the sculptor and the painter was clearly defined. He was no longer the unnamed artisan of the Orient, a sacerdotal instrument depending on caste, chained to an immutable tradition and interned in obscurity in the place where first he commenced to live. The Hellenic artist held an important position in the State and in society. He was independent, peripatetic, and well disposed to collaborate with his confreres in different regions. The relationship between the architect and the people is an interesting commentary on the competitive spirit promoted by the Hellenes in their public affairs. The commissions for public buildings were thrown open to competition and the projects adjudicated in public. Every architect brought his plan and his specification and defended them at the theatre before the assembly of the people. But the long-drawn struggles of the Peloponnesian Wars sapped this wholesome intellectual freedom, and Hellenic art suffered with the decline of political power.

Let us now consider the nature of the Hellenic spirit and see how it was expressed in Hellenic architecture.

The impact between Europe and Asia and the forging of pan-Hellenic sentiment is symbolised by the War of Troy. But the Odyssey, the Iliad of Homer, do not compass one idea. Homer is concerned with a kaleidoscopic world of powerful images, and out of these he attempts to create a unity. He presents the spirit of the Ionians, intellectually and morally effete, rejuvenated by a fresh injection of life. Homer's heroes are national; they personify the race. And the underlying idea of that unity is the independence of the individual. In contrast to the immobile Oriental concept of life, the Hellene sought to reconcile himself with his gods, his ego, and with his physical environment, the natural world. The divine and heroic figures depicted by Homer were humanised and the scene of life charged with



The Aegina Pediment

human interests imbued with a joyous humour. This conciliation between the forces of the mind and the cosmos is evident in all Hellenic works of art. The ideal is without depth and sublimation, but it is free, familiar and full of grace and harmony.

The "colossal" architecture of Asia played an important role in the modes of artistic expression adopted by the Hellenes. The Hellenic artist perceived that architecture, by the grandeur of its masses, the vast spaces on which it reposed, and its defiance to the passage of time, was in effect the most suitable medium for representing the great physical forces of the universe, the display of power, and the imposition of order on natural phenomena. It was the inexorable aim of the Oriental peoples to create objects of infinite multiplicity and immensity: the straggling vastness of Ninevah, the tower of Babel, the pyramids, the temples and the colossal statues of Egypt. Their buildings were smeared with stucco and paint, and the fundamental handling of forms was lost in an obscurity of dimensions and an infinity of decorative details. The Oriental phase of Hellenic architecture is characterised by the metal revetments of the legendary period. Walls were covered with ores, ivory, amber and rich tapestries, in the manner of contemporary clothing, with its collars, buckles and baubles. That was the state of early Hellenic architecture—a state when polychromy attached to an indetermination of purpose which did not allow the artist any means of expression other than a profusion of fabrics and a display of purely sensual effects. At the opening of the 6th century, however, the introduction of marble subjected the rich fantasy of ornament to the inherent brilliance of the material. Under the subtle influence of their country the Hellenes were not long in recognising that quantity itself was meaningless and that the most powerful effect on the intellect was achieved by virtue of relationships. They realised that it was not the absolute effect that moved the spectator, but the relative, and from that time Hellenic art sought to substitute comparative values for positive.

The sculptor did not pursue his ideal in mass and in fatuous ornament. He found it in precision, in the proper relationship of the parts, in the organic unity of the ensemble. Architecture underwent a corresponding change. It was developed in conjunction with sculpture,

Corinth

and the principles by which it was standardised were based not upon mass and the brightness of colours, but on harmony and proportion. The god approached the human stature and proportions, and the beauty of his type proclaimed his divine nature. The ivory and metal statue was an improvement on the wooden " xoamon," but the sculptor preferred the compactness and austerity of marble for the perfection of his ideal. Reflecting the evolution of the statue, the architecture became stable and sober. The temple of Aegina was a spectacle of riotous polychromy, the Parthenon a discreet display of light and colour. The forms are not expressive but impressive, conceived and wrought to produce a determined effect, a rhythm and a harmony, the tension of amphora and rhyton-vases.

The outstanding character of Hellenic architecture is that which demonstrates the Hellenic propensity for analysis. In their plastic arrangements the Hellenes have clearly proved that the limit to the divisibility of the organ is the indivisibility of its function. They not only distinguished the members of their buildings from the foundations, but they also differentiated their forms. The part was treated according to its function in the whole and all structural elements were rigorously respected. Thus by their spirit the forms are characteristic of the organic functions which they hold. The architect has transcended his Oriental imitative conceptions. He creates logically according to definite laws, and by the spirit of analysis he accomplishes the specialisation of forms. Logic is the fundamental creative force that regulates the choice and invention of forms.

The application of this process is best seen in the Doric temple. In the twilight of its ruins it lives for us still, with the secrets of its arrangement and the principles of its beauty. The temple was an enclosure for the idol. It was also a treasury and museum. It was not designed to receive in silence and darkness the everyday devotions of the people. The Hellene invoked his gods by sacrifices in the open air. On appointed holidays he approached the temple in public processions, and the essential purpose of the building was to serve as the centre for the solemn fetes of the nation. It was national pride that caused the temple to dominate the town, the country and the sea. The Parthenon is in sight of all the coasts of Athens. The Aeginetans regarded it with jealousy, and to the navigators sailing by Salamis its clear, resplendent outlines proclaimed the power and the grandeur of Athens. The political enthusiasm of the age was interpreted by its architecture. The architect who conceived it and the sculptor who modelled it were conscious more of patriotic inspiration than of purely religious sentiment.

The temple is a regulated system of stereometric parts which the eye follows easily, spontaneously. The sculpted simplicity of these parts produces a series of powerful perspectives that merge into a single pulsating impression. The precise character of Hellenic ornament derives from a clear conception of the elements of order. The Hellenes conceived of ornament as an accent, and carried it to its utmost limit. The same economy was manifested in their robes. Polychromy was an Oriental tradition which the Hellenes appropriated to their ideal. They employed the liveliest colours to express the joy, the life and the glory of the nation—the pagan, triumphal hymn of the people was chanted loud and clear, and the vibrations of tumultous song were carried to the far limits of the horizon.

The Parthenon reflects the spirit and the morals of a people. In the metopes of the entablature the vigorous stories of Homer have been translated into passionate sculpture and under the Lapiths and the Centaurs are the heroes of Marathon and Salamis, fashioned under the chisel of the sculptor with a verve that impresses on the work an immediate and living reality. It reveals that resolute concentration of the Dorians, the vitality, the zeal and the pride which is the source of inspiration and heroic activity and the essence of all great art.

THE INERTIA OF FORM ● A. NEUMANN

A Paper read in Johannesburg on April 17 1936

OPINION OF THE ARCHITECT

If we open any one of the many books about modern architecture, we always find the same statements, the same arguments; the modern architect says: In what anachronistic surroundings are we living, our furniture, our houses, our gardens. What bad taste. Why do we sit on low chairs, which do not suit modern customs ? Look at aeroplanes; they are something like modern architecture. They are a product of our time. The modern man is something very ridiculous, and so on. You all know this sort of tirade against bad taste. It is rather wearying to read, always the same stuff between the first book written by van der Velde, " Laienpredigten," and, lately, Corbusier's " L'Art Decoratif." The quintessence is: There are so many million people with bad taste, with eyes that do not see, and here are we, the modern architects, who could teach you better. But they do not want to listen. (I exempt Adolf Loos, whom I will mention later, whose argumentation was social, not formal.) There is one astounding thing about all this, that nobody has tried to find out why people are living in anachronistic surroundings and working in modern surroundings. Why are modern artists so shocked by this fact ?

Two groups of shapes.

We admit the fact that the modern man is a peculiar being, that he lives in an obviously chaotic world of shapes. But if we look closer at the world we live in, we distinguish clearly one large group of shapes, which is not anachronistic at all, which satisfies the eye which can see, which has obviously formal and principal unity. I mean all industrial shapes—aeroplanes, automobiles, all machines, ships, all those things which the modern artist likes. Then there is another group of shapes which the modern artist dislikes—houses, monumental buildings, furniture, the styles, costume, all kinds of decoration. This group of shapes seems to be perfectly useless seen from a functional point of view. It seems that there is no logical raison d'être for its existence.

We see that our life oscillates between two groups, usually called modern or ancient, but the terms are not significant.

We Live in a Polarity of Shapes.

What the first group of shapes has in common is that they are all products of machine civilisation, of modern production; they are steadily changing, developing as production is developing. There is practically no link between these forms and the forms of the past.

This new world, which has no precedent in history, has been created in an astoundingly short time. It is less than one hundred years since the first railways were constructed, the first factories came into being. The new method of production changed everything with which it came in contact and absorbed all the energies of the white race. But life does not follow a straightforward line of evolution. It is something dialectical. In this steadily moving stream man looked for something stable, something statical; the masses do the same as an individual does when he gets a shock. He becomes neurotic—that means he retires to an earlier state of evolution. It is psycho-analysis, which has shown us the mechanism of the subconscious. If a man gets shocked he retires into a state of childhood. But in production there was no room for this kind of extravaganey, so he could only go back into his private life, away from his work into his recreation, into a state of non-tension. The forms of production are tensional forms. The non-tensional forms are those rather unchangeable forms man inherited from pre-mechanistic civilisation. We can see that all forms, losing their function through the new methods of production, are becoming recreational or, if you like, decorative forms.

Examples of Inertia of form in Architecture.

Amongst the many possible examples to clarify this statement, let us take the means of traffic. Animal power was about the only means of transport before engines arose. In a moment the motor-driven vehicle appears; horse-riding is functionless. It becomes what we call a sport. The same with sailing boats, rowing, running, etc. The older methods of production are not lost, but they have a different meaning; they become decoration.

It corresponds to the biological moment of inertia. A characteristic example: the picture needed a curtain to separate the stage from the auditorium. In a modern kinema there is not such a thing as a stage, but one still uses a curtain to cover the screen. The movement of the curtain has become a decorative symbol of the overture; its functionless function has turned it into a decorative one. In architecture we often find the biological moment of inertia intervening. For instance, the Romans used the Greek column—the architrave system, which was functional for the Greek method of construction—as a decoration on their vaulted construction. In dress, we find all the unnecessary buttons as decoration; they were once functional.

We know, for example, that the Greek temple was originally constructed of wood. When the Greeks changed over to stone construction they kept certain features of the earlier constructive methods as decoration, following the inertia of form.

Actually we use skeleton structures like steel or concrete for our building. But the methods of stone and brick construction, established by precedent, are used as a decorative scheme. Our buildings look as though nothing had changed in construction. We are able to make large openings in walls, but we use small windows because they are decorative—that means corresponding to the brick and stone construction, which is functionless and therefore decorative. We are able to produce glass sheets of any size, but we subdivide our window casements because it repeats the time when subdivision was necessary. When the first steel furniture appeared on the market it was painted to look like wood furniture. It was rather naive, but the inertia of form is stronger than logical consideration. Even in so-called modern architecture we often find the inertia of form. Most of the modern houses are executed in skeleton construction, but they have a plaster coat like any ancient brick wall. It was Corbusier who made this mistake, probably influenced by Mediterranean folk lore, and his imitators followed him blindly. Under the influence of the younger French generation surrounding Perret he himself has already given up this principle.

Examples of Inertia of form in daily life.

When people invented the electric lamp they were afraid of its appearance. They masked it in the shape of old candles. If we feel festive we still use candles for lighting.

In factories, in offices, everywhere, production purpose is deciding. We use all kinds of rational radiators for heating. As non-tensional form we use the old fireplace, although it is not rational. It is a recreational form. It is the escape of a neurotic away from production. I think we can continue with examples ad infinitum; all our festive forms of dress are forms of the pre-machinist production state—evening dress, costume, etc. The feminine " mode " also repeats all historical and regional forms, and regional forms are historical. In modern production a new type of dress arose. The overall of the air pilot is a form of dress which is typical of our century, which couldn't have been invented in any other time; so also is the overall of the mechanic and the surgeon. Modern production has bridged over the antagonism of sexes. The male or female air pilot, the male or female surgeon wear the same overall during work, during production. But in the evening, after work, the female air pilot is no longer an air pilot. She puts on a dress which has formally descended from past centuries. The male air pilot becomes in the evening a gentleman—that means a man of the eighteenth century. He puts on evening dress, which was the every-day dress, the production dress, of the aristocrat. But before the rupture between the machine and craftsmanship there was not any considerable difference between production shapes and recreation shapes. People used more expensive materials and brighter colours. But between the overall and evening dress there

is an enormous formal discrepancy. The men of the twentieth century escape into shapes which have nothing to do with the contemporary world. I think it is obvious that new shapes can only arise from the production process.

I want to show now that the same principle which dictates the life of shapes in general can also be applied to architecture in particular. But the term architecture covers a general conception. By it we mean all types of building. But, from the point of view of shapes, there are two clearly distinguished groups.

The first group comprises every kind of building in direct touch with production. In the first group, for example: factory buildings, coal bunkers, grain elevators, tanks, reservoirs, large garages, etc.

The second group comprises all buildings not in touch with production underlying in their shaping the inertia of form.

For monumental purposes and domestic life this means that out of production people use all the historical forms, which are functionless, small windows, pitched tiled roofs, rustic walls, all kinds of historical reminiscences. But, as we see, this does not apply only to architecture; it seems to be a general law of modern shapes in its polarity. For furniture the same rules govern. In the factory, in the office, man disposes his belongings in very rational space-saving furniture of standardised metal, typical products of the machine. In the evening, when he comes home, he tries to help himself, as well as possible, with some historical relics, used for the same purpose.

The military, in modern warfare, make use of the most progressive technique. For festive occasions they use the uniform of some centuries ago, which has for long become useless and functionless, therefore decorative.

Modern society and recreational life is dictated by the principle of the fancy dress ball, the attempt to escape from one's own time, and last, but not least, from one's work.

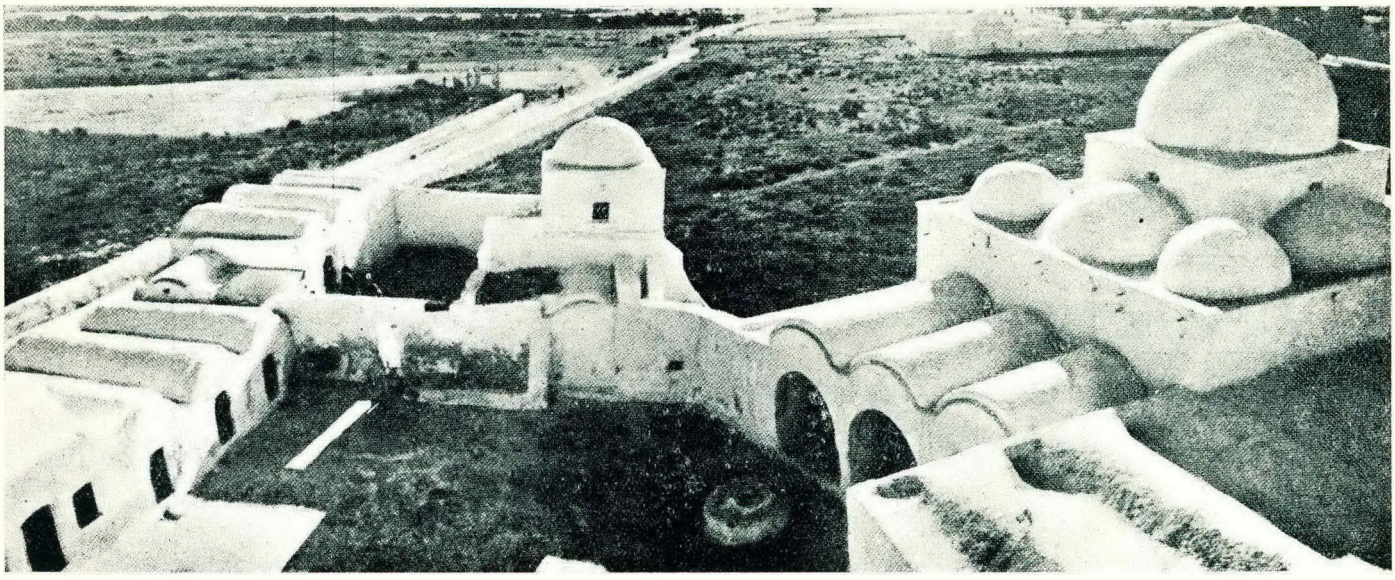
Let us translate what we said before into terms of classes. As the leading class, before the advent of the bourgeoisie, we had the feudal caste, the aristocracy. The bourgeoisie is compelled, in its attempt to escape conditions of modern production, to use the forms of this ancient aristocracy, which means that the bourgeois wants to be an aristocrat in his recreational time. The aristocracy is actually a decorative class, a functionless class, therefore the bourgeois lives in a castle and wears a title of nobility in his free time.

We have now arrived at the question of the sociology of shapes, so to speak. I know what a difficult domain we step into; almost everything remains to be done. There are a few genial attempts, and I cannot claim to solve the problem, nor even to attack it in the right way. Still, let us try.

All those laws which we have outlined for a morphology of modern life are generally right only for the social classes close to production. But there is one class which got further from production as machine civilisation progressed. It is a small minority only, the intellectuals and artists. As we are dealing with form only, we can leave out the intellectuals. The artist was amongst the production process while craftsmanship was the only way of producing goods. With the change to manufacture he became only an artist in the modern sense of the word, and actually he is probably furthest from production. But with the changing social state he is approaching production again, and may even play an important role in it.

The artist's reaction has not always been the same during the evolution of a new production principle. His first reaction did not differ very much from that of other classes. Later on, with growing distance, he was the most reactionary to draw evolution back. The attempt to reintroduce craftsmanship, hand-made meant artistic, by Ruskin, Morris, etc., went on until about 1900, when industrialisation stepped into the modern state, electrification, motor roads instead of the railway. It was a moment when the artist, as a social class, was as far as possible away from production. He knew his art had nothing to do with modern life, so he declared art as a self purpose. L'art pour l'art. But this distance from production gave him one advantage, the total view, the bird's eye view, so to speak, of shape conditions. He was the first to state that the world was changed. People inside production did not want to see it; they wanted to escape production.

For the artist the new changed world had the same attractive power as the old world had for the man who was inside production, and the artist professed the new beauty of speed, of light, of the productions of the twentieth century. The first futuristic manifesto appeared.



Native Building North Africa

It is the birth certificate of modern architecture. The contemporaries of 1909 took this curious document for a provoking joke, and its author, Signor Marinetti, was considered to be quite mad; actually his excellency is director of the Academy of Milan. In rough but kind terms the futurists opened an attack against everything passéiste, every shape of the past. They declared the beauty of Venice, Nurenburg, Versailles, the Escurial to be a lot of rubbish. They attacked the old art and did not even omit such venerable names as the great creators of the Renaissance, meaning the academicians who misused those great names. They attacked the then prevailing impressionist fashion in painting, music and poetry, and professed a complete revolution in all domains of art. And what probably was more important, they discovered their surroundings, every-day life, the modern street, with its traffic, its display windows; they discovered a world of speed.

The futurists discovered the beauty of engines, of motor cars. They observed the moment of time in art, they observed the kinema, which before then was considered a very vulgar kind of amusement; they were particularly interested in all modern means of traffic, ocean liners, an element which plays an important role in Corbusier's aesthetic. The academies and the public behind them were simply scandalised. It is quite amusing to read the contemporary art critics.

But the names signed under the futurist manifesto are already classics to-day. Names like Appolonaire, Picasso, Bracque, Laurencin, Satie, the names which made the new vision of the twentieth century. There is one thing important in this first manifestation of modern art. They are against the hypertrophical individualism in art. It took nearly three generations before the collectivity of the production process got reflected by a collective feeling in the class for form production.

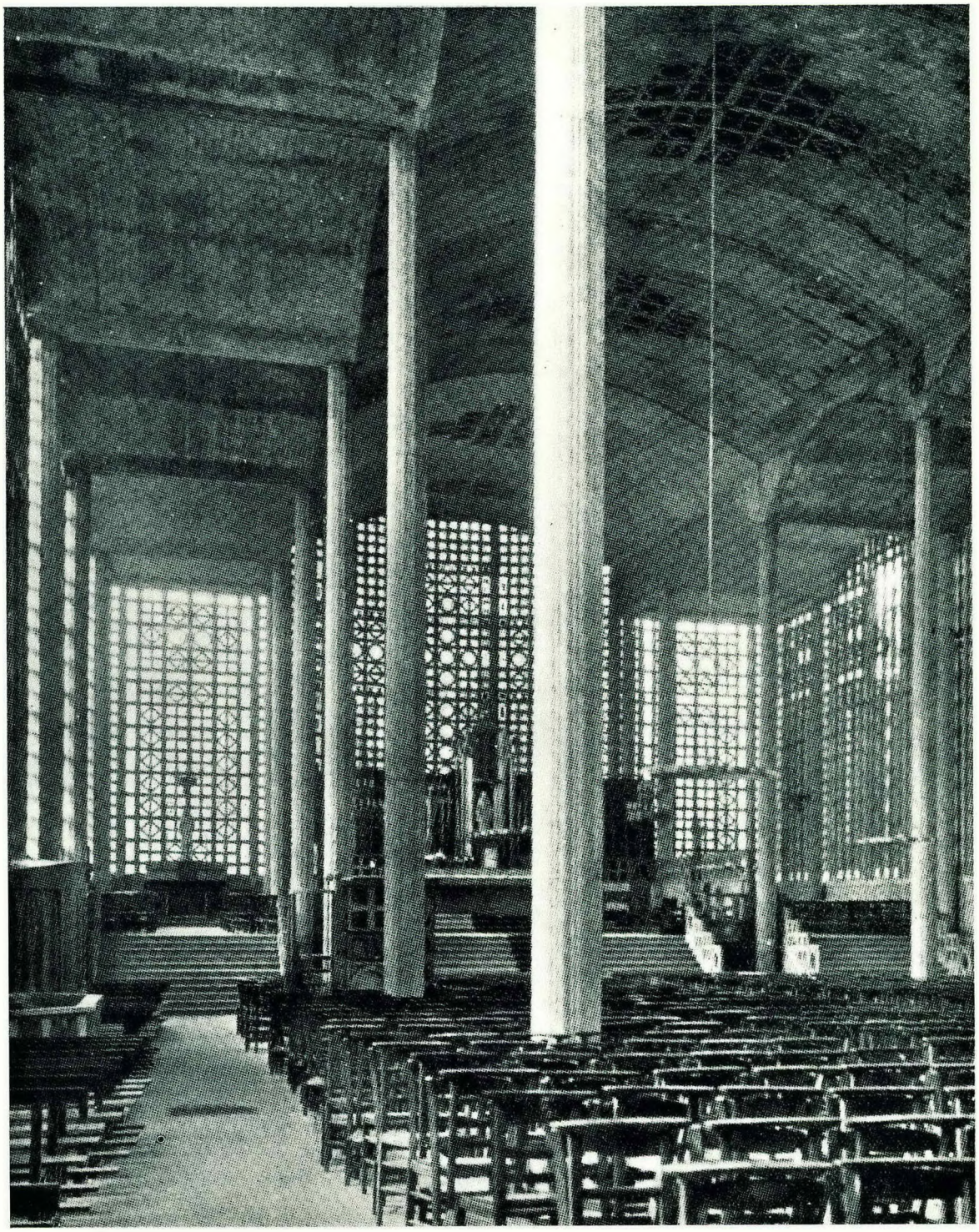
We have just witnessed a significant campaign against new pictures which the Johannesburg Art Gallery recently purchased. I do not want to touch the question about the justification of the arguments used by the one or the other party engaged in the struggle. But there is no doubt that we had on the one hand reactionaries, what we call the "academy" against "moderns." This grouping in modern art is not confined to this country—we actually find it the whole world over. There have always been art discussions in history, but only since about 1830 do we find this clearly pronounced contra position of two groups of academies and modern revolutionaries. It was about the time when the newly-formed bourgeoisie crystallised their power and the transformation from the feudal manufacture system to machine production had taken place. If we read such a good documented work like Gideon, "Bauen in Frankreich," we are astounded how early revo-

lutionary voices arose. We find certain definitions of modern art, particularly as concerning architecture, already in the first half of the nineteenth century. We also find all the contra arguments we are used to hearing to-day. I believe the French example is most characteristic because the French Revolution swept away all those relics of feudal tradition which veiled the sociological structure of the industrial countries.

So the laws connecting the super and substructure of society are still undiscovered, and we step into the dangerous domain of conjecture. The work of Charles Lalo, "Sociologie de L'Art," does not touch the question of relation between art and modern society. But there is one particularly interesting work about the sociology of modern art by the Spanish writer, Ortega y Gasset, Professor of Metaphysics at the University of Madrid. "Il Thema de Maestro temps," the task of our time. He gives a very clever analysis of modern art, with its typical features like dehumanisation, self ironic and so on. Then he analyses the class of art consumers, and comes to the conclusion that modern art is a typical aristocratic one. He starts from the fact that there is only a small minority which understands modern art. This phenomenon can probably be explained. As the artists are excluded from modern production processes, their problems can only be understood by a part of society which is out, or nearly out, of touch with production. As a matter of fact, the most important collectors of modern art are members of the French aristocracy, particles of a functionless class. A small aristocracy carrying the new feeling of life, which is something like a compromise between vitalism and culturism. But he only analysed the modern art consuming part of society, considering the art producing part as a quantité negligible. And may be in this supposition he is wrong. Apparently the art producing part in society is a minority too, the Bohemians, to use the usual French expression. It means just a man out of society or, in clearer terms, a man out of touch with production. At a first glance it seems that this constalation won't carry us very much further. There are Bohemians who are academically minded, there are Bohemians who are rebellious, revolutionary in art. This apparently independent part of modern society is still in an organisal relation to the production carrying part of society. It reflects simply the class struggles which characterise the production society. We find a strange parallelism to political and economic states. The pioneers of modern revolutionary ideas in political life did not originally come out of the proletariat; they were intellectuals. In this class a political phenomenon became conscious which moved spontaneously the producing class.

From a purely visual point of view, the modern world has not been aware of itself. The first conscious manifestation has been the futurist manifestation. In it modern life finds its perceptive discovery. It existed, but was not discovered. We might be allowed to compare the two stratas of society, substructure and superstructure, to an electrical field and neighbouring spools with induction streams. The intellectual class receives the impulses and reacts in a parallel way.

The gravity centre of bourgeois art was painting. The evolution trend of small, transportable oil paintings follows the line of mercantile cities—Amsterdam, Venice, Florence, Rome, etc. In the first transition period from feudalism to capitalism the painters were architects at the same time. They treated architecture like painting, as an autonomous thing, so to speak, framed without any connection to its surroundings. Look at drawings by Leonardo, Michaelangelo, Raphael. Their buildings could be placed anywhere. Never do we find the slightest indication of surroundings or any co-ordination. In our time again architecture received its strongest impulses from painting or, more precisely, from painters. Particularly the application of scientific method, of analysis and synthesis, has found access to art. By continued analysis art arrived at a state of abstraction. All literary moments, for instance, have been excluded. The narrative content which played such a great role in ancient painting has been excluded. The typical pictorial values have been extracted which are a certain correlation of colour and form. The form analysis manifested in the pictures of Cezanne has had a strong influence on architecture. The chapter on volume in Corbusier's "Towards a new architecture" deals exclusively in terms of Parisian painters' slang. They showed the way back to elementary form. It



Church at Le Raincy A. & G. Perret

shows the formal continuance in architecture of all periods.

The futurists wanted to introduce the moment of time in painting; they had to destroy painting, the essence of which is statical. What drove painters like Prampolini, Severini, optically determined writers like Marinetti to destroy their proper art? Their manifesto is a strong condemnation of all kinds of academicism. They embody all the essential points of Corbusier's aesthetic, who only popularised and compiled all those ideas. When he actually writes about aviation when he finds the same shaping law in an aeroplane and the Parthenon, those ideas are discoveries of the futurist.

After this introduction let us resume. We have to deal with two groups of systems, a substructure and superstructure. The first group is in direct contact with production; the last is the furthest distance away from production. But the class furthest away from production feels the production shapes as functionless; the direct production forms become non-tensional forms for them, the decorative forms (for example, Tatlin, the first constructivists, the futurists, think of the film decorations of Fernand Leger).

In those works the shapes of engines (which are in the engines co-ordinated following the law of function) lose this connection and get co-ordinated by a purely formal point of view.

Production has created new shapes, the artist has created a new aesthetic.

But he could only use this aesthetic where production has not penetrated, where the old decorative forms have barred the way for production forms. So the artist designed new stage settings, new dresses, new furniture, new household goods and new houses. It was quite natural that he studied the laws of production and he found the law of function. Now he tried to apply it. But there is no production in recreation life, therefore no function in the production sense; the only point in a modern house about which we have got certainty is the kitchen.

It is the only point of production in the dwelling therefore able to be organised in a functional way. So our kitchens are small factories, with all the disadvantage of small factories amongst them irrational production. But indeed they satisfy the eyes which can see. What remains to do is to search for the law of recreation. Recreation is more a question of the subconscious than of logical reasoning. And already voices rise against the misunderstood functionalism.

I remember the first reaction when, after the war, the suburbs of large European cities arose. People emigrated in masses on Sunday afternoons to look at modern architecture, and there was one judgment. These houses look like factories, the interior like a dentist's rooms. That means that the masses recognised the new shapes as transplanted production shapes, and they refused to accept these shapes for recreation use. In the masses there is a subconscious desire for something that satisfies their emotional life. As the artists have not yet created, they just go back to the old forms which have the same charm for them as the good old days. There is an emotional basis for all reactionism as well in artistic as in political life. But there was one man in architecture who did not go through painting, who attacked all the pictorial architects, who brought pictorialism into architecture. It was Adolf Loos. He was not revolutionary as regards construction. He didn't claim new shapes. When he was against ornament he did so for social reasons, not for formal reasons, to save working time. He showed that only criminals use ornaments in modern society.

He built the house for Tristan Tzara, the Dadaist poet, and Dadaism was the first step to Surrealism. The modern dwelling has to satisfy the needs of our subconscious. This is the way towards an architecture. Tristan Tzara wrote an article for surrealistic architecture. Like all theories, it has got its mammothistic state in the beginning. There is no doubt there is still a lot of very rational function in the house. But the essential thing is recreation—a great problem for an artist.

It is striking how Corbusier changes under the influence of surrealistic propaganda. Suddenly craftsmanship motifs arose. Vaulted ceilings, obviously under the influence of Perret, Rue Rayonnard, then small houses,