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DEMOCRATIC ARCHITECTURE - THE UNIVERSAL AND USEFUL ART: PROJECTS AND REFLECTIONS

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DEMOCRATIC ARCHITECTURE –
THE UNIVERSAL AND USEFUL ART:
PROJECTS AND REFLECTIONS

The Thomas Cubitt Lecture by

RALPH ERSKINE, CBE

delivered to the Society on Wednesday 31st March 1982,

with the Lord Bellwin, Parliamentary Under Secretary of State,

Department of the Environment, in the Chair

THE CHAIRMAN: It is a great pleasure for me, as a former businessman, a former Leader of a local authority and now as a Government Minister with responsibility for some of our inner cities, to take the Chair at this Thomas Cubitt Lecture which commemorates the influence of one of the great private sector developers in London. This is the fifth such lecture commemorating this early nineteenth-century builder and architect, and I have little doubt that this evening's meeting will in the words of the Trust 'promote debate and therefore understanding of quality in the design, management and maintenance of the environment'. We are doubly fortunate tonight in having also an exhibition downstairs organized by the Council of the Schools of Architecture, showing what the designers of the future are doing to-day in their training.

Ralph Erskine is one of our strongest exponents of the idea that to achieve the best environment and

buildings requires the participation of people with architects. Trained as an architect in London, Mr. Erskine moved to Sweden and developed his architectural philosophy relating buildings to social and political requirements. He was not lost to us for good. Indeed his buildings in England include housing schemes, Clare Hall in Cambridge, and the Byker development in Newcastle-upon-Tyne, including the now famous Byker Wall. He was a brave man, I suppose, to set up his office in the middle of the redevelopment area, but from all that I have heard it seems to have paid off in terms of public satisfaction. Mr. Erskine has had many exhibitions of his work, he has been honoured by various foundations, he was made a Commander of the Order of the British Empire in 1978, and has published many articles. I am sure you are all looking forward to hearing him speak.

The following lecture, which was illustrated,
was then delivered.*

INTRODUCTION: ARCHITECTURE –
EXTRAVAGANT GESTURES
OR USEFUL ART?

The Nature of the Art

ARCHITECTURE arises as human beings change the landscape, erect buildings and towns, and create furniture and other tools for satisfying their many needs. It is every-

where with us, is a vital influence on our lives and a major expression of our culture, the most extensive and universal of the arts, experienced and used by all people. It is the art of building communities, and this is true whether or not architects are involved in their creation.

Likewise we must never forget that architecture

* The Lecturer included very many more illustrations than can be accommodated in these pages. – Ed.

differs from all the other arts in that it is *brukskonst* – ‘the art of that which is useful’. It is the usefulness, the functional aspect – that rich and all-embracing weave of practical and spiritual satisfactions, which is the very special characteristic of this exceptional art which both protects our bodies and expresses our dreams.

There are therefore exceptional responsibilities for all who partake in building our environment, and they should consider with the utmost seriousness what their most important objectives should be.

The Expression of a Culture

The great art and architecture of antique cultures, of the Middle Ages and of the Renaissance, was involved in glorifying the persons and institutions of a powerful élite, and largely ignored the fate of the underprivileged majority of humanity. It was believed that this was a natural order ordained by God, and the great monuments were therefore a true expression of this belief. Meanwhile ‘people’ themselves built for their own needs with understanding, economy and charm.

We must with equal sincerity express the important beliefs of our own time.

This being so, it should be a matter of great concern to observe now – in an age which professes profound belief in equal human rights and democracy, and when scientists, authors and the media inform us of deprivation and the pressing needs of a majority of the inhabitants of the world – that such great resources of endeavour and finance are spent on a few offices, civic buildings, churches, museums and other exceptional monuments, and so little of exceptional and humane quality can be discovered in the numberless dwellings, work places and other buildings for the very real needs of the vast majority of people.

Despite the new techniques, materials and modern aesthetics of our present day architecture we see, as in earlier ages, a few exotic monuments, and as never before widespread inferior environment in our towns and villages.

In view of this fact it would seem surprising that often architects, clients, critics and the architectural press show great interest in the form and philosophies of the exotic buildings, and I question whether we are more involved in architecture which betrays the humane and democratic beliefs and dreams of our culture; or

is such architecture – as all art – communicating ideas very precisely and demonstrating our *true* belief in inequality and exclusive privilege? Can it be that it is only in the modernistic shapes of these buildings and in hypocritical talk about human rights that we differ from the monument builders of earlier ages?

Are we seduced by the proficient beauty of modern or post-modern aesthetics and is our capacity for critical evaluation thereby dulled? Are we naïvely unconscious of the important messages that architecture so precisely communicates or is dishonesty a basic characteristic of our culture? If the new buildings were ugly, or if they always imitated the attitudes as well as the shapes of the Renaissance, this might become clearer.

Architecture, like the shaft of an axe, must beautifully and precisely symbolize its own good reasons for its necessary existence, and insight and sincerity will tell us which reasons are good.

For what good reason then should we architects spend the invaluable resources of time, intellectual and emotional energy in involving ourselves in battles over the cults and fashions of a disorientated age, in the irrationality of the New Rationalism, or nostalgic escapism, or wasteful glass-house heroism and palace building for a world where the majority of humanity is energy-starved or, simply starved? Why should we interest ourselves in the present-day masters of monumentalism – those great ‘dinosaurs’ who have not realized that for satisfying the real needs of the real world they are ill-adapted, but who may regrettably survive since the powers of an age so often ignore its true need?

The Academic Tradition

The academic tradition has often been an important factor in isolating artists and architects from the users of the built environment. Deeply involved in labyrinths of abstruse dialogue within a limited circle of true believers, architects and critics become members of a cult which has its own high priests and proselytes and uses its own secret language, a language which arouses the admiration of the initiated but excludes outsiders. Such cults and languages usually express concern for the common good but in fact give rise to an isolated and exclusive society for mutual admiration. They strengthen the feeling of superiority of the believers by excluding and thereby establishing the inferiority of all others.

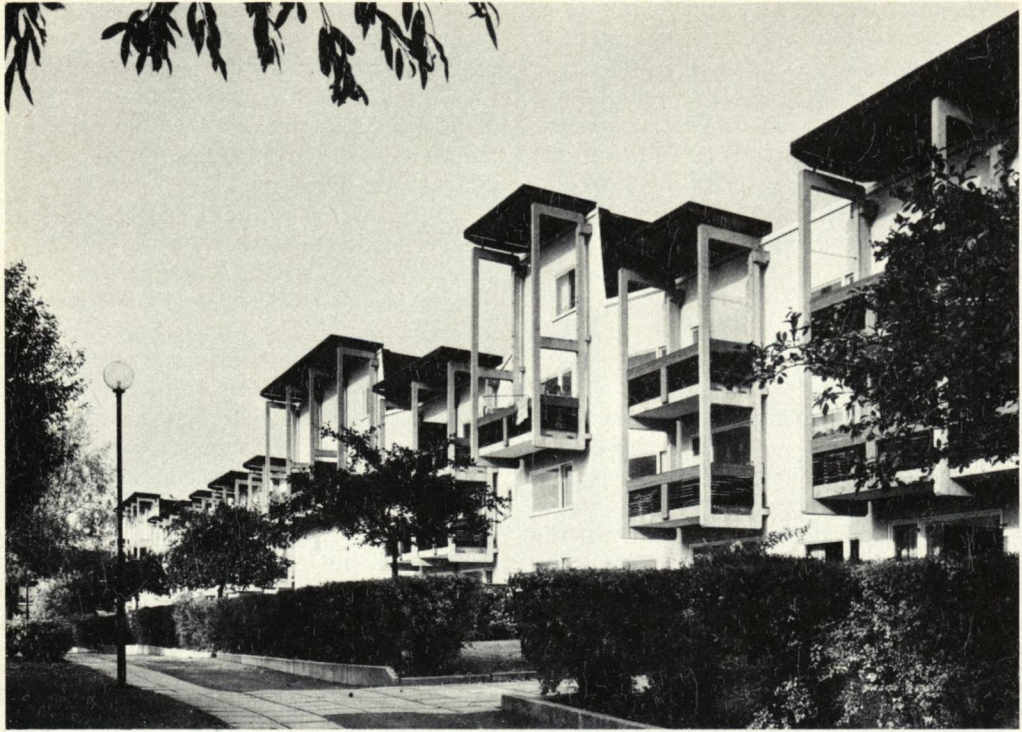


FIGURE 1. *Swedish low-cost mass housing at Tibro, built in 1960: siporex, concrete, wood, on-site prefabricated balconies and access galleries*

A regrettable consequence is that architects become involved in their own exotic salvation, wrongly imagine it to be of great importance for others, and lose interest in the real needs of the real people outside their circle. They plead the mysticism of the human soul and decry attempts to seek attainable precision in the knowledge of human needs.

An Alternative

Since humanity in the eighteenth century discarded the medieval realm of mysticism and developed a science and system for studying the physical world the results have been sensational. Humanity has more recently commenced the careful and systematic study of us, the human beings. This continuous and careful search into the realms of anthropology, sociology and psychology and the painstaking checking of results will with time lead to equally sensational realizations, the results of which will be of vital importance for architecture and community planning.

In the meanwhile we architects must seek

such knowledge wherever it is to be found, use it and, foremost, use our training, intuition, sensibilities and sympathy for people to imbue our fulfilment of very real and often prosaic needs with a poetry which illuminates those important realities with which we work, which tells of the dreams of justice and equality of which we often speak. Also as citizens we must work for the better political, economic and administrative instruments which can ease our task in making reality of these dreams.

In this we must clearly realize that our hope is for relevant change, and our allegiance therefore with radical rather than conservative philosophies, with the very real needs of the needy and underprivileged rather than with the profitable commissions and luxurious needs of those who are powerful and rich.

The Practice of Architecture, A Complex of Concepts

Architecture has many facets, and we must, with sympathy, achieve an understanding of a multitude of very different concepts and needs. We



FIGURE 2. 'Bruket', Sandviken, housing area ('Architecture is the art of communities')

must with others enjoy a complex process of evaluation and develop a valid system of priorities. We must achieve a delicate balance between perfection and compromise, between very different and often conflicting demands of practical function, of technique, of spiritual and social needs, of finance and economy (so often in conflict) and of administrative or political organization.

None may be neglected, all must be resolved – and the result must always be checked against an overriding philosophy of the purpose of man on earth if the highest potential of architecture is to be attained.

The ambition, understanding and competence of different architects vary, as do those of the clients and others with whom they are involved; tradition is no longer a certain guide to good results as it was in past ages, with slow progressive changes, limited choice of materials and few and well-proven techniques.

There is a great temptation to simplify and to allow a selected priority to dominate our work, be it function, technique or 'economy', aesthetics or political opportunism, with the consequence that we so often see incomplete and unsatisfying

architecture, and so seldom feel that the whole task has been happily resolved.

PERSONAL EXPERIENCES AND REFLECTIONS

I should like to reflect on four of those many facets of architecture which I have felt to be important to my endeavours in the practice of the art.

1. That architecture is the art of communities
2. Architecture the protector, modifier and mediator – the impact of climate
3. Four unacknowledged and powerful generators of architectural change
4. The aesthetic experience – a personal view

1. ARCHITECTURE IS THE ART OF COMMUNITIES

Fragmented Communities

To plan a good community is a demanding task. It is difficult enough with understanding and intelligence, maturity and enthusiasm; without these it becomes almost impossible.

To build a house, a school or a factory is insufficient. Each building is as a brick in that

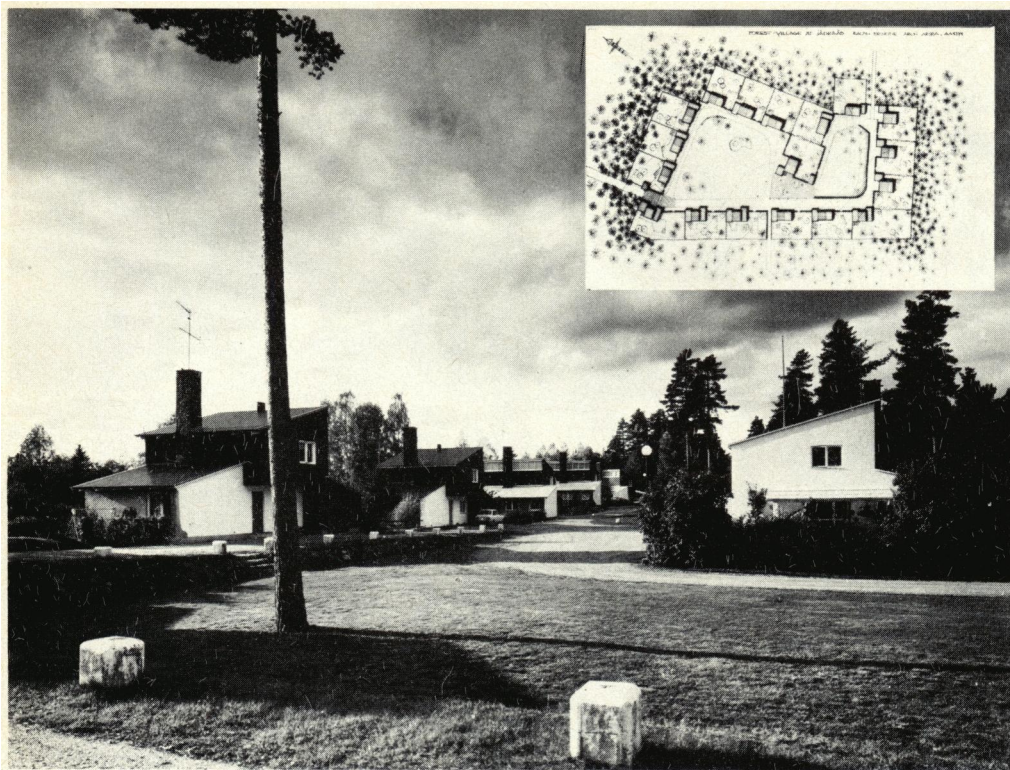


FIGURE 3. *Jädraås, Middle Sweden, village for forest workers: wood, siporex, corrugated asbestos; normal costs and finance plus a subsidy from industry for special environmental values*

complex edifice 'a town'. Analysis of a community leads to the realization that it consists of dwellings and shops, of places for work, education, meeting and recreation, of systems for communication and for a multitude of other human needs. Such analysis has often been made, but naïvely or in the interest of 'rationalization', the analysis has actually been built without transforming it into a meaningful whole. Each function has commonly received its special solution but the very rationalization of the particular task has often isolated it and given it a limited value, disregarding its most vital rôle – that of contributing to the building of a good community.

Dwelling areas have become places where one merely lives. The transport apparatus can move us and our goods quickly and sometimes in comfort, but has so many negative effects on the surrounding environment that it must be isolated as far as possible from the rest of the community.

Commerce has progressively rationalized the handling of goods but has lost its vital rôle of giving rise to stimulating human contacts and

ceremonies. It has become isolated in large anonymous shopping centres, where the loss of social communications within the buildings has been aggravated by the sterile deserts of our transport requirements. Consequently barriers have been created between the life of our homes and families and the joys of the market place.

Schools and universities have become bigger and bigger ghettos for a single age group, and industrial rationalization has largely concentrated itself on the production process with a consequential loss in the experience of meaningful work and that direct contact between wife, man, children and neighbours which existed when human beings were active in older communities.

It has been suggested that in many industries the transporting of items of production to people in their local environment could be as rational as or more rational than the present transporting of large numbers of people to factories.

Housing as a Community – an Alternative

If the stimulating human contacts of pre-industrial

communities were one of the important aims of the modern rationalized production techniques, then the above arrangement would be of great interest; buildings and plans would change; a new, stimulating and surprising aesthetic would arise. What consequence would such human-orientated objectives have for housing, for the construction of communication lines, for schools and universities, for trade and recreation and for the size of our townships? And for the character and our evaluation of architecture?

It would seem to me that in the intimate interplay and confrontation of different insights, interests, generations, subcultures, activities and situations of varying size there are essential values which are commonly lost in our modern communities. In this, rather than in contrived and romanticized manipulation of form, would arise the complexity we seek and new forms would appear. Instead of housing or working areas, it would be important to create 'places for living' which offer varied life styles, parts of towns where dwelling, work, study and recreation take place in as close contact with one another as possible. This is equally important whether we are involved in an individual building or a community plan.

The Goodman brothers have conceived of a community where meaningful work and varied experiences are amongst the main objectives for the culture and planning, and have established that such communities should not be too large. They suggest that our modern cities have grown with very different priorities in mind.

New communities and parts of communities must be built for the rapidly increasing work population.

It is important therefore together with intelligent, knowledgeable and interested people, to plan complete and proper 'places for living': useful, compassionate and poetic places. I suggest that they may be similar in concept, though not in form, to the older villages and towns we know.

It is my experience that much can be learned from research, discussion and literature, but equally as much from experiencing, observing and analysing the interplay between built form and present-day life in such older townships and villages. Likewise, whilst it is this interplay which is most relevant, the understanding of them can readily be confused by observation of only the beauty of their style and detail. For

these are often the expression of the economies, techniques and beliefs of another culture and age, and imitation will lead to the falsifications of nostalgic pastiche.

Furthermore, I must admit that whilst I have been fortunate enough to design small communities or parts of communities, despite all my endeavours it has not yet been possible to achieve fully the weave of functions of which I speak.

These projects are largely 'dead' during weekdays and become weekend places at weekends and the essential richness of life has not arisen. The charm they may have could be the 'Aesthetic Trap', an artistic manipulation which gives intimacy and personal situation but an environment which, though improved, is still thin in content, not community-places but the mono-functional housing areas I decry and a palliative rather than a solution for our living environment.

2. THE IMPACT OF CLIMATE: ARCHITECTURE THE PROTECTOR, MODIFIER AND MEDIATOR IN THE COLD REGIONS OF THE SUB-ARCTIC NORTH

The Sub-arctic

When considering the problems of building in the north, to talk of an architecture of climate would be to tell only half of the story. It is people in the climate, the cities and the landscape, people alone or in families or crowds that count. Ordinary people, not architects, people who sometimes are born in the north and know it and love it (or hate it), other people who are moving from more populous areas to small isolated communities in the wilderness, and who must be given the amenities they previously enjoyed.

I try to base my work on that rhythm of seasons and life in the north, which I find so enthralling, and form communities which encompass all its richness of contrasting experiences. I shape my buildings with a completely protected winter part surrounded by separated sheltering outdoor places for spring and for autumn. Beyond these places is free summer life in the natural landscape with which the north is so richly endowed.

It can be difficult enough to express these thoughts in words – how much more difficult to say them in concrete and wood, in asphalt and grass, to say them with precision and warmth but without unnecessary pathos and exaggeration.

Wherever in the world it is that people build, whether in the cold places, the hot places, the

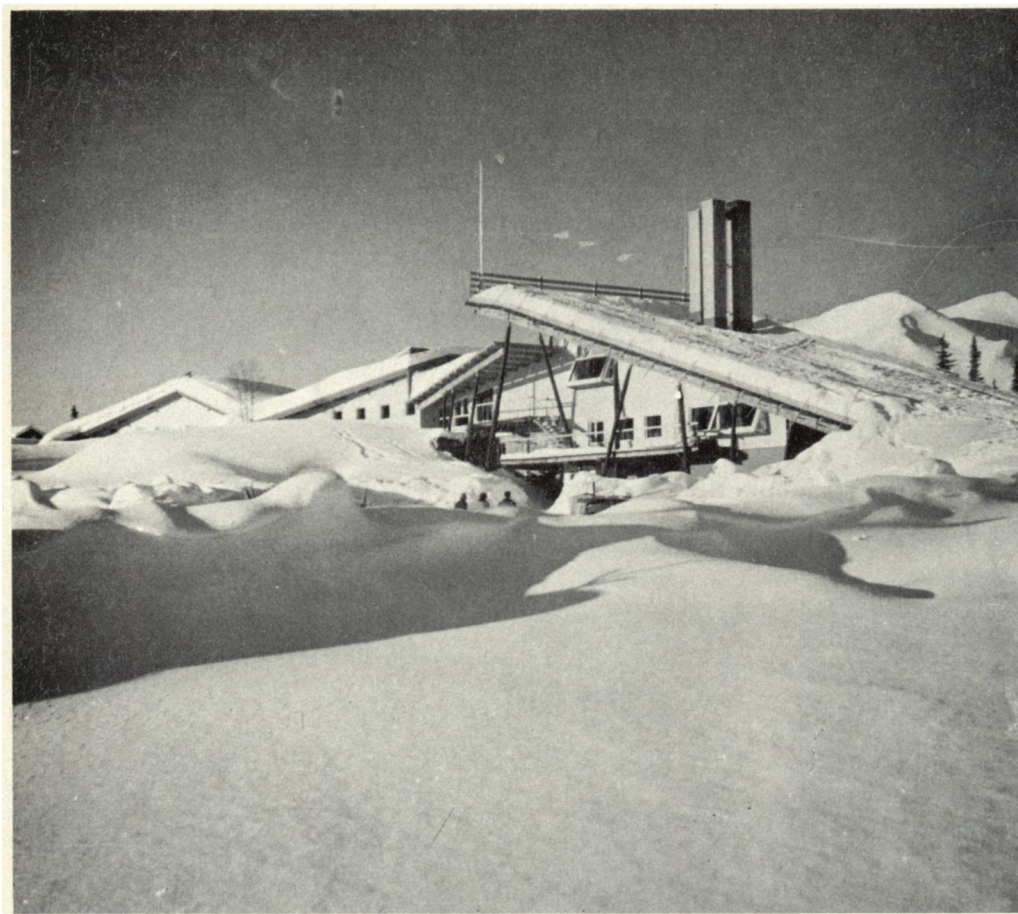


FIGURE 4. *Ski hotel, Borgafjäll, North Sweden: 50 beds; dining-room for 70 guests. Mainly wooden structure, ski slope on roof, local materials, simple finishes, low cost ('I shape my buildings with a completely protected winter part surrounded by separated sheltering outdoor places for spring and for autumn . . .')*

friendly or the unfriendly places, and for whom-
ever they build – black or white, old or young –
it is surely people and buildings and streets,
gardens and animals or birds, not economy,
technique and aesthetics that people dream about
when they seek a home, a community and a
place in which to work or play; these are only as
the bricks with which to build a great and com-
plicated dwelling, a place to find warmth and
protection, to find both togetherness and privacy
and a feeling that 'this is where I belong, this is
my home and here I shall like to be'.

I hope that we architects can help to give such
a dwelling a form, make a place with a potential
for contentment. In the final count it is the
inhabitants who will give the same dwelling its

meaning and will change our architectural
'space' to 'place'.

My question is, 'Do the cities and buildings of
the north serve the needs of their inhabitants
well?'. My answer must be, 'No, Man in his in-
genuity has invented many ways of protecting
his puny body – of maintaining its surface within
the narrow range of temperatures and humidity
which allows for survival. As his inventiveness
and artistry have increased he has moreover
created conditions of convenience, comfort and
pleasure. With time he has created cities and
buildings which are works of art and a witness to
the genius of human cultures.'

Where could this protection be a greater need
than in the north? But cities – our most concrete

artifacts, which represent nothing other than their own existence – are nonetheless liable to the laws of symbolics and fashion, and a house not only has to be a house, to shelter, protect and function but it must also symbolize a house; a city must represent a city, and traditions of form impair the fulfilment of their function.

When I came to Scandinavia at the end of the 1930s I found that this symbolic aspect of architecture in some ways seemed to be regarded as of greater importance and urgency than the primary purpose – to clothe, to comfort and to protect. What I have seen in Canada and Alaska convinces me that the situation there is no different. The southern cultures are dominant and neither in Canada, Alaska, Scandinavia nor Siberia can I find communities intelligently and inventively built to give pleasing and effective comfort and protection in the specific conditions of the north. I have found arctic outposts or alpinist huts technically giving survival conditions in situations of extreme stress, or cities with overheated buildings and draughty streets, but nowhere can I find a sector of our modern culture which has a special local flavour of the north due to combination of understanding, inventiveness and, not least, artistry, in satisfying special human needs in this special part of the world.

It is also disturbing to realize that the new towns and suburbs of more temperate and amenable climates show no greater signs of success.

The Character of the Sub-arctic

What then are the characteristics of this sub-arctic realm, lying between the empty arctic wastes and the bountiful fields and teeming populations of the temperate zone? How does it form our lives, how should it, with our sensitive help, mould the buildings and cities we use?

Above all it is a world where it is only with the advent of our technical civilization that man became freer from a long and constant warring with the difficulties of an inhospitable climate, and with wrestling meagre returns from its meagre soil. It is a world without a rich history of city-culture and techniques precisely adapted to its special demands.

It is a world of great contrasts, of the yearly rush from the cold, dark sterility of winter through a short and explosive spring to a few green months of life under the night-time sun. Then the swing back through rapidly

shortening days of mist, rain and frost to winter, snow and ice.

These are happenings of great importance to the people who experience them. It can be seen how spirits lift as the days lengthen and melting snow runs in the gutters, also how people put up their defences as autumn frost and darkness grip the land. In summer they plunge into the chilly lakes and wander the streets in the midnight sun, in winter they draw up their fur collars and hurry from house to house, and spirits droop unless lights are lit both indoors and out.

Here houses and towns should open like flowers to the sun of spring and summer but, also like flowers, turn their backs on the shadows and the cold northern winds, offering sun-warmth and wind-protection to their terraces, gardens and streets. They should be most unlike the colonnaded buildings, the arcaded towns and mat-shadowed streets of the south Europeans and Arabs, but most similar in the basic function – of helping people to maintain their bodies at a comfortable 35° C. When studying the beautiful towns of the south, whether old or new, it is not the forms in themselves which should interest us, but the inventiveness and artistry with which people solved the needs which were peculiar to their situation and time, the comfort and beauty which they created. Only by such methods can a personal and indigenous Alaskan, Canadian, Scandinavian or North Russian tradition arise.

The Generative Elements for a Northern Architecture

The essentials of this human and physical situation make necessary the realization of the violence and the drama in the contrasts of the region and a re-statement of the protective function of buildings and towns. The contrasts are the following:

- (a) The warmth, the brilliant light and the teeming life of summer – the cold dark sterility of winter – each creates a protective need and an expressive architecture.
- (b) The consequential changes in human spirits and the rhythmic change of social life from the extrovert of summer to the introvert of winter: these give an ever-changing experience of society, towns and buildings.
- (c) The geographical isolation in an extensive and often wild natural landscape and the resultant impact of a human milieu. Wild

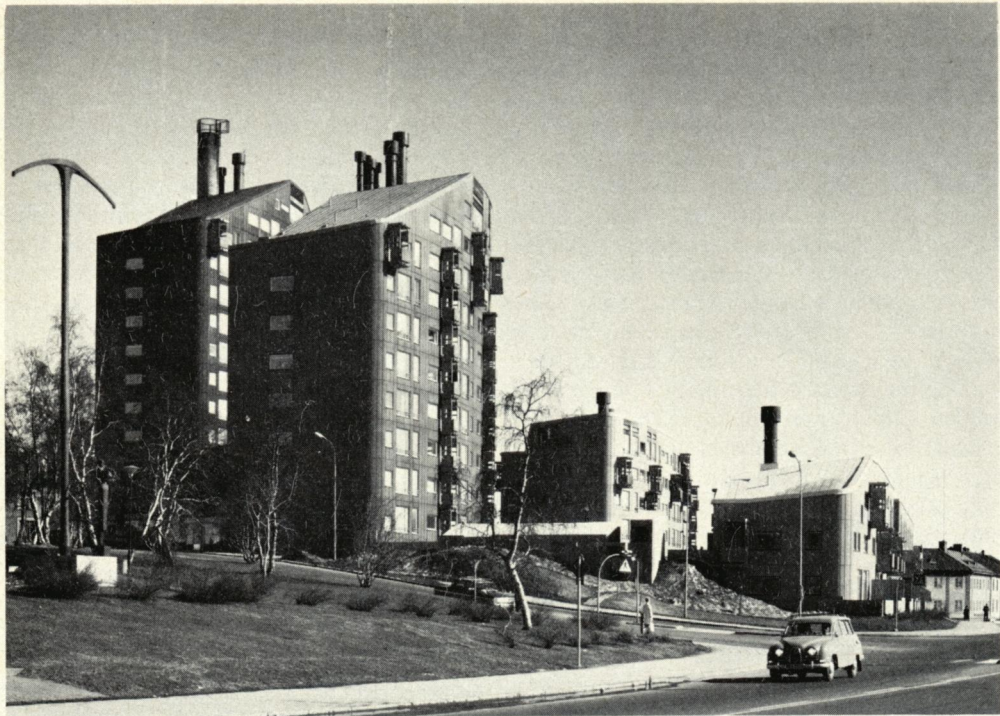


FIGURE 5. 'Ortdrivaren', Kiruna, North Sweden, co-operative apartments, shops and church north of the Polar Circle ('Thus the idea develops of the winter cell surrounded by, but separated from, the summer units . . .')

nature is everywhere and the human is the exception (the opposite of the 'man-made' world of the temperate zone); the man-made needs protection and hence intensification.

The protective functions are:

- (a) The intensively protective character of the barrier between 'in' and 'out' and of the heating system are the *sine qua non* of the arctic and sub-arctic – without these there is no life.
- (b) The lighter, open sun-catchers and mosquito and wind protective units for the summer period are for comfort and are of a completely different and contrasting character to the above.

Thus the idea develops of the winter cell surrounded by, but separated from, the summer units. The one envelops and protects life, and the other shields but makes it more pleasant. The one is a momentous reality, the other a gracious accoutrement. These are the basic elements of a modern and indigenous architecture for the high latitudes.

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A Grammar for High Latitudes

The Cold. The intense cold leads to the reduction of envelope surface for space-confinement. It also leads to the agglomeration of many functions under a common envelope for economy of heating and community of function when suitable. It produces an introvert architecture with simple volumes and an intensive experience of protection and of heating. Indoor as well as outdoor circulation in winter is required.

The Warm Period. The warm period's shortness leads to an intensive desire to experience summer freedom and activities during the few weeks in which this is possible. This leads to many special summer arrangements, and light and open architectural elements of extroversion and gaiety.

Snow. Snow must lead to aerodynamic formation of towns and buildings, covered ways, sweeping space for clearing machines, catchment, lay-up and disposal areas for snow. Snow controls produce snow aesthetics.



FIGURE 6. *Frescati, Allhuset, Stockholm's University*
 ('Snow must lead to aerodynamic formation of towns and buildings. . .')

Ground Frost. In the lower latitudes the ground has a more equable climate than the air, and could be piled up against the building to help protect it. In the higher latitudes the thermal instability of the permafrost layer may lead buildings to float above and renounce contact with the ground. This produces different aesthetics depending on the situation.

Light Conditions. Extremes of summer light and winter darkness produce psychological stress. There is a need for night shading in summer and for cold exclusion in the winter as well as for light during the day. This leads to the need for shutters and the expressiveness of variable windows. Outdoor illumination and snow-reflections reduce winter darkness. The low angle of the sun influences the form of towns and buildings.

Wind. Cold air movement gives intense discomfort, and wind protection becomes vital. However, controlled summer air movement disperses mosquitoes, suggesting that variable screening can be necessary. Wind drift in snow can be

utilized positively for clearance given correct aerodynamics. Snow aesthetics must be part of the northern experience.

Air Drainage. In very cold weather there is often relative calm. The drainage of cold air to low places and into pockets in the terrain, townships or buildings becomes very apparent and can lead to great temperature differences. Drainage away from buildings and communities should be facilitated, and pockets avoided. Town structures, siting and landscaping will have, as a result, a specific character.

Solar Radiation. This is always a positive phenomenon except during summer nights. As solar radiation is positive and the air is usually cool or cold, shadow is mostly unpleasant. North elevations and windows are cold in winter but can be undesirably hot in the night sun of summer and this should be minimized. South slopes and south walls are a source of comfort and advantageous for heat economy. They also give night-shadow in summer. The low angle and 24-hour duration

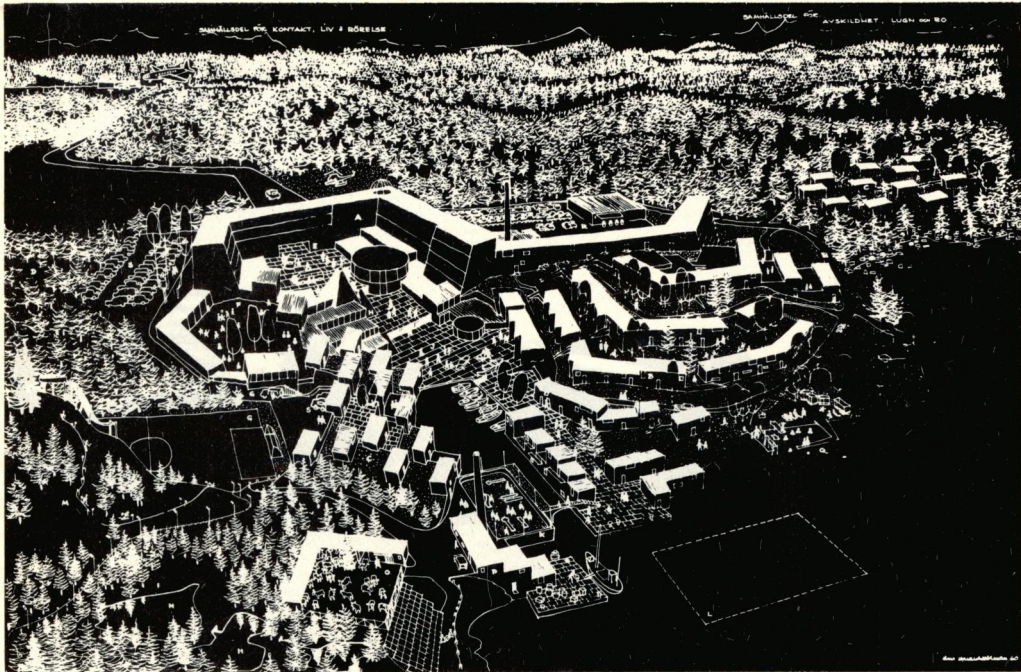


FIGURE 7. Study project for sub-arctic town: wind protection, sun catching, sense of community, privacy ('The structure of the town itself can be of vital importance in improving the climate within its boundaries . . .')

of the summer sun give problems with solar heat gain; the variable window minimizes this problem. Solar gain can also be utilized as an energy resource. The sun is therefore also a creator of form.

Fauna. The wilderness offers hunting, fishing and open air activities all the year round. The plague of insects leads to control by screens and by encouraging suitable air movement in summer.

Vegetation. We expect sterile skeletons in the snow, ubiquitous summer green and autumn red. The botanical limitation of species suitable for high latitudes and sensitivity leads to a precious attitude with 'artificial', protected and formal treatment of outdoor and indoor gardens. (Remarkably similar to the gardens of the Arabs.)

Microclimate

For microclimatic reasons a township should be built on a slope where the radiation from the low arctic sun is more intensive than on the flat country, and where some protection from the cold northerly winds can be found. Further advantage can be gained by turning to the south-

east to catch the early morning radiation which tempers the cold night air. But in more extreme climates the low parts of valleys should also be avoided, for in the still of intensively cold weather the denser cold air flows from the hills and collects in the hollows and valleys.

The structure of the town itself can be of vital importance in improving the climate within its boundaries. Continuous strips of higher buildings can encompass and help to protect a township, but must, in lower scale, be repeated within its structure. Each will improve the microclimate of zones for gardens and smaller buildings; they will reflect warmth and sunlight on their southern side and protect against the cold north winds. Thus can arise a typical and rhythmic structure in the township. The buildings must be given aerodynamic forms so that excessive snowdrifts in their lee may be reduced, and an architecture will be created.

Cold and Hot Climates

My intensive impressions during visits to Arab countries and southern states in the USA have combined with the results of my attempts to

analyse the consequences on people's lives in cold climates and to find what suitable architecture therefore should arise, and I have become conscious of major parallels between the hot regions and the cold.

Since cold and heat are experienced so differently and few people have lived both in arctic and tropical regions it has not been observed that for their effect-potential on architecture and planning the similarities between the cold arctic and the hot-dry desert and savanna region are extraordinary. With the hot humid climates the similarities are also important, but are not always equally obvious.

In contrast there is similarity. In the arctic it is important to catch the sun and avoid the breeze, in the heat it is equally important to avoid the sun and catch the breeze. The arctic is a cold white desert with drifting snow, in the tropics there are hot yellow deserts with drifting sand. A warm place in the sub-arctic is an oasis with trees, a wet place in the desert gives the same result. Except where there are special resources communities in both are usually small and isolated and the traditional cultures have been nomadic.

Survival techniques and the whole culture have in both been highly specialized and directly related to the impact of the extreme climate. Today architecture and planning that are properly considered would show certain striking differences but there would be very much more that is strikingly common to both regions.

'Les extrêmes se touchent' and the experience of the one gives special insights in the other.

The Energy Balance

I have made many observations, and the consideration of the nature and consequences of these have led to most interesting conclusions. Here I will consider one alone, the conservation of energy.

In Sweden (and recently in the Canadian arctic) I have always designed buildings which take into account the problems of energy – and heating economy. Indeed much of the 'climate architecture' which was the subject of my earlier speculations has in Sweden become a 'must' under the impact of rising fuel costs. As a consequence I realize that for the construction of buildings which are either heated or cooled it is the temperature difference between exterior and interior which is important. Given 20°C indoors it is not very important whether the outside is 10° or +

50°, i.e. 30° difference – except that the *cooling is more expensive* than heating.

(In saying this it must be remembered that for the person outdoors it is otherwise. With suitable diet, activity and clothing –10° is an invigorating and pleasant experience. This cannot be said of +50° (30° above or below a comfortable +20°.) It is only at –40°, when there is wind or it is humid that equivalent distress is felt in a cold climate.)

The Architecture

In both hot or cold regions the buildings will consist of well insulated simple volumes which have restricted window sizes and are surrounded by light structures where the pleasures of the more temperate seasons may be enjoyed.

3. FOUR UNACKNOWLEDGED AND POWERFUL GENERATORS OF CHANGE

With some justification it could be said that it is not architectural philosophy which is to-day the important instrument of the change which affects my architecture but the insights of scientists, economists, philosophers, authors and many other opinion-formers interacting with national and international institutions of political and economic power. The special dynamic for architectural change has come when such insights have been formalized in buildings – or other laws.

For the present purpose I will select four factors as typically important agents of this architectural change in Sweden.

(i) *Democratic Participation in Decision-making Processes*

The 'user-client' brings new insights and evaluations which can fundamentally differ from those of the traditional 'sponsor-client', and architecture and the architect must change. New qualities must be discerned, given form and defended.

(ii) *Minority Rights (at the moment especially of the handicapped)*

The aesthetic stimulation which arises with the manipulation of varied floor levels and stairways becomes impossible, and there arises a different aesthetic of extensive horizontal floors, with ramps and lifts at any unavoidable changes of level. Serious consideration of the needs of children, the



FIGURE 8. *Byker, Newcastle-upon-Tyne* ('The user-client brings new insights and evaluations which can fundamentally differ from those of the traditional sponsor-client, and architecture and the architect must change . . .')

aged, immigrants and other subcultures and minorities would introduce further new form-elements in architecture and planning.

(iii) *Economy in the Use of Energy*

It is realized that energy is a valuable, scarce and often polluting resource. Building volumes must therefore become simple and heavily insulated in both hot and cold climates, thermal bridges must be minimized and windows severely restricted in size. But controlled solar heat collection can lead to carefully orientated glass areas of considerable size. The architecture of glass buildings, however beautiful, is recognized as symbolic of a naïve, wasteful and irresponsible culture, and laws (in Sweden) on energy conservation have

made such architecture impossible. A new, wise, responsible and beautiful architecture must be invented.

(iv) *Economy in the Use of All Resources*

The first three factors have to a considerable degree been ignored by architects in the past. The fourth, always operative for most utility buildings, can also be considered as a fundamental condition of human rights in a world where the limited resources are so inequitably distributed between classes, races or nations. With the spread of media communication the tragic effects of such inequalities may, as well as being an intolerable injustice become a threat not only to the underprivileged, but also to those of us who waste resources in the wealthy and

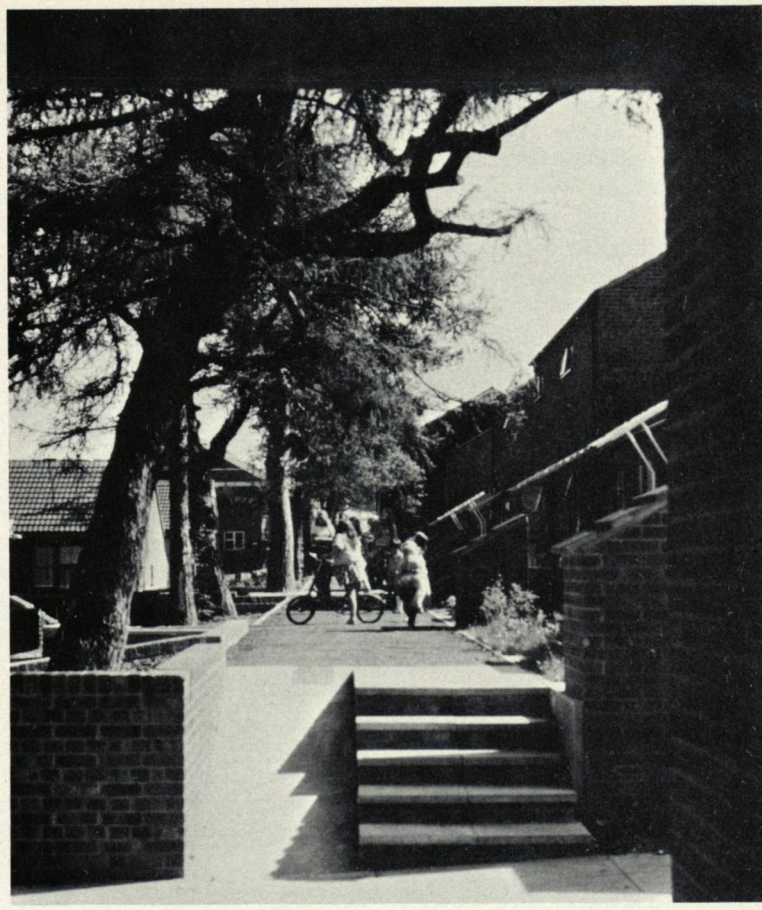


FIGURE 9. *Studlands Park, Newmarket, low-cost housing centre*

privileged parts of the world, for those privileges can be violently challenged by the deprived majority of humanity.

A subtle and inspired architecture and aesthetic of economy should therefore become the overriding interest of architects in their professional rôle and the wise use of the saved resources their concern as citizens.

4. THE AESTHETIC EXPERIENCE

The Poetry of Architecture

Beauty and art are essential experiences for all people, be they 'sophisticated' or 'primitive', who are not merely struggling to survive, and a fundamental characteristic of all art is that, whether we realize it or not, it communicates concepts and beliefs, it comments on our present and future life.

Architecture is in no way an exception to this rule. It is therefore pleasurable to observe that there are architects and others with a genuine interest in all the human and social qualities of architecture and in the special poetry which can arise out of these. Architecture becomes involved in basic human needs partly out of intrinsic interest, and partly prodded by the increasingly sophisticated requirements of statutory and funding institutions. This can be observed in furnishable rooms, useful kitchens and improved work-environments in factories and offices; in better places for the creative indoor and outdoor activities of adults and small children; in sociable public furniture in the shade or sun; in the rights of the under-privileged and minorities and in economy in the use of energy and other resources.

It is a very 'different' architecture that arises from such considerations. I find here the important

dividing line between the smooth beauty or sterility of 'production-line' and 'international' architecture or the eclecticism of the 'baroque-modern', 'organic', or nostalgic' trends on the one hand, and on the other hand a truly modern architecture for the troublesome realities of the troubling world in which we live.

Great is the need for inspired artistic invention which stems from a deep feeling for such modern insights and humanistic hopes, of humble, masterly and compassionate creations which are as moving as those which sprang from the inspired faiths and dreams of other times.

There are many historic masterpieces erected for the glorification of the proud and opulent institutions of religious or temporal power, and the most gifted architecture of modern times, works of the greater and lesser masters of the modern movement, have largely glorified the powerful and wealthy institutions of this corporate age.

When will we recognize the inspired expression of our dreams of true liberty, equality and fraternity?

May I now relate a personal history of my Search for an Aesthetic?

Let it be understood that I was born to the life of an architect in the intoxicating days of the Revolution, of the battle for a new and better world of architecture. It was an inspiring battle against the out-dated and suffocating dogmas of academic architecture. Irrelevant for the needs of a changing world were the battles of the styles – for New-Renaissance or Neogothic, for the organic forms of Art Nouveau or the nostalgic romanticism of Arts and Crafts – of Lutyens, of Baillie Scott and Beresford Pyte, however artistic they might have been.

Clearly these were experiences which left their mark, and therefore it is perhaps with limited enthusiasm that I consider the changing styles and fashions of the Post-Modern movements.

'Plus ça change plus c'est la même chose' says a French novelist and wit. A *bon mot* indeed but not necessarily an axiom. Our belief was in relevant and continuing change and we sought an underlying philosophy which would unite modern life and architecture and guide our attempts at acts of creation. We fought for the new world of Modern Architecture and for Functionalism as we understood it. It was at that time an architecture of analysis, but also with strong emotional ties to the new techniques and

materials of the industrial age, and to Cubism in the Arts. We fought for freedom, and our faith was strong, but in retrospect it would seem that our understanding was naïve, our analysis limited, and that our freedom from the old styles was rapidly and willingly exchanged for the dictates of the new.

In Sweden I found a wider belief more in accord with the early Functionalism of central Europe, a faith which included the search for a new, juster and more humane society as well as for satisfaction of the intimate daily needs of families and old people and small children.

I also found a less dogmatic attitude to style. Like Bartók, who drew inspiration from the folk music of Hungary when he created his music of the future, the new, fresh and inspiring architecture and industrial design of the golden age of 'Swedish Modern' was – without taint of nostalgia – rich with the experience of a long history of form: a history of the practical and beautiful use of the simple materials of a poor country without access to the luxurious gold and brocade and spices of the Orient. Beauty had been created by peasants and artists with wood and glass and iron, with flax and wool, and with colours extracted from the herbs and leaves of their pastures and forests. The best of Swedish Modern was an optimistic culture of the future which without false drama lived in the context of that tradition, in a subtle and inventive relationship with the continuity of time and place.

Frequently it was also an architecture of democracy, open light and the accessible. It was far from the splendid and monumental symbols of power and wealth from the history of Europe or Egypt, symbols whose meaning and potency were correctly discerned and universally used by the mighty Banks and Corporations of my youth, and by the latter-day dictators of Moscow, Rome and Berlin. Not for Scandinavians the Germany of Wagner and Schinkel and Speer; they were drawn to that of Brno Taut and of the Bauhaus, of Käthe Kollwitz and of Brecht.

Here in Sweden and Scandinavia I found moving and relevant principles of design and aesthetics which are still with me.

Later history has not changed my belief. Swedish economy expanded, and the drive to modernize industry, the movement to the cities and the ambition to eliminate all slums (since good dwellings were considered a basic right), led to an enormous need for buildings. Quantity

was achieved, and this country of eight million people built a million dwellings in ten years.

It was that generation of architects and others who with their social compassion laid the foundations of a state housing policy which had never before existed, and which contributed to banishing the housing misery which was amongst the worst in Europe.

But techniques changed, 'conventional wisdom' and shortsighted perspectives prevailed, and the 'Henry Ford Method' was used. The early Functionalism's interest and simplistic planning in the techniques and materials of the industrial age were seized upon, but the essential subtleties of the philosophy found no favour with the building industry or clients. Architects battled or – willingly or unwillingly – accepted their allotted rôle!

Thus developed that which involved architects in despair, named 'Production-Orientated Architecture', or 'International Style' – styles which survived until in recent years they have been put in doubt by public outcry and rejection.

The Rôle of an Architect

The rôle of a creative architect is not in the practice of styles, but poetically and truly to satisfy human needs; to do this with honesty in form and technique.

In my own work I have sometimes been accused of producing organic architecture, an accusation which for me is a matter of some, though not exaggerated, concern.

Should organic tendencies be discerned in my design they are not to be looked upon as important or as a proof of success or failure, but as an aesthetic choice and a tendency of my personality. Other architects could, no doubt with success, have found other expressions for the needs with which I have worked.

But it would lead me yet again to realize that the art of architecture, though precise and concrete, nevertheless gives rise to uncertainty on the part of architects in interpreting the language of its aesthetics, and that I must endeavour in written and spoken language to clarify the objectives of myself and of the group with which I work, and give my own evaluation of the success or failure of our efforts.

The Concept of Functionalism

Since I would consider myself a latter day Functionalist, I must define my understanding of the

concept. It must be clearly understood that for me Functionalism is no style but a method of thought, a work-process which can increase our understanding of the activity in which we are involved. By no means should it be identified with the limitations of understanding or with the plans and the styles of its earlier years.

Those were the early attempts to systematically apply to planning and architecture ideals which included social, aesthetic, housing, political and scientific elements, and which have always expanded our understanding of the physical world. The limitations of the Charter of Athens and other concepts, as well as the impossibility at that time of foreseeing the fundamental changes of the following epoch and their consequences are but one aspect – though typical – of the diverse processes which have led to the great problems which beset our age.

Functionalism, as I understand it, may not be discarded in favour of the uncertainties of mysticism or dogma. It must ever be widened and deepened. Hypothesis and invention, experiment and careful checking of results must follow one another, and knowledge be sought from all the disciplines.

Aesthetics and the Creation of Architecture

Knowledge of the principles of aesthetics in architecture must be sought in history, in our own experiences and in the humanistic sciences, and each method is a necessary complement to the others. The value and meaning of each must be well understood. For example, the lessons of history: memories indeed are part of our heritage, but memories must be complete. We see the beauty of the posts and beams of Greece, of the arches of the Arabs and of Europe. Consciously or not, we realize that they spring from limitations and inventions in the art of building, we feel the completeness and the dignity of their rôle. Deprived of their vital purpose of most aptly and economically supporting the imposing weight of a building they become partial memories. Impoverished, they falsify the reality of architecture, that most concrete of the arts, and imitate the very different purposes, the revealing magic and pregnant illusions of sculpture or painting or theatre – of those arts which deepen our understanding of realities by evoking that which they are not.

In architecture such illusions may become 'style', or be enjoyed as the gaiety of occasional

'follies', as a rare spice but never the daily bread of our cultural diet.

In music the careful study of harmony and of rhythm has expanded, not limited, the scope for intuition. We must, like musicians, attain greater understanding of the experiences of our art; the principles of composition, of the different realms of harmony and contrast (and when and why they should be used); the formation and experience of indoor and outdoor 'rooms', the impact of light and shade, of form and materials, of texture and tactility; our experience of structure, of real or subjective lightness and weight, and of rhythms and how they lead to stimulation or tranquillity in the human soul. We must learn of sound and acoustics and how they change a room, of how the presence of people will transform the abstraction of 'space' and out of it create the warm presence of 'place', and as in a 'ballet of life' we must understand the movement of people through the spaces we create.

We must realize the impact of our heritage and how the continuum of time can be acknowledged without impairing our duty to project the history of our own time and of the future.

We must cultivate a mature judgement of where to be modest and subservient to an existing landscape or urban environment and when to enrich them with new accents.

We must be able to understand the differing rôles of romantic complexity and warmth such as are to be found in the cities and buildings of the Middle Ages, as well as the very different disciplines of 'formal' composition.

We must always expand these understandings into new spheres and train our sensibilities in their use. Principally we must learn all these as the essential skills of our trade and remain open-ended and without predetermined links to 'style'. We should use these developed skills for spiritual enrichment in the fulfilment of our fundamental rôle, as servants of the needs of humanity.

SUMMARY

When regarding the present interest in the fantasies of Post-Modernism in arts and architecture it might seem that a well justified disillusionment with 'that which is' is leading to esoteric and academic dreams of 'that which might be'. I therefore make a plea for an alternative philosophy, for *brukskonst* – the Art of that which is Useful – a plea, that is, for poetry and beauty created out of the realities and true needs of a disturbing world, for an architecture which expresses our dreams of a more just society and the inspired promises in our declarations of human rights.

DISCUSSION

THE CHAIRMAN: I will ask Sir John Summerson to propose a vote of thanks.

SIR JOHN SUMMERSON: I must congratulate Ralph Erskine on a most exciting marathon. My memories of Sweden go back more than half a century. One of the most illuminating experiences was a visit to Stockholm in 1927. What excited me and my companions just as much as the stylistic varieties and the vitality of the buildings, was the inescapable fact that the people of Stockholm actually *loved* the buildings, and they loved their architects. Forty years later I went to Sweden again on a lecture tour, and I had a very different experience. I was taken on a well-organized tour of some of the post-war housing round Stockholm by an energetic and exceedingly well informed young civil servant who was accompanied by a slip of a girl who said very little. Towards the end of it I found the opportunity of addressing a few questions to this silent girl. I said, 'What do you really think of all that we have been looking at?'. She hesitated. Then she said, 'I hate it. You see I was brought up here.'

Well now, in telling you this I am not disparaging Swedish housing or achievements, which are technically as well as socially admirable, but I could not help thinking that in the interval of forty years between my first and second visits something had snapped. And not only in Sweden, not only in Stockholm, but in Europe. A feeling of architecture and the community being at one seemed to be a thing of the past.

Then I came to another episode only two years ago at Byker. Here again, as at Stockholm in 1927 there was that sense of a community happy in what architecture has done for it. The evidence for that is difficult to state in so many words; it was somehow in the air, in those little, trim gardens, in the grouping, the planting, the absence of litter and vandalism, and conversations with people we met. Being North Country people of course they did not make a fuss, but they made it clear that Byker was a good place to live in. I don't think any other recent British housing, and certainly none that I have seen, has achieved this quality. How has it happened? I think the answer is that it has happened through the personality of our lecturer this

evening. Ralph Erskine confesses that he is a functionalist, a latter day functionalist I think he would say, and he describes functionalism as a method of thought, a work process, which can increase our understanding of the activity in which we are involved. It is a much more profound functionalism than any which can be expressed in the slogans of the Modern Movement of the twenties and thirties which we are casting off with such relief. It means deeper insight and harder work, going always deeper into the implications, especially the human implications, of the programme. That seems to be the clue to the success of Byker. Today we have an anarchy of architectural approaches. We have High Tech, which I confess I rather admire, we have post-Modern, which seems to me largely drivel and sometimes sheer poison, but I suppose folly must have its lease. But Ralph Erskine's *brukskonst*

does seem to me to be central to the whole purpose of contemporary architecture. It has been an enormous pleasure to hear him and to have his achievements so handsomely reviewed on the screen.

Thank you very much, Mr. Erskine, for giving us a memorable evening.

MR. IAN HUNTER (Chairman of Council): As Chairman of Council of the Society I should like to thank our speaker, Lord Bellwin and Sir John Summerson for their part in tonight's proceedings, to say what a stimulating evening it was, and in that context to thank the Thomas Cubitt Trustees who make this lecture possible. We are also very grateful to them for their continuing support of the Society's environmental work.