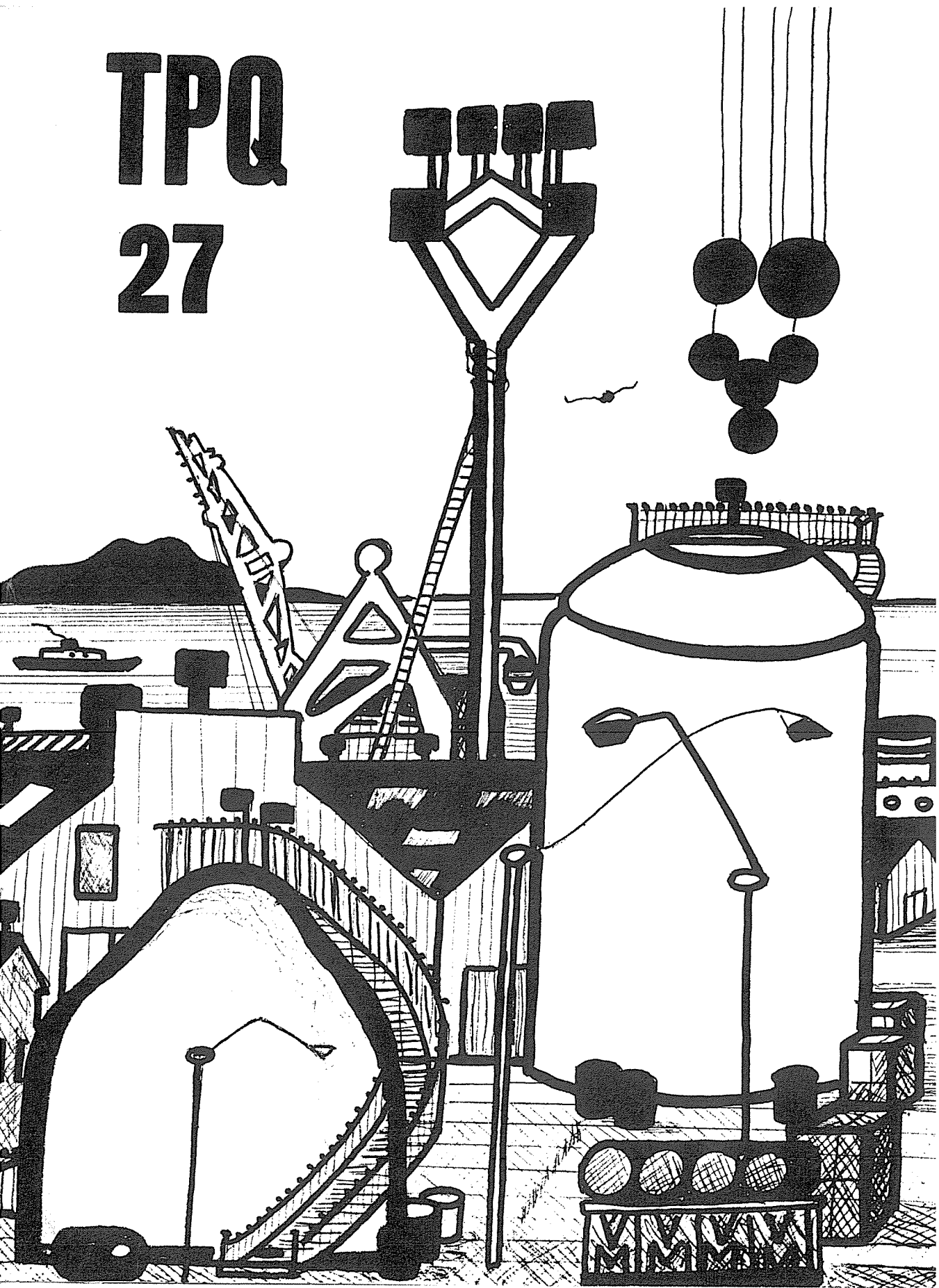
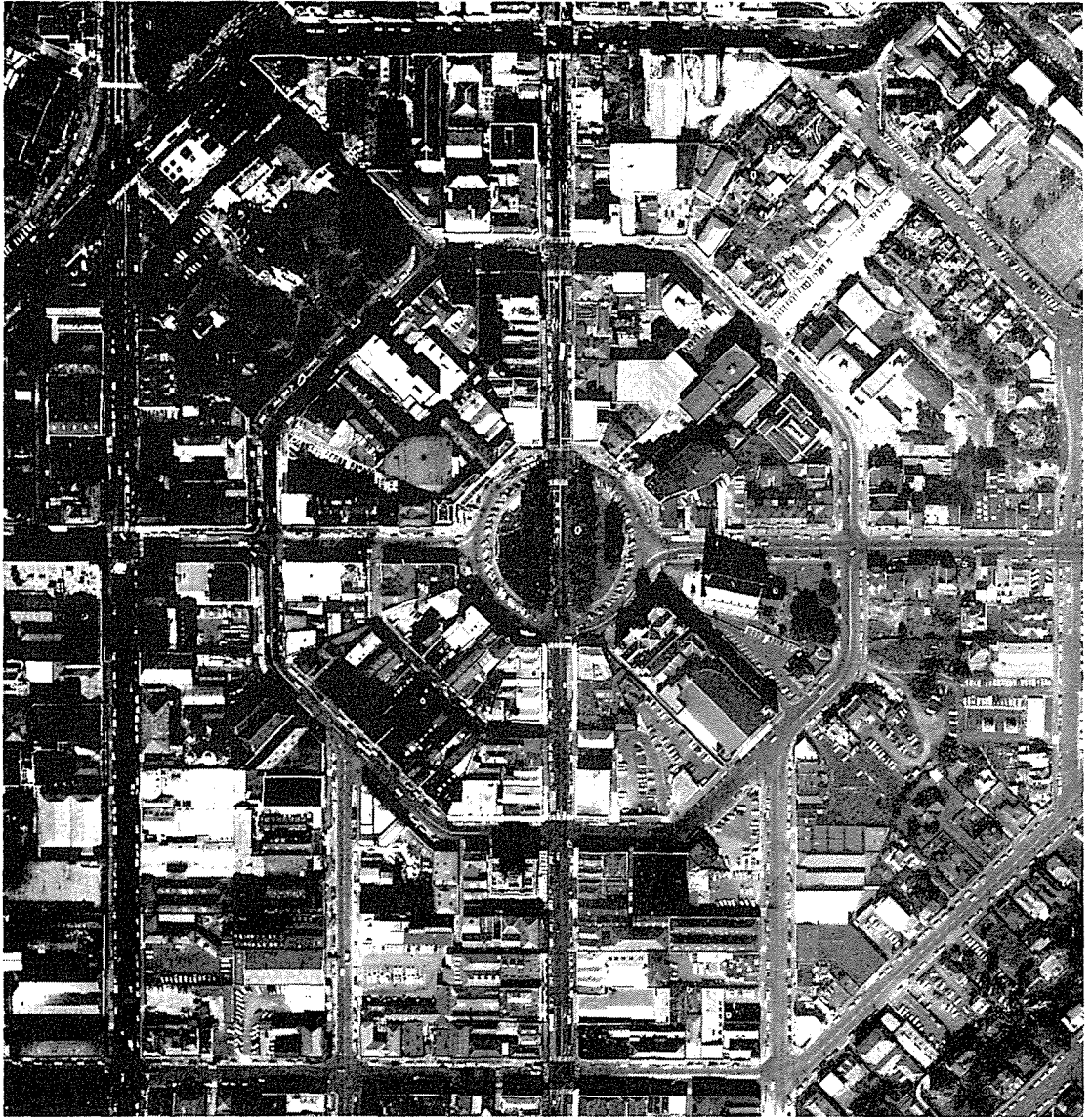


TPQ 27





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TOWN PLANNING QUARTERLY

Number twenty-seven March 1972

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FACT & OPINION

An editorial notebook

Editorial change

This is the last issue in which Dick Scott will be managing editor of *Town Planning Quarterly*. He has held that position since the journal's first appearance in 1965 and we regret that passing of an era in which he has guided its physical appearance and been responsible for its publication.

The new address for all correspondence is to the editor, *Town Planning Quarterly*, Town Planning Dept, Auckland University, Private Bag, Auckland.

The greater good or *droit de seigneur*?

The whole of the planning machine is concentrated upon controlling the land use activities of the private sector. The sad history of the consequences of the 'free play of private enterprise' is still valid enough to explain the emphasis. New Zealand did not escape its depredations, mild though they were by comparison with other parts of the world. The multiple decisions of myriad developers whose motive is private profit can never be relied upon to produce a pleasant or even an efficient total environment. Community super-

vision and control is inevitable whatever guise it may take.

How curious then that the public sector, on the strength of its purported Crown privilege, so abuses its powers as to behave in an anti-social way as any 19th century industrial baron. No private developer, whether he is building a carport or a steel mill, may proceed except within the context of the local district planning scheme and the Town and Country Planning Act. Yet with the exception of the Housing Division, any government department may carry out any work of any magnitude no matter what the view of the local community and no matter what may be its disruptive effect upon surrounding land uses.

Without doubt, the wider responsibility must take precedence over the narrower; local government cannot dictate to central government; local interests must bow before national interests. But a distinction needs to be drawn between a policy and its execution. Public works are the skeleton which supports the flesh of private decision-making. With a healthy body, the flesh adjusts, accommodates and changes as the skeleton grows. Attempts to thrust pieces of the skeleton into the formed body can lead only to discomfort or disaster.

The anarchical tendency that some government departments display suggest insensitivity, indifference or arrogance on the part of those responsible, but whatever the reason, it is time that their claim to be above the law that controls the rest of society was closely re-examined. Each of us needs constantly to call to mind Lord Acton's advice that, "power tends to corrupt; absolute power corrupts absolutely". It is too often difficult to discern the ingredients of the public good in departmental decision-making.



Retiring barrister

Mr H. E. H. Smytheman retired as a senior

partner in a well-known Auckland legal firm at the end of March. My Smytheman is one of the very few lawyers who has specialized in planning law cases and has regularly appeared before the Town and Country Planning Appeal Board since its first sittings in 1955. Harold, a big man with a strident voice, noted for the very thorough preparation that he undertakes in every case in which he participates, has generously given his time and the benefit of his long experience to many students of planning law. We regret his passing from the battlefield and wish him a long and happy retirement. He is a modest man who has never presumed to advance his own cause, but the monument to his work is the case law that he helped to build with such diligence and enthusiasm over the past 16 years.

Thought for the quarter

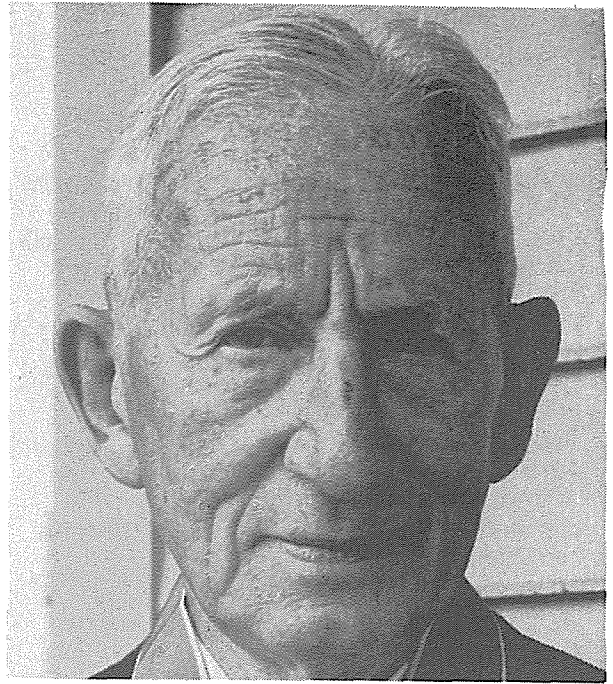
Harmony, one must note, equals stagnation, or lack of progress. Change takes place because a disjunction arises among the parts of an inter-related system, and a planner who wants to bring about more or different changes cannot dispense with this motive power. Only in the final stage of development, in the utopia where no ills remain, is harmony entirely a useful characteristic. But there planners will be unemployed.

William Petersen, *'American Institute of Planners' Journal*; May 1966.

The death of a surveyor

Archibald Hugh Bogle, CBE, Fellow and Past President of the New Zealand Institute of Surveyors, Editor of the "New Zealand Surveyor" for four decades, died a few days ago. He was born in 1883, began his surveying career before the turn of the century, and was still carrying out fieldwork in his early eighties.

A. H. Bogle and his friend and colleague, C. K. Grierson, were the doyens of their profession. They fought vigorously and successfully for a continuous re-examination of its scope and standards and both actively participated in early moves towards a town planning profession in New Zealand. Mr Bogle was a member of the Town Planning Board set up under the 1926 Town Planning Act. The



Archie Bogle

first, 1930, issue of "Community Planning", the country's first town planning journal, carried an article by him on the role of the surveyor in town planning and he frequently wrote on the same subject for his own journal.

Archie Bogle was a man of complete honesty and integrity, a gentleman in all his relationships, a master raconteur, and a man of wry, dry and, above all, quick, wit. They were fortunate indeed who could number him among their friends. Our lives will be the poorer for never knowing the pleasure of his company again, but, as Shaw said of William Morris, you can lose a man like that by your own death but not by his. Haere ki te po! Haere!

Correction

We regret an error that appeared on page 8 of TPQ 26. The sentence in the middle of the first paragraph should have read:

"Of more interest to the problem in hand is the lack of indication in group II of a desire of South Islanders to move to the North (though the north of their own island is more popular than the Otago and Southland homes of many of them.)"

THEO JOHNSON

The death on the 6th March, 1972 of T.F.S. Johnson at the age of 54 was a sad loss to the planning profession in New Zealand and to the ministry which he served. To many of us it also left a personal gap which will not be filled.

After serving with the Town and Country Planning Branch of the Ministry of Works continuously from 1947, he became Director of Planning of what had by then become the Town and Country Planning Division in 1968, a post he held until his death.

Everyone associated with him knew Theo Johnson's ability, his conscientious devotion to his work and above all his sincerity. Deteriorating health and suffering in the more recent years made these qualities more apparent.

Theo was among the first in 1939 to join the Air Force and become commissioned in Bomber Command. Unfortunately, he was also among the first to be shot down over Germany in 1940 and consequently spent the next few years in a prisoner-of-war camp.

Perhaps one needed to live through the pre-war years seeing and hearing the increasing turmoil of destruction of people and property to understand something of the forces that sent a man like Theo Johnson to Manchester University after the war to take his Diploma of Town Planning and then to devote the remainder of his life to constructive planning work in the Civil Service.

F. W. O. Jones



T. F. S. Johnson

Town planning and harbours



E. W. Thomas, LLB, is a senior member of the legal firm of Russell, McVeagh, McKenzie, Bartleet & Co., and has acted as legal adviser to the Auckland Harbour Board for the last decade.

It has been said (all too frequently) that there are as many definitions of town planning as there are town planners – and this is to disregard the pungent descriptions of its many detractors. But there is nothing untoward in this; there would no doubt be as many concepts of port planning as there are harbour board members and port administrators.

For the purposes of this paper I accept that town planning is the discipline which seeks to ensure the ordered use of land for the benefit of the community at large. It looks, as any planning by definition must, to the future and to future requirements. Put shortly and simply and accepting the not too sophisticated assumption that the best use may be non-use, it is the process for determining the wise use of land. Sound town planning is not theoretical. Nor is it solely concerned, as many might make it appear, with the compatibility of adjoining land uses to the exclusion of all else. It is, properly conceived and executed, directed to the social and economic needs of the community and concerned with the economic employment of resources and the promotion of good communications and access.

It is implicit in what I have said that town planning also embraces the procedure or administrative means by which the wise use of land can be achieved. It provides the machinery for weighing alternative points of view, for assessing rival interests, for resolving competing claims and for reconciling or determining conflicts between citizens or their elected or appointed representatives.

Town planning is not new. Early communities planned whole towns or villages as fortifications to guard themselves against their hostile neighbours, or they organised as a community to protect themselves against natural elements beyond their control. Today, of course, open hostilities are reserved for the lands of other less advanced peoples and town planning for defensive purposes is no longer pertinent. Nor, having emerged from an intensive period of industrial, technical and scientific advance to stand supreme as Man the Conqueror of Nature is Man fearful of the natural elements.

But the need for town planning is more imperative than ever before. Put negatively, the mistakes of a hundred or more years of laissez faire development must be avoided; put positively, the very speed of technical development and the explosive increase in population growth makes planning essential.

“Piecemeal” and unco-ordinated growth can only make our living conditions intolerable. In truth, there is no alternative.

Again, while as a generalisation man may no longer fear nature, he would be wise to fear his own impact upon it. We are dealing with limited resources. The natural order of things is not inexhaustible and our demands upon it must be controlled and planned if our towns and countryside are to be pleasant and balanced places for our own and future generations to live, work and play.

The question then arises, are harbours outside our environment. Other questions follow in quick succession –

* are harbours to be for long treated separate and apart from our towns and countryside?

* are water or water associated uses essentially different from land uses?

* are water and water related resources any less important than resources on dry land?

* are harbours to be exempt from planning aimed at ensuring the ordered use of land for the benefit of the community at large?

* or, are harbours independent and sovereign fiefdoms in a larger domain?

* is there to be a “line of demarcation drawn at the wharf gates” beyond which, whatever the rights of the general public may be, pilferers and town planners may not go?

To all these questions my answer is an emphatic no –

* I reject the viewpoint that would draw a line of demarcation at the wharf gates – or at the wharf itself – beyond which the local authority’s town planning jurisdiction must not extend as unrealistic and outdated,

* I accept that town planning is relevant to harbours and ports, and

* I believe that town planning must be brought within the ambit of a port authority’s responsibility and expertise.

What then is the extent and application of town planning to harbours? I wish to examine this question in relation –

* to the port undertaking,

* to proposed reclamations, and

* to the need for and means of preparing an overall harbour plan.

THE PORT UNDERTAKING

The Port undertaking, by which I mean the



vandal.

Someone said of New Zealanders: if it moves, we shoot it. If it doesn't we chop it down. What a testimony for a people who have inherited one of the most beautiful and generally unspoiled countries in the world. The word vandal is no less a truism when we consider a bulldozer smashing its sharp-bladed way needlessly through a grove of native trees, than when we relate it to an unknown individual indulging in mindless destruction by night.

It could be said that the sheer lack of second thoughts about aesthetics and environment, has created a wide spectrum of commercial vandalism in New Zealand.

While we may not be able to claim a perfect track record ourselves, it is Fletcher policy to make the issues of preservation or re-creation a part of initial planning. If history or natural beauty has to go sometimes, we try to heal the scars of progress. We like to think Fletcher Development means what it says.

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area traditionally called the commercial area of the port, is part of the harbour in which it is situated. It cannot, to my mind, be excluded from the town planning process. There are two essential reasons for this.

(1) The "People's Heritage"

It would be trite to point out that harbours do not belong to the harbour boards that administer them. They belong to the people and are a vital part of the people's heritage; they are part of our national resources and represent community assets; and they are part of the environment in which we live.

Consequently, harbours do not exist solely or exclusively for the establishment, construction and operation of a port any more than towns exist principally for motor cars and parking buildings or the countryside for the construction of motorways, pylons and other products of technical progress. Accepted and much-used phrases such as "the quality of life" testify to the fact that progress with ports, as in other areas, can no longer be measured solely in material terms of growth and efficiency. Regard must be had to the less tangible effects of any development, to visual appeal, to aesthetic considerations and to the preservation of the amenities.

To exclude the application of town planning to any part of a harbour, therefore, would be to deny the people the right of opportunity to control and plan an important part of their heritage and a major and integral part of their environment.

(2) Relationship of port and city

The fact that the majority of cities in this maritime nation adjoin ports is evidence enough that the economic growth of these cities has been strongly linked with the provision and development of port facilities. Invariably, the site of the port was selected because of the natural advantages of the harbour, such as deep water and a sheltered anchorage. As the port grew the city hinterland it served expanded. The growth and economic well-being of the one was associated with the growth and economic well-being of the other.

Again, acceptance of the need for sound, co-ordinated and positive planning follows from an appreciation of the extent and nature of that economic interdependency and close relationship. In this connection two developments have taken place which I regard as having significance in terms of planning.

First, to the merchants, manufacturers and producers who were drawn to the immediate

vicinity of the port during its early growth the port represented a vital link in the transportation of their goods. The port served a function which was closely identified with and akin to that of transport. It was the terminal at which goods were transported from one means of transport to another with the use of conventional cranes on finger piers of limited size.

Today, the introduction of cellular container ships and the various types of unit load vessels accompanied by modern methods of cargo handling have altered the character of a port. The port operation has changed in size and scale as well as kind. In many respects it demonstrates the characteristics of an industrial undertaking.

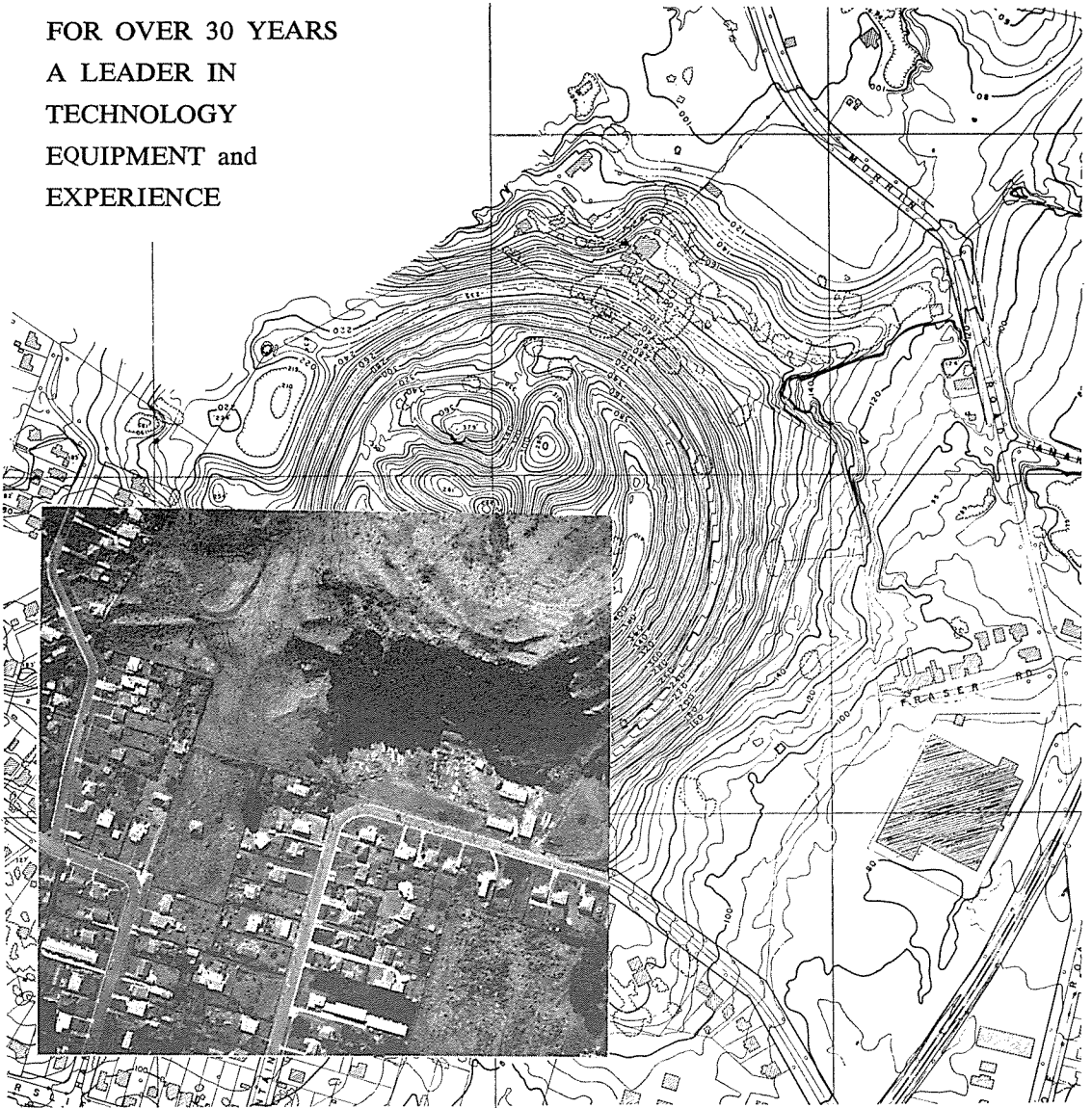
Unlike the conventional quayside cranes, a portainer crane towers over the surrounding sea and landscape. A modern wharf is no longer a finger pier built upon wooden piles that is as pleasant to the eye of a water-oriented and harbour-conscious public as it was sufficient for the merchant and producer. It comprises acres of asphalt-covered land backing a concrete berth or complex of berths for the handling, sorting, packing, assembly and storage of today's larger units of cargo and room for the heavier modern mechanical handling equipment to manoeuvre. It is surrounded by a high security fence.

Trucks moving to and from the wharf, while less in number because of the use of container and unit loads, are and will be larger. Their impact and presence will be more obvious to the adjoining city. Thus, the industrial characteristics of a modern port necessarily give rise to a conflict between the port and its neighbouring city.

This source of friction is aggravated, however, because the city has also undergone a change. Originally, the land uses of the city followed directly and naturally from the presence of the port. There was a high proportion of industrial and warehousing activity. The town or city was a place to produce and trade in goods, the bulk of which had been or would be, in one form or another, transhipped through the port.

In the modern larger city of today most of the industrial activity is located away from the port area. Warehousing is dispersed and generally situated at the perimeter of the city. The inner city has become more essentially commercial in character including a preponderance of administrative and office activities. People oriented activities – the dealing in and

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exchange of ideas, advice and information — dominate the central city scene. While, therefore, the modern port has become more industrial in character the modern city has moved in the opposite direction. It is a situation which can only be resolved in the context of town planning.

In resolving this issue it must not, of course, be overlooked that the port still remains the basic “transport” function. It is still, notwithstanding the industrial characteristics of a modern wharf and modern methods of cargo handling, a vital link in the transport chain — indeed, more so than ever before.

The second development is not entirely unrelated to the first. Although, among port administrators it may have always been recognised that the major ports were, in terms of the area of their service and importance to the overall economy, national in scope and significance, a neighbouring city always received, or could always believe it received, the greatest benefit from the existence and operation of the port.

Today, especially with the advent of containers and unit loading, it is more apparent than before that the hinterland of a major port goes well beyond the immediate city or region. As in the case of ports handling specialised cargo the benefit to the neighbouring area is less direct and less “exclusive” being included in the benefit to the country as a whole.

As a result, a number of inhabitants of the city ceases to think of the port as being “their” port. They feel that, with size and diversification, the city has become less dependent upon the operation and development of the port than before. They see the city as largely self-sufficient and are, therefore, more inclined to resent what they see as an industrial development at its very doorstep.

Consequently, on the one hand, the area of service and importance to the economy of a major port has become more clearly national in significance while, on the other hand, the adjoining city has become less dependent on the port for its economic stability and growth. The potential conflict between the wider interests of the port and the more local interests of the city is clearly apparent. However, once again, the fact that the efficiency and development of ports is critically important to the economic and social well-being of this country cannot be overlooked. The benefit to the city or region may not be as direct or as

“exclusive” as before but it is nevertheless there.

RECLAMATIONS

It is almost a gross understatement to say that in recent years the reclamation of land has caused considerable controversy. Harbour boards have been forcefully reminded —

- * that they have no “right” to reclaim land,

- * that the harbours and foreshore under their charge are national assets belonging to the people and forming part of their natural heritage,

- * that once the bed of the harbour and foreshore has been reclaimed the land will, at worst, pass from public ownership and be usurped for private development, or, at best, be narrowed to a restricted form of public use in which any benefit is limited to a special or even privileged group,

- * that the bed of the harbour and foreshore, once reclaimed, is effectively lost forever and cannot be restored to its natural condition,

- * that, at best, there is a lack of information on the long term effects of reclamation and that Man must unequivocally forego all claims to be above ecological laws,

- * that there is too little appreciation of the demands and pressures of a greatly enlarged future population on available natural and recreational assets,

- * that future generations have a valid claim to ultimately share in those assets and the present generation a corresponding duty not to destroy them, and

- * that the bed of the sea, the foreshore and the coastline are limited resources to be deliberately conserved or jealously preserved.

Future reclamations will be considered in an era of conservation consciousness. Conservation, its unbelievers notwithstanding, is a respectable cause with a growing measure of political appeal. All in all, I believe that both the message and mood of our times calls for an intensive spell of environmental repentance.

Not only will harbour boards be required to scrutinise the necessity for proposed reclamations for port purposes closely but they must surely be more circumspect in sponsoring reclamations for territorial local bodies which covet the foreshore adjacent to their districts for various forms of development. Nor can the effect of other public works such as motorways, roads, railways, and bridges on the foreshore and tidal waters be disregarded for such works can be just as detrimental in terms of loss of

Pauatahanui

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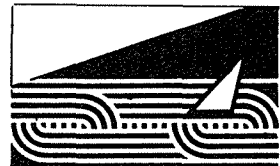
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natural foreshore or of water space for recreation or of public rights of access to the foreshore as any reclamation for port purposes.

I believe that legislation making proposed reclamations subject to town planning procedures, with its right of objection and appeal, is long overdue. This will not mean that no more land will be reclaimed but only that a proposed reclamation will require to be justified in appropriate terms before an appropriate tribunal.

“TOWN PLANNING” THE HARBOUR

The need for an overall planning study of harbours and foreshores has been recognised for some time. At least one harbour board has already initiated and carried out such studies in certain areas of its harbour and has now set in train the procedure and work to complete a planning study of the whole harbour.

Although studies of this kind may to some extent be given formal recognition in the regional planning scheme for the district they are not being undertaken pursuant to any legislative direction and their goals and ambit are nowhere defined by statute. Rights of objection and appeal or the ability to participate in the survey are necessarily limited – principally to local authorities adjoining the harbour. It is my view that the planning of harbours and foreshore and land abutting the harbour under a harbour board’s control should be given legislative recognition and sanction.

Having accepted the importance and inevitability of town planning and the need to positively extend such planning to harbours and land associated with the port, I am convinced that harbour boards should seek and accept the responsibility of becoming planning authorities. Such a proposal is appropriate having regard to the existing status of harbour boards as independent public bodies exercising jurisdiction over large areas of tidal water and land and to their specialised knowledge, experience and expertise in port planning and other matters pertaining to the harbours under their control.

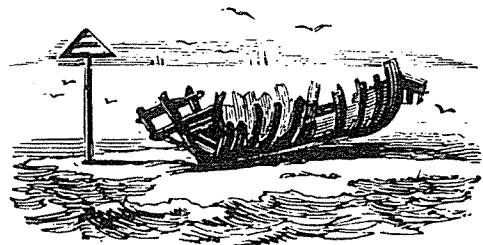
I would envisage that the legislation would delineate the area to be covered by such a harbour plan. This would logically include the foreshore and any land owned or under the control of a harbour board abutting the harbour and used for purposes connected with it. In short, ultimate planning responsibility for such land would rest with the harbour board

concerned and not the adjoining territorial local authority. Territorial local authorities adjoining the harbour would have the same rights as they now have in respect of land in the district of another territorial local authority bordering on to the boundary of their district.

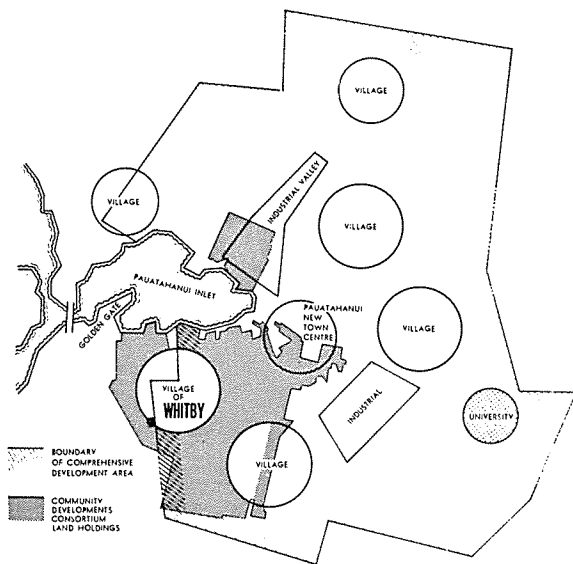
I would think that the content of the harbour plan should also be indicated in the legislation. It would need to provide for both the harbour board’s overall policies in different areas of the harbour; that is, which areas are to be preserved and which areas are considered suitable for development or reclamation and to define the various uses considered suitable for different parts of the harbour, such as port facilities, shipping routes, boat harbours, recreation areas and the like. The plan would need to be based on sound hydraulic and ecological investigations. Such a plan would also be prepared having full regard to the existing and future requirements of the port and the regional or national interests involved in the port undertaking. No doubt, such legislation would also need to define the role to be played by the New Zealand Ports Authority.

Once prepared the plan should be publicly notified, as is now the case with the district schemes of territorial local authorities, and would be open to objection and appeal by persons affected by the plan or groups of persons associated for any relevant public purpose. As with district schemes the harbour plan would be subject to review every five years.

Becoming planning authorities in their own right would have the advantage of giving harbour boards greater status in dealing with territorial local authorities on planning matters and would, I feel, lead to better liaison and co-operation in this area. Such a proposal may initially sound too far-reaching for ready acceptance. However, if the basic premises of this paper are accepted, it is a logical development and only a matter of time.



Pauatahanui — the New Town



Pauatahanui development near Wellington as it is at present envisaged. The Comprehensive Development Area currently under study by the Wellington Regional Authority, totalling 17,800 acres, is within the large border. Land holdings owned and to be developed by Community Developments Consortium, including Whitby Village, are shown in heavy shading.

Within twenty short years Pauatahanui is to become a very large and important residential and industrial area within the Wellington region. An eventual New Town is to be established where the present township of Pauatahanui now stands and this is to be surrounded by a series of six villages, one of which — Whitby — is a present under development.

The plan is a massive one and can best be illustrated by the accompanying map. On this is shown the total area envisaged for eventual development in the full term (known as the Comprehensive Development Area), the placement of the six villages and two industrial park sites and, in dark shading, the land holdings of Community Developments Consortium. This holding alone is of some 3,500⁺ acres. The Comprehensive Development Area encompasses 17,800 acres.

This article was supplied by Community Developments Consortium.

First steps

In 1967 local authorities in the Wellington region agreed to a common strategy to promote orderly development, having accepted policies proposed to achieve this objective in the Wellington Regional Planning Scheme which was produced in 1966. One of the new areas singled out for special attention was the Pauatahanui Basin which was viewed as being suitable for urban development on a large scale.

Shortly after local authority agreement was reached, three large organisations linked to form Community Developments Consortium which made its first land purchases in 1967 after publication of the regional planning scheme. There were the National Mutual Life Association of Australasia Ltd; Jubilee Investments Ltd (a Todd family trust company); and the Fletcher Development Company Ltd. The last mentioned later formed an equal partnership with Mainline Corporation Ltd of Australia and became the managing partner for the consortium under the title of Huapai Properties Ltd.

While development is continuing on a large scale through the consortium at Whitby, this is in fact but a small portion of a larger scheme. The consortium did retain skilled consultants to produce a plan for the whole Comprehensive Development Area and this was submitted first to Hutt County Council and, through that body, to the Wellington Regional Planning Authority. Its intention was to frame a total scheme but it was never more than a document for discussion. However, the framework was sound and, on December 13, 1971, the Planning Authority confirmed in principle the elements proposed.

An established future

This was done in a report entitled "Pauatahanui — Political and Technical Implications of the New Town". The report stated firmly that Pauatahanui "appears to offer the only new area within the region which has the capacity to absorb a substantial proportion of future growth and to do this without compounding the urban problems which already exists within the region". It can be regarded as an important statement of long-term intention and a confirmation of planned growth for the area.

Recommendations listed were:

- 1) That the Authority adopt as policy the provision of a new town at Pauatahanui as a major urban growth point for the region, with emphasis on employment growth as an essential

accompaniment to residential development.

2) That, as an essential element in implementing this policy the authority take the following steps with central government:

(a) Initiate immediate discussions on the necessity for the adoption of a decentralisation policy for government office employment (i.e. away from the central Wellington city area to other centres within the region and specifically Pauatahanui).

(b) Obtain a firm commitment to the Pauatahanui new town policy and the public sector investment that will be involved by central government.

3) That the continued development of the Whitby village and its extension into the Comprehensive Development Area must be related to employment opportunities in the Porirua Basin and the Pauatahanui new town.

The report considered that a study of regional development showed that there should be an early decision to speed up and give purpose and direction to employment decentralisation and that the region was rapidly reaching the time when it would have no place where a large-scale industrial complex could be available for substantial industries and their supporting and ancillary services. A new town at Pauatahanui offered the best prospect to these two problems.

These statements imply full acceptance of a regional satellite concept, with communities becoming increasingly self-sufficient and self-contained and, as far as possible, of the right

size at the right place.

The present

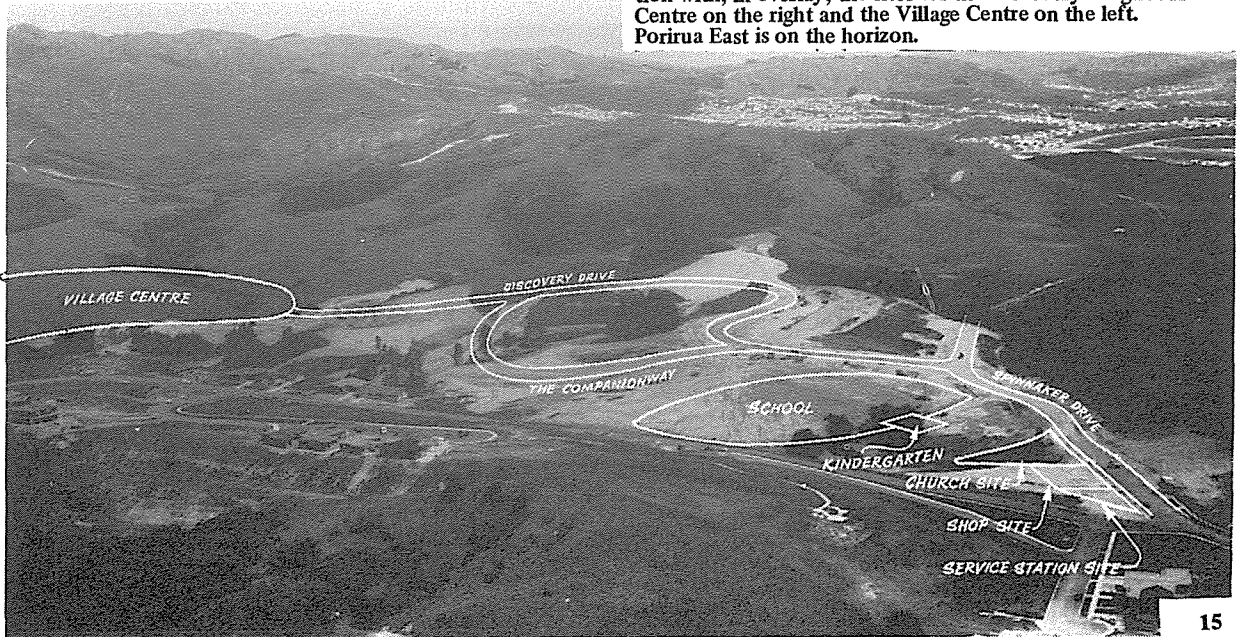
Within this broad framework, Whitby Village is being developed as a model residential community which can merge and extend successfully into a larger plan. Community Developments Consortium's assistance in the preparation of a comprehensive plan encompassing the whole scheme area and the immediate evolution of Whitby within it has served usefully to pinpoint and a specific direction which has been agreed to in essence.

The consortium has, to date, undertaken development of Whitby only in its holdings outside of the Comprehensive Development Area, apart from sports and cultural facilities. These include the new 18-hole golf course in Duck Creek Valley and the restoration of the historic Taylor-Stace Cottage close to the Pauatahanui township.

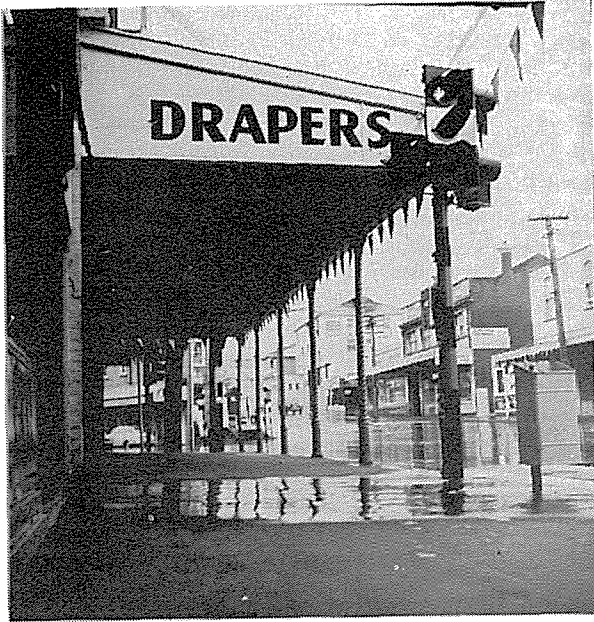
Plans are well advanced for the early development of an industrial park in the Horokiri Valley – property which is also shown on the map as consortium – owned land.

Private enterprise investment is at present taking the lead at Pauatahanui but it is working closely with the Wellington Regional Planning Authority. In due course there will be additional developments in the area initiated by local government. A great deal of long range planning covering this is at present under way and it is anticipated that a large, completely planned community of special attraction will become a reality within a short span of time.

An aerial view of the latest section of Whitby under construction with, in overlay, the sites for the Discovery Neighbourhood Centre on the right and the Village Centre on the left. Porirua East is on the horizon.



Current theories in shopping provision



Mr Nairn is the senior planning officer for the city of Palmerston North.

In western countries retail distribution is an important sector of the national economy. For example in Great Britain retail distribution accounts for more than 50% of the total consumer expenditure and the employment in the retail trade is more than twice that in the primary industries of agriculture, fisheries and forestry.¹

Spatial retail patterns involving social and political considerations, reflect attitudes and values of a particular society. These forces however, can be regulated through government control of economic forces and through town planning.

Historically, planning for retail shopping has always been associated with the development of some type of central place hierarchy and shopping patterns in town planning schemes, invariably following the lessons of the past, provide for a hierarchy of centres.

Scott,² commenting on the importance of central place theory, says the geography of retailing rests not only on concepts of centrality but also on considerations of scale economies, agglomeration, retail organisation, consumer travel and spatial competition. This extension of the original central place theory is a valuable contribution to the theory and the real world retail shopping situation.

With the development in the late 1920s of the neighbourhood theory, which in England culminated in new town layouts which were based on a group of neighbourhoods, a four tier shopping pattern was planned for. While the neighbourhood system with a hierarchy of shops is still acceptable, a three tier system seems appropriate for small cities. According to Burns,³ small cities are those with populations of about 200,000 people. In this system sub-centres are replaced by the corner shop and district centres are not provided at all. Either of these systems will in all probability be satisfactory where the overall provision is controlled in terms of land ownership. Where, however, no such control exists and private ownership of land is predominant, then it is more difficult to reconcile the demands of retailers and developers.

The planning for existing and expanding cities which have an established pattern and demand from the public, cannot be classified strictly into a preconceived pattern. New areas would, however, be based on some objective and the three tier system with the C B D at the apex appears to be the most suitable for a medium sized city.⁴ It should be noted that medium sized cities usually have

a hierarchy in which the C B D has the greatest proportion of comparison shopping. This does not apply fully to metropolitan areas nor to the smaller urban settlements as they have no hierarchy.

Shopping needs of the town

Whilst the concept of a hierarchial pattern of shopping centres is easy to establish the problem of estimating the number and arrangement of shops is more perplexing. The problem was commented on by David S.R. Overton⁵ who said in 1954:

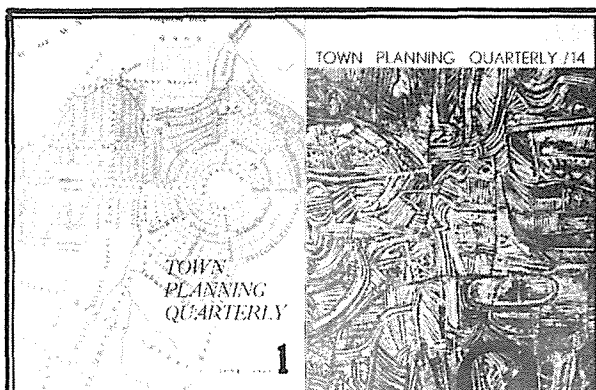
“The difficulties which confront the planner in seeking a basis for the assessment of the number of shops which a community can support are complex enough to account perhaps for the absence to date of any practical solution.”

Despite the work that has been done on the development of the theory of retail patterns, trends and shopping centre structure, Overton's comments still hold in relation to a practical solution.

A great deal of research into shopping has, however, taken place in both America and Britain. In Britain where the situation has now been studied in some depth, the estimating of shopping needs in the immediate post war years was by the application of simple standards, but there is now a tendency to follow America and to provide a more sophisticated market potential or retail gravity model or a comprehensive model in an endeavour to predict future requirements.

Mathematical analysis and model making for estimating the number of shops required in a community are of very recent origin. Town planning, at the turn of the century, did not indulge in economic activities of this type. Raymond Unwin⁶, in describing the plan of Earswick near York in 1911, said: “Where the main road runs alongside of this green it is intended to arrange a few shops.”

Many authorities did not differentiate between commercial activities such as shops, banking, insurance and professional activities and no consideration was given to shopping in terms of number of shops or a precise requirement for shop floor space. Commercial space was, however, related to population by taking street frontage of the zone on a per capita basis. This was basically an American approach but it was used in New Zealand in pre-war proposals and naturally has been carried on and is the basis of much of the



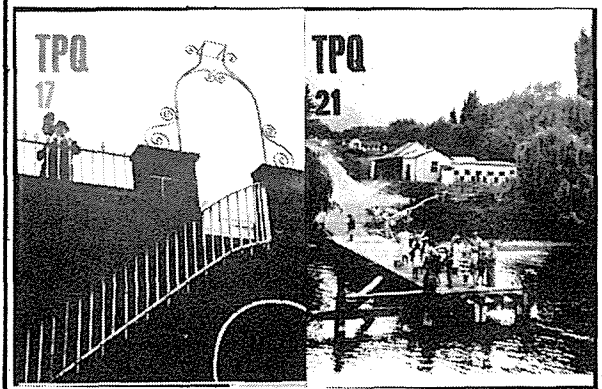
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present zoning in this country⁷.

America, in the late 1930s, was giving attention to calculating shopping needs by estimating probable expenditure and relating this to floor space. However, at this time this did not influence zoning in any real way.

The Dudley Report⁸ published in 1944 dealt with neighbourhood planning and local shops to serve those units of housing development. They considered that there was insufficient information to provide for space reservation for shops other than on an empirical basis but from the information available they concluded, however, that there should be an allowance for shops in a neighbourhood (i.e. local shopping facilities additional to those in the central area of towns) at a rate in terms of individual shops of 1 shop per 100 - 150 inhabitants or 70 - 100 shops per neighbourhood of 10,000. The report did, however, suggest that because shops vary in size by type of organisation, it might be preferable to plan in terms of retail area.

At about the same time the National Chamber of Trade in a report provided for 18 to 22 shops for subsidiary shopping for an estate with 5,000 population⁸. Presumably for 10,000 people, this would be 36-44 shops plus the corner shops and can be taken as a movement to reduce the extent of competition proposed in the Dudley Report.

Roskill¹⁰, however, considered that "Although the numbers of shops in the country as a whole was excessive, town planning should not be used as a method of reducing the number of shops by providing for only a limited number."

The New Towns Committee's final report¹¹ suggested one shop to 100 to 150 people was desirable, but abstained from suggesting any allocation of shops between central area and neighbourhoods but favoured reasonable competition. Keeble¹² stated that it was not possible to derive from the information available any definite or authoritative standard but it looked as if one shop to about every 170 people was not unreasonable to adopt for neighbourhood shops.

The New Towns

Consideration has so far been confined to local shops although in the development of New Towns, central area shopping as well as neighbourhood centres was provided at a total provision of 40 to 50 shops per 10,000 people.

At 1967 the overall provision was 1 shop for 200 persons. However, Basildon had 1 for 122 and Hemel Hempstead 1 to 92. Scottish New Towns had 1 to 300, London Ring 1 to 150, balance of England and Wales 1 to 130. In 1969 there was overall 1 shop to 164 people, Basildon having now 1 shop to 123 people, Hemel Hempstead 1 to 101, the Scottish New Towns 1 to 265, the London Ring 1 to 145 and balance of England and Wales 1 to 160¹³.

The New Towns' standards do not appear to be relative for any town with regional significance, in that the overall provision for shopping is at about the level suggested by the authorities for local shops and presumably their success is due to the proximity of large retail centres in older areas, particularly the London Ring.

Basildon, however, may be the exception where the centre has a regional significance. As at December 1969, in addition to 294 existing shops, a further 350 have been added, each with an average floor space of about 1,900 square feet. The provision here, therefore, is 1 shop per 106 of population.

Central or local location?

Central area size during this period does not figure prominently in literature, however Holford¹⁴, in a paper to the 1953 Town and Country Planning summer school, deals briefly with this aspect.

The core or central area is related to the existing and projected size of the urban mass, its sphere of influence and the number of settlements within its orbit of employment.

In this paper Holford compares Cambridge in England with general United States figures. In the Cambridge situation an existing 10 square feet of shopping space per person in the urban area was to be increased to 11 square feet, in contrast to a figure for the older shopping centre of the U.S.A. at 15 to 35 square feet per person or an average of 25 square feet.

Taking the recommendations so far we would have a fairly acceptable standard for local shops at 1 shop for every 160 people and little more than Holford's 10 or 11 square feet per person for the central area. Assuming the central area shops to average approximately 1,500 square feet then the central area of 100,000 urban centre would have about 660 shops or 1 shop to 150 people. In these circumstances an overall provision of approximately 1 shop to every 78 people with half in

the central area and half as local shops would be a reasonable rule of thumb standard.

Basis for number of shops

There is quite a lot of statistical information about shops in relation to population but it is of only limited practical value because population figures generally refer to city, county, borough or other local authority boundaries which have little relationship to "Shopping population".

Percival¹⁵ in 1965 said Britain was in a similar position with regard to distribution of income and consequently personal demand, that the United States was in 25 years ago and that Britain should look to America for the answers to its retail shopping problems.

The American practice of building shopping potential gravity models is now being considered by researchers in Britain.

In Cumbernauld (1959)¹⁶, however, a comparative technique was used for the central area in which the average sales per head of type of trade for towns of similar size with similar locations were calculated from the Census of Distribution. The sale were then converted into retail area.

The Haydock Report¹⁷ in 1961 used an adaptation of the Law of Retail Gravitation (W.J.Reilly 1929) which Jones¹⁸ expresses in the following formula:

The number of miles from larger Centre A to the outer limits of trade area (computed on major roads) =

$$1 + \sqrt{\frac{\text{Mileage on road to adjacent smaller Centre B}}{\left(\frac{\text{Population Centre B}}{\text{Population Centre A}}\right)}}$$

This establishes the trade area from which present retail expenditure can be obtained by type of good and a sales per capita derived for target date. Allowing for social classes and urban rural differences, total target population sales per head and sales per square foot for type of good can be calculated and the following formula then gives:

Floor Area Year X =

Sales per head x total population Year X
(Present value of money)

Sales per square foot (Year X)
(Present value of money)

The Haydock study combined an identification of a shopping centre system with an adaptation of Reilly's Law. Numerous shortcomings were found such as arbitrary method of classifying centres and the assumption that the population can be allocated to specific market areas. On this last point Cole¹⁹ is critical and indicates that a consumer may patronise for various purchases three or more centres.

Nader²⁰ in his criticism of the Washington new town shopping proposals concluded that "Undoubtedly the gravity principle operates but knowledge of consumer orientation does not allow the application of statistical formulae or models in almost all areas."

A more comprehensive model is needed and Lakshmanan and Hansen, 1965, developed such a model for a metropolitan region. Several refinements have been made to this model but there are still problems when it is used to predict retail requirements.

Rhodes and Whittaker²¹ in applying the Huff retail distribution model to selected Central London centres concluded that although the model was comparatively successful in predicting the actual level of retail sales a more refined methodology for general application was needed. Their second conclusion was related to the future use of shopping floor space where they say:

"Clearly considerable further research remains to be done. While certain rule of thumb methods have emerged for estimating both the future sales potential of existing shopping space and the likely sales per square foot achieved on new premises more accurate forecasting techniques await the compilation of a much wider range of data."

Despite considerable interest in the prediction of retail requirements and the application of quantitative analysis we have not advanced far since Overton's statement.

In the absence of any sophisticated, readily applicable means of predicting shopping requirements, several ways are used to estimate the number of shops and given community needs.

One of these is to relate the number of existing shops to population in several towns of the same size and for groups of towns in categories by increasing town size and then to apply a simple standard. The area of floor space may also be taken and treated in the same way. The results from these give no accurate measure as some towns only serve

the local population and are themselves contributors to a regional centre, some are regional centres themselves, while others may well have tourist characteristics and all that one really achieves is an average which could be too small or too large.

The present trend is to endeavour to relate floor space in square feet to annual turnover. While this is a more sophisticated technique it requires information not at present available in New Zealand. Briefly it requires an analysis of the expenditure per head of population on specific commodity heads in relation to the size of town. This investigation would produce statistics like towns with regional significance have expenditure of \$30 per head of population for the grocery group of articles, \$9 per head on butchery, etc.

The process is still a hazardous one unless a full understanding of the regional importance of the town is possible, and until sociologists tell us why expenditure on basic commodities varies from place to place.

After arriving at expenditure figures, these have to be allocated between the various groups and then translated into floor space so that they can be used to set aside areas of land. Space standards are continually changing and the acceptance of the present day relationship between floor space and population, or floor space and turnover without reservation, would be suspect.

Building costs have an important part to play in how far comfort for shoppers is aimed at. At what point is it profitable to relieve congestion in a shop? Does self service with trolleys, which demands larger floor areas, have a fixed relationship to turnover per square foot and size of shop?

Any calculations of this nature cannot be precise and are unlikely to indicate statistically any trends for the future and therefore one of the prime considerations is to allow for a full complement of shops to be built if required, but flexibility to take up the slack if the anticipated demand is not achieved.

There is also no absolute guide as to how much of the floor space should be in the central area and under traditional development; this is usually a hit and miss system based on the ability of certain functions to withstand competition from the floor space in the central area. An example of this is the shifting of a fruit and vegetable shop from the Square, Palmerston North, where the highest

pedestrian count is recorded, to Rangitikei Street, which has a much lower pedestrian count. Its place being taken by a menswear shop. In this way shops selling day to day goods in the C B D move to cheaper rentals on the outskirts of the main retail area and finally, in some cases, to the suburbs.

A differentiation by function as well as floor space for the C B D and the local shops will, of course, depend again on the size of the town. The amount of specialisation that has already taken place can be some help - it determines trends.

Conclusion

There are no sound theories for determining the number of shops a community can support in a free enterprise system. In this system competition is supposed to eliminate the inefficient. This may be true where the market forces have free play.

In the situation we have it is perhaps better to talk of private enterprise rather than free enterprise and it may be possible to theorise on the provision of shops by determining expenditure in shops and to determine how this is related to an adequate number of shops but not to an under-provision or an over-provision.

There is still, however, a large area of opinion and a choice for the practitioner in how he handles the matter in his own locality. Two well-known planners, Waide and Keeble, both express this opinion in varying degrees.

Waide²² says: "My department's work has made them doubtful of attaching too much significance in terms of overall planning to precise floor space measurements".

Keeble²³, in his latest edition, now suggests shopping provision on the basis of expenditure per capita. On the basis of a 1966 expenditure of 182 pounds per head he assumes a rise to 200 pounds per capita per annum. He also suggests that there is evidence that each square foot of gross shop area (shop storage plus selling space) might produce 30 pounds of sales per annum, and that 7 square feet of shopping space per capita therefore needs to be built. "How much of this is to be built in the central area cannot be a matter of prediction; it must be a matter of decision." Furthermore he says that the number of shops which can be supported by a particular population is a matter of uncertainty.

In the New Town of Runcorn²⁴, one of the most recently developed new towns, a growth rate of 2% or 2.5% was assumed making a 1991 expenditure per capita of 256 pounds -

282 pounds, but a yield for square foot of gross retail area of 47 pounds for convenience goods and 34 pounds for durable, was allowed making a per capita floor space provision of 7.13 square feet with a ratio of 60:40 as between town centre and remainder of town.

Runcorn's shopping hinterland is, however, limited by its more powerful neighbours and will therefore be smaller than that of a similar sized town in more favourable circumstances.

Brown and Sherrard²⁵, on the other hand, consider that as the existing Australian provision of shops per capita is close to the British standards the British neighbourhood planning scheme standard of one shop per 100 - 125 persons is satisfactory for application in Australia.

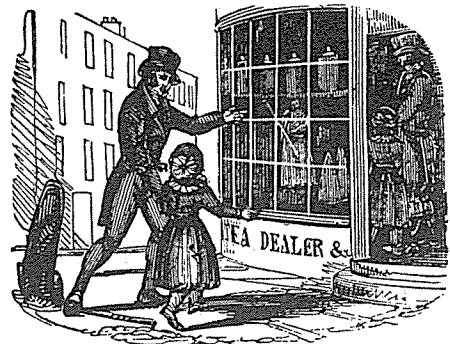
Of the empirical standards which are in use those proposed by Percival²⁶ appear to be a reasonable average. He suggested a range of 10 - 30 square feet per person as an overall figure for the selling area required for a balanced region. He also says that in balanced communities in North America two thirds of the space is in the C B D and one third in suburban areas.

Retail floor space (selling area) might then total 13 square feet per person in the C B D and 6 square feet per person in the suburban areas. This figure, which has become established as a consequence of the evolution and development of theories of retail shopping, appears to be most useful and in a later article application of these techniques are made to Palmerston North.

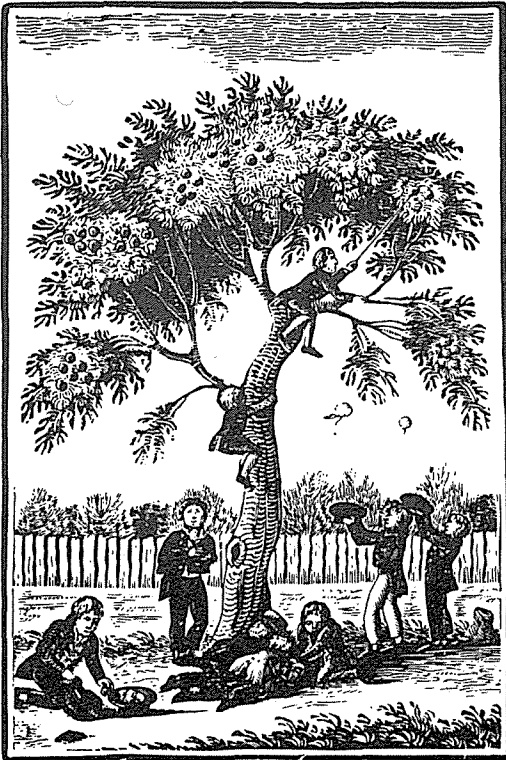
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Delinquency and the physical environment



The number of people involved in making decisions which will influence the amount and kind of deviant behaviour in society is very great. Architects and town planners are certainly among these. The problem is that the kinds of questions we have asked about delinquency have not been designed to elicit the kind of information needed by those creating our physical environment. In this article an attempt is made to take some features of modern environments: lay-out, density of population, vertical expansion, community size; and suggest the effects on delinquency they may have, on the basis of psychological theory and research evidence.

The idea of a link between delinquency and environment is by no means a new one, but the centrality of such a concept in general informed thinking about this and other problems is more recent. From the point of view of psychologists it can be said that during this century there has been steady progression away from the idea that delinquents are necessarily different kinds of people, towards a view of delinquent acts as the resultant of a complex set of social factors acting on a variety of individuals in different ways. The problem of delinquency is unlikely to be solved by the birch or the therapist's couch. It requires careful social planning. Among the factors which we can immediately give some thought to is the physical arrangements of our future environment. The effects of ill-advised decisions in this area will be with us for a long time.

It is difficult to show the link between delinquency and environment directly. The absence of direct studies means that we shall, in the main, have to adopt a course which attempts to show the relationships between the physical environment and the process of socialization. The term socialization means the process by which a child learns the requirements of society, both in positive terms, what is expected of him, and in negative terms, what is not permissible. In our culture the family is the initial agent of socialization. If the child has less than the usual amount of contact with parents, or unfavourable relations with them, the socialization process will be hindered. There is little risk in their taking the further step of assuming the connection between poor socialization and a higher likelihood of involvement in delinquency. This association has been shown in numerous studies.

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Physical Lay-out

The first aspect of architects' decisions we can examine is that of physical lay-out. To a large extent it is not possible to predict the effects of different lay-outs within homes. They may lead to different patterns of family life, but it is not clear which will be most advantageous. Considering lay-out between homes, their relations to one another, and access details, it is possible to show implications for general social relations.

An American study⁽¹⁾ of student family residences showed that on campus where the houses were arranged in courts, there was a marked difference between the high social integration of those living in houses facing into the courtyard, compared with the few living in corner houses facing outwards. This appeared to be a result of the simple fact that those in corner houses did not make chance encounters with other residents, in the way that those facing the courtyard did. A well-known socio-psychological dictum, 'interaction leads to liking' is appropriate. The general trend of much research in this area is towards showing that interaction between individuals close to one another in spatial terms can be very easily blocked or facilitated by minor details of the man-made environment. An example of the kind of question this gives rise to is, what effects on social interaction would be observed in flats opening on to a central square landing, rather than on to a long corridor? Thus lay-out may determine, in association with other factors, the build-up of social relationships. The relevance of this to the socialization of children becomes evident when we consider how the physical environment may influence the development of the very young infant.

In the earliest years of life the physical environment will be mediated by the mother. The most salient features will be those determining the quality of maternal care. Maternal deprivation is sometimes suggested as a cause of delinquency but Rene Spitz⁽²⁾ has drawn attention to the opposite possibility. This is the danger of emotional over-loading. The adaption of mother and child is seen as a complex process, a sort of non-verbal dialogue. The child can learn appropriate responses, even if the mother is denying, or delaying satisfaction of its needs, so long as the maternal behaviour is related to the child. But the dialogue breaks down if the mother's behaviour towards the child

is to any extent the result of non-maternal motivations. An example would be where the mother, because of few social contacts, lacks a sense of identity. The infant becomes important in giving her an identity as the loving and competent mother. Thus, in subtle ways her behaviour may become determined more by the need to maintain a favourable self-image than by the real needs and behaviour of the child. In this situation the mother's responses become less predictable, and the child's limited ability to adapt is overstrained. Also, of course, her relationships with her husband and older children may be stressful in various ways, though their powers of adaption will be greater.

Clearly, a disturbed mother-child relationship may come about in a number of ways, all culminating in the process described above. The possible causal sequence we are interested in, physical environment - restricted social contacts - lack of opportunity to express non-maternal needs, is only one of several possible roads to the same basic disturbance. From a male point of view brief encounters may seem too trivial to be of importance. If so, try imagining a work day in which all communication with colleagues is by 'phone, tea or coffee is delivered to the office, automatically, and lunch is taken in isolation. However, physically environments are not the only modern development which can tend to restrict social interaction. The cultural factors making for some reserve in social relations, and the tendency to occupational heterogeneity in any one area are also important.

Population Density

These then are some of the possible consequences of physical lay-outs which restrict social contacts. However, Spitz, in suggesting the possibility of a breakdown in the mother-child dialogue, really has in mind over-crowding, and the question of population density is probably one of the least understood aspects of the physical environments.

As is often the case, the direct evidence is from animal studies⁽³⁾ and analogies must be drawn cautiously. The result of over-crowding in some animal populations is a breakdown in social behaviour, particularly sexual and maternal behaviour, and a high rate of still births. These studies represent extreme situations and

the questions we would want to ask about human over-crowding are complex. What kinds of space restriction are most stressful: confined living quarters, or other forms of limitation? What is the relationship between objective measures of crowding and subjective, or perceived, restriction? Just how stressful is crowding for us?

Although there are only animal studies, directly relating to population density and behaviour pathology, there is work by D. H. Stott(4), on children, suggesting that if crowding is stressful, the long-term effects may be very serious. This work tentatively suggests that emotional stress on the mother, (during pregnancy) which might result from overcrowding, produces children who show a syndrome of early ill health, intellectual retardation and behavioural difficulties, given other precipitating events. The suggestion has been made that because advances in medical science ensure the survival of many of these impaired children, the incidence of behavioural maladjustment, possibly leading to delinquency, is likely to increase.

These various aspects of the relation between the quality of maternal care and the physical environment do appear to bring out a contradiction. On the one hand there is the implication that restricted opportunities for social relations can lead to an over-involved infant-mother relationship. On the other hand crowded living conditions, presumably giving a high rate of social interaction, are said to be potentially stressful and disrupt social processes.

This clash is however, only at a superficial level. It is possible to visualize physical arrangements which give adequate living space, but also have access characteristics which are likely to lead to casual social interaction. It is, of course, not suggested that this would solve all problems. No amount of ingenuity is likely to please the man who wants the impenetrable private castle in one mood, and his neighbourly social life in another.

Vertical Expansion

Another important aspect of contemporary physical environments is the increasing tendency to vertical expansion. High blocks of flats create irrational suspicion because they are a new way of living, but it is possible to see very real difficulties. For instance, at the toddler stage, families living in high flats may tend to let their children out to play at ground level

because of space restrictions at their own level. Continual supervision is probably not practicable, and opportunity to 'run to mother' is blocked. Such children will have to learn to fend for themselves very early. This means in practice that a child has to acquire interpersonal skill before it is ready for this stage of development. The very young child becomes capable of using aggressive behaviour long before it has any ability or understanding in dealing with the aggressive acts of others. Young children will be surprised, and possibly frightened by the aggression shown towards them by other children even though they have recently behaved in a similar manner themselves. Groups of children who have been exposed to this kind of early experience too often have been observed to adopt a 'might is right' adaption; a pattern of getting one's own way when the odds are in favour, but retreating in the face of any difficulty, particularly superior strength. (Most children will, of course, show this kind of behaviour at some stage, but not persisting into later childhood.) The other side of this premature independence is the reduction of interaction with parents, a primary requirement for adequate socialization.

Community Size

Moving from the design of buildings to the planning of communities, we can look at evidence suggesting how community size may influence the later stages of socialization, and examine ways in which community facilities determine some of the more immediate factors in delinquency.

Some of the most interesting information on the relation between environment and socialization has come from studies carried out in recent years at the University of Kansas, under the direction of Roger Barker and Herbert Wright. They have introduced some important new concepts into psychology. Particular emphasis is put on seeing behaviour in terms of episodes, rather than responses, and on relating behaviour to the setting in which it occurs. The individual and his environment form the unit of study; the usual isolation of individual from environment is shown to lead to inadequate description and incomplete explanation. These ideas lead to a study of behaviour ecology. Developing from this early work, studies of more recent years have centred on the behaviour and learning of children in different sized communities.(5) In this 'City-Town' Project, the comparison

has been between communities of from 4500-1,100, representing towns, and a mid-west City with a population of about 35,000. The children studied were from 6-11 years of age, and the groups from City and Town were matched on the variables of age, sex and social class. Underlying the work is a broader view of the socialization process than is usually apparent. The child's personality is commonly seen as a product of the family, and its view of the wider world is essentially that projected by the parents. The Kansas studies focussed on the way the child gradually acquires, through personal experience, a knowledge of his immediate surroundings, particularly the human hinterland. Because there are wide variations in the kind of surroundings in which the mobile years of childhood are spent, parallel variations in the child's internal world are to be expected.

The results of these investigations are many and complex. In briefest summary it can be said that the Town child has a greater depth of knowledge of his environment than the City child. Though the extent of his possible learning is restricted he knows much more about this world. Adults figure more prominently in his world than they do for the City child, and his interactions with adults outside the home, like storekeepers, are longer. The Town child is more likely to greet adults, and to be treated permissively and attentively by them. The City child enters a greater variety of behavioural settings, but his involvement in them is lower. Thus, overall, the City child appears to live in an environment with far greater possibilities for learning, but, in fact, lives in a perceptual world which is smaller, more diffuse, and more highly dominated by self, family and other children.

The reasons for this are clear if we consider the descriptions of learning from other psychological work. To have knowledge about a person or thing, or to have a feeling about someone, is a response. We only learn to respond consistently to some stimulus when it is sufficiently clearly differentiated from other similar stimuli. The more similar stimuli there are, the less likely we are to differentiate, and the slower the learning will be. The City child has much greater difficulty learning to differentiate the persons and things around him, and, therefore is less likely to learn consistent responses. In this way his perceptual world is developing, and less clearly defined.

The idea that many social problems relate

to the diffuse nature of modern cities, and the impersonal social relations, is, of course, not new, nor is the suggested break-down into smaller units original. The usual grounds for this proposal are the increasingly well understood foundations of social control, or morality. Although we may train children, in the home and other settings, to behave in certain ways, or at least to have certain attitudes to different ways of behaving, the actual behaviour shown will be closely tied to more immediate influences also. Particularly important is a general sense of community approval or disapproval. These external controls appear to be more effective in the small, socially intimate communities. This is probably partly due to the closer relationships to the small community, of its children, as indicated by the Kansas studies, and also to the greater probability that one's behaviour will be known to others in the effective social network. Leslie Wilkins⁽⁶⁾ has recently drawn attention to a related aspect, the provision of private and public housing in different areas. This may tend to intensify 'us' and 'them' attitudes. Suburban dwellers have little experience of delinquents, and rely on mass media for information. They easily become convinced that the perpetrations of the latest outrage are some new kind of monster. Proposals for control become unrealistic and severe. This is fed back to the offenders by the same channels, newspaper and television, and the alienation of the deviants is intensified.⁽⁷⁾ Thus not only increase in size, but also the associated development of separate communities with relatively little knowledge of one another, seem to lead to greater difficulty in dealing with deviant behaviour.

In putting forward these views on the static aspects of physical environment, and suggesting that they may determine some kinds of behaviour it is not intended to suggest that architects and town planners can directly cause or prevent certain kinds of behaviour. They can only learn what part their decisions play in the total complex of society. Psychologists, equally, have to learn this restriction. But to argue that because one cannot fully control, there is no point in doing anything, is neither logical nor responsible. Probably the most productive first step is provision for research in which architects, town planners and behavioural scientists work together. In this way develop-

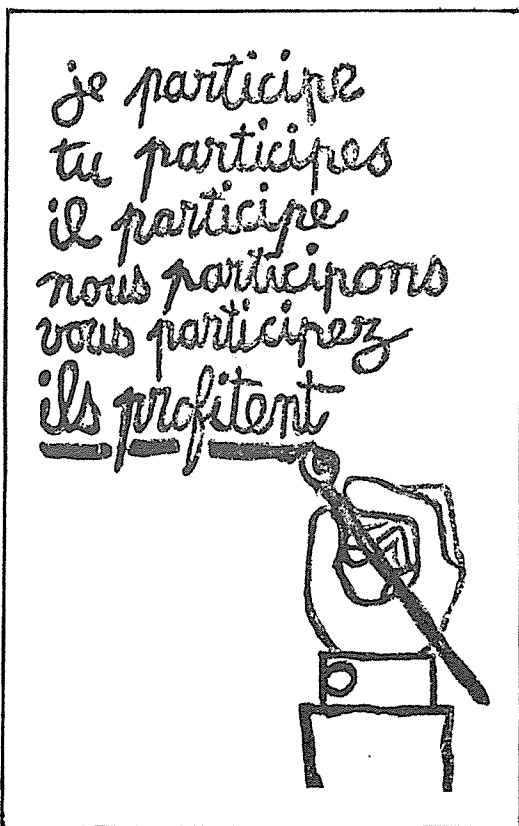
ments can be based on the best available knowledge, and more important, the effects of innovations can be assessed.

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Judith Davey

The office industry in Wellington



From Posters for the Revolution, Paris, May 1968, produced by the Atelier Populaire

The Town and Country Planning Division of the Ministry of Works has undertaken a survey of offices in Wellington with the aim of providing background information for planning. The problems of increasing concentration of office employment in central city areas have led to the suggestion that the feasibility of office decentralisation be explored. With this in mind, information was collected on patterns of contact in offices, on employment structure, accommodation and location needs, to assess, if possible, the degree to which offices are attached to the central area.

A postal questionnaire was circulated among 320 office establishments in the Wellington employment district in late January 1971. Information from 232 respondent firms was used in the analysis. Follow-up interviews were conducted with 50 office employers.

Mrs J. A. Davey, BA(Hons) (London), PhD (Durham), has been working as an investigating officer with the Town and Country Planning Division of the Ministry of Works, Wellington. This article is a summary of a report of similar title published by and available from the Division's Wellington office.

Characteristics of the sample

Respondents were divided into seven major function groups and seven size groups in terms of employment. The majority of the firms were small; 57% had 10 or fewer workers, and only 3% had over 100. This distribution is close to figures for office firms in overseas surveys. Finance and import/export firms tended to be large, professional firms of medium size, wholesalers, transport and miscellaneous services generally small.

The majority (91%) of respondents were located in central Wellington, with larger firms in the core area and the smaller on the fringes in general. Finance and professional firms were generally in the Featherston St. - Lambton Quay core area, with commercial and miscellaneous firms on the fringes, in Te Aro and Thorndon. (see map)

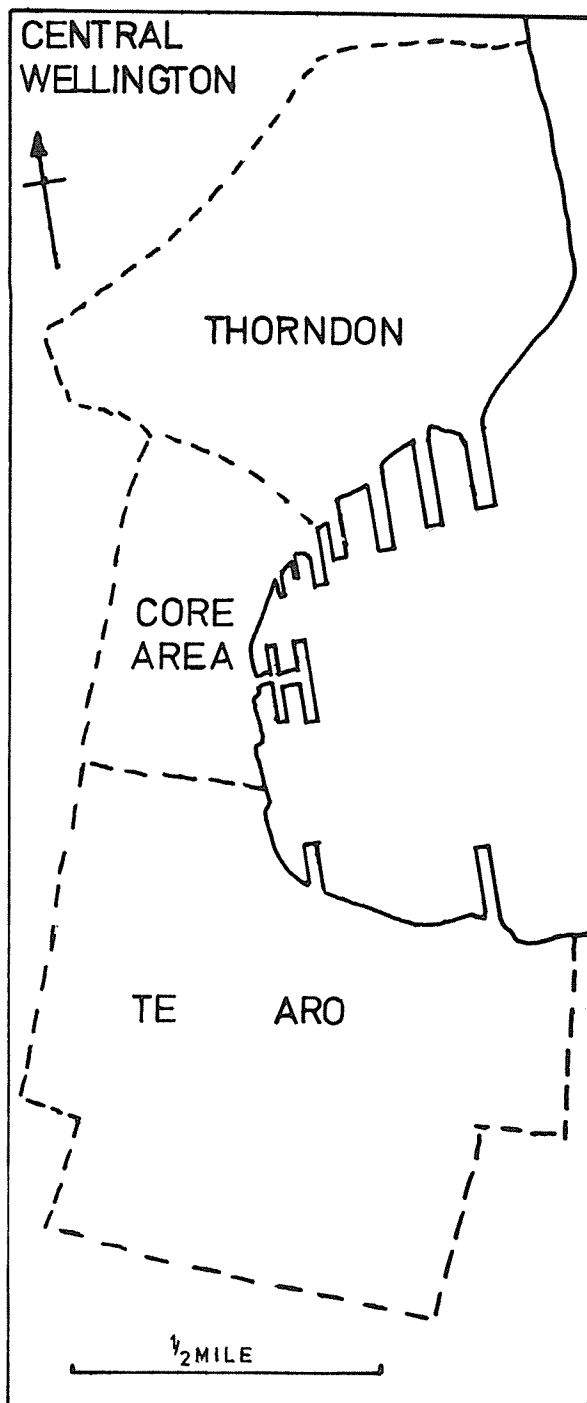
Respondents were fairly evenly spread between the status groups - sole, head and branch offices. Professional, transport and miscellaneous firms were mainly sole offices. A number of financial and commercial respondents were local head offices or branches of firms in Auckland or overseas.

The majority of respondents were housed in buildings constructed as offices (73%) with a higher proportion for larger firms. Of financial firms 93% were in purpose-built premises, but transport and miscellaneous firms were also found in converted dwellings, and manufacturers and wholesalers in converted warehouses or factories. Ninety percent of respondents in the core area were in purpose-built offices.

Nearly a third of all respondents were in premises built as offices since 1961. Larger units tended to be in more recent accommodation, but there were no marked differences between function groups in age of premises. Of premises constructed since 1950, 94% were purpose-built offices, but 91% of converted premises dated from before 1940.

The great majority of respondents (96%) were satisfied with their location and 80% with their premises. The highest level of satisfaction was recorded by financial firms and the lowest by transport and miscellaneous services.

The main factors which differentiated groups of offices were employment size and function. There were unfortunately too few respondents from the suburbs to make meaningful comparisons with the central area.



Contact patterns

Information was derived from the postal questionnaire on respondents' contact range, frequency and methods. The analysis of these factors led to the following findings:-

- 1) Banking is the most important contact as a single institution, used by nearly all firms, at high frequency and largely on a personal basis. However, the facilities of branch banks would be adequate for most needs.
- 2) Customers and clients are also vital contacts and 76% of recorded contacts with them takes place daily or more frequently. The nature and distribution of customers and clients varies from firm to firm but the concentration of business activities and day-time population in the city centre and its accessibility mean that such contacts can readily be made there.
- 3) Professional services - lawyers, accountants, insurance etc. - are used by the majority of firms, but generally not very frequently. However, the importance of personal meetings in this field makes such contacts another factor favouring centralisation.
- 4) Business services - secretarial, calculating and computing, advertising etc. - are used by about 60% of respondents, but levels of frequency and personal contact are moderate or low. Proximity to such services may be convenient, but not essential.
- 5) The importance of government contacts varies between function groups. Such contacts are important for transport, import/export and professional firms, and in these cases proximity to relevant government departments may be a strong locational force. Contacts with local government are much less in all respects.
- 6) Contact with other parts of the same organisation also varies, but is important for the larger firms. Frequency of contact is high but the personal element generally low. Such contacts are unlikely to contribute to office concentration.
- 7) The same can be said for contacts outside Wellington. Links with the Hutt Valley are very close, but those with Porirua-Tawa are generally less important than contacts with other New Zealand cities. The amount of personal contact involved falls off regularly with distance from Wellington.

A comparison of the ranking of contacts in terms of frequency, as between the Welling-

ton survey and one conducted in Leeds, U.K., shows very close agreement, especially when government contacts are omitted, as these are a specialised function of Wellington and also differ in their influence as between New Zealand and the U.K.

Contacts patterns for function groups have been summarised using an index which combines contact range, frequency and personal contact levels. Import/export and professional firms have the highest scores for contact intensity, followed by finance, wholesale and manufacturers' offices at about the same level. The transport and miscellaneous groups have the lowest scores and therefore the weakest contact patterns. A similar comparison for size groups shows that contact intensity increases with employment particularly in terms of frequency.

This analysis of contact patterns goes some way towards assessing the strength of ties which bind offices to the city centre. They are, however, only one factor in the complex equation of factors which influence office location.

Contact methods

Interviewees were asked to state the advantages and disadvantages of various contact methods and the types of business for which they considered them most appropriate.

Personal contact was highly valued for its directness and usefulness in explaining and advising. It was considered an essential aspect of selling, and also where documents and other material had to be handled as part of the transaction. The majority of respondents (86%) could see no prospect of a reduction of personal contacts in their business. Similarly very few could envisage devices such as the TV/telephone ever replacing personal communication. It seems unlikely therefore that personal contact will easily be ousted from its position in office activities.

As a whole, interviewees considered that telephone contact was more important than the post or personal meetings in the day-to-day running of their businesses. The telephone has the advantages of speed, convenience and efficiency, and is particularly appropriate for routine business and for simple transactions which require little discussion. These occupy the greater part of office activity, and so quantitatively the telephone may well account for the larger amount of contact. However, it is personal contact which gives rise to vehicular and pedestrian traffic and is thus a more

important influence on office location.

Employment structure

Firms covered in the survey employed 4000 office workers, representing 15-20% of the total in the Wellington employment district. Comparisons with Labour Department figures show that postal questionnaire data is fairly representative in terms of numbers of workers per office and male/female breakdown.

Males outnumber females in office work about 1.8:1. Financial, professional and miscellaneous firms have more balanced figures (1.5:1), but commercial and transport offices have a 2:1 ratio. Ninety-three percent of the surveyed labour force works full-time, slightly less in miscellaneous and professional offices. The full-time proportion increases with size from 85% of those employed in firms with up to 5 workers, to 99% in firms with over 100.

A classification of office staff by function shows that one-third are engaged in clerical work (half in financial firms) and 17% in typing and secretarial duties. One in five are managerial and executive workers, one in four if the professional class are included. There is a higher proportion of such top level workers in miscellaneous and professional offices, fewer in commerce and transport. The proportion in the managerial and executive class falls as employment size increases.

Male workers dominate the upper echelons of office work-over 90% of managerial, executive and professional workers and also salesstaff. The position is reversed for the typing and secretarial class which is 90% female. Clerical work is evenly divided between the sexes. Part-time workers form a significant proportion only of typing and secretarial and 'other' office workers (tea-attendants, general assistants).

Office staff can be divided into the 'decision-makers' - the upper ranks - and 'routine' workers. Where the latter predominate, ties of contact to the central city may be weaker and decentralisation possible. The routine sector is strongest among financial firms, especially insurance companies, and then commercial and transport offices. It is least important, numerically, in professional and miscellaneous firms.

Staff recruitment

Only 17% of respondents said that they had no difficulty in staff recruitment. The larger firms appear to have more difficulty than the smaller. Few experience problems in

recruiting high level staff, except for commercial firms. However, the recruitment of typing, secretarial and clerical staff poses difficulties for about 75% of firms. The major recruitment problems are therefore in classes where females form a large proportion and of which a certain percentage are part-timers. This is the routine sector mentioned above.

Interviewees were asked their opinions on staff recruitment problems. The scarcity of trained, experienced workers and high turnover, especially of younger workers, were their main complaints. Central location was considered a great advantage in attracting and retaining staff. Male staff were considered to pay more attention to salaries, prospects and job satisfaction, whereas female staff were attracted by the appearance and atmosphere of the office, if congenial, and by access to city centre shopping.

The ambivalent nature of staffing as a locational factor is thus revealed. Female labour for routine work, some part-time, may be available in the suburbs among married women, and this may prove a 'pull' factor favouring decentralisation. On the other hand females already in the workforce prefer jobs in the city centre.

Other staff factors

The majority of interviewed firms have had stable or increasing staff numbers over the past five years and about half expect such trends to continue. Professional firms are confident of further expansion, financial and miscellaneous firms expect it, but commercial establishments are less sure of the future because of uncertain economic trends.

About one-third of interviewees use electronic computers, mainly renting time from a bureau. In no case has this brought about a decrease in staff, except perhaps for banks, although increases in staff may have been postponed. No drastic reduction in routine office workers can therefore be expected as computer use becomes widespread.

The question of journey to work was not probed deeply in this study, but there is evidence of a vast amount of long-distance commuting, mainly by public transport. Location near transport termini was considered an advantage in staff recruitment.

Office location

Centrality was by far the main advantage of present premises/ location, quoted by 73% of questionnaire respondents. The commercial and transport groups tended to value parking

highly, but be less concerned with centrality. Financial, professional and miscellaneous firms saw centrality and the facilities of modern premises as their main advantages.

Fewer disadvantages were cited, as the majority of firms were satisfied with their premises and location. Inadequate parking led the list of complaints, but lack of space and the drawbacks of old buildings were also mentioned, especially by commercial and transport firms. Eighty percent of firms giving centrality as an advantage also mentioned some drawback.

Interviewees were asked if they had any contacts they felt they must be within five minutes walking distance of. Forty percent said they had none, but significant numbers mentioned the post office and banking, professional services and government agencies. The first two could be supplied on a decentralised basis, but government and professional contacts remain as factors favouring concentration.

Apart from these specific contacts, other reasons for central location were suggested by the respondents. Access for or proximity to customers and clients led among these. Others suggested general convenience, staff factors, prestige and tradition. This confirms that the making of contacts, especially with customers and clients, government and various services, is a major factor encouraging central location.

Two-thirds of interviewed firms had never considered location other than in the central area, and a further 20% had considered, but rejected the idea. Possible movers-out included manufacturers' offices relocating at factory sites and architects and engineers seeking suitable suburban premises. In only two cases was the move likely to take place within five years. On this evidence the scope for spontaneous decentralisation seems very limited.

Parking

The average number of private car spaces per interviewed firm was 3.1, but commercial firms and those on the fringes of the core area had rather more. Relating the number of car spaces to employment, it is found that firms with 10 workers or less averaged 3 workers per car space; with 11-20 workers there were 5 per car space, and firms with over 20 workers had 10 per car space. Thus the larger firms had less provision for car parking.

Seventy percent of spaces available to interviewees were rented. Overall 64% of firms considered their parking arrangements ade-

quate, but only 45% in the core area as opposed to 71% elsewhere in central Wellington. As many as 80% of interviewees said that parking provision would have some influence on their locational decisions.

When asked to rank parking priorities, 43% of firms gave first place to firms' or executives' cars. A third put visitors' parking first, but only 15% gave precedence to employees' vehicles (no commercial firms) and 9% to service vehicles (no non-commercial firms).

Office mobility

Half the respondents to the postal questionnaire had not moved in the past 10 years, 38% had moved once and 12% more than once. Of those who had moved, 84% had done so within the central area. Firms with 20 or fewer workers tended to be more mobile than larger firms. Manufacturers and miscellaneous services were the most mobile function groups. Firms dissatisfied with their premises and location tended not to have moved in the past 10 years.

A study of office mobility in Wellington, 1950-70, was carried out using business directory data. There was no indication that the more longstanding groups of offices were the most mobile. Some groups were mapped to show the length of moves and the area within which they were shifting. The most mobile groups included advertising agencies, architects, sharebrokers and woolbuyers, and the least mobile bank head offices, insurance companies and lawyers. But whereas some moves were long-ranging, others covered a very small radius. Indications of decentralisation, defined as any moves out of the core area, could be seen for commercial firms and for services other than professional and financial firms; but such dispersal is short-distance for the most part.

The leading reason for movement, both past and future, was expansion and/or lack of space. Others included demolition, redevelopment, repossession by landlords and reorganisation of the firm. Fifty-eight percent of reasons for past moves and 71% for future moves could be described as 'push' factors, including those already mentioned. 'Pull' factors, such as improved facilities or site, better access or parking, were less dominant. Thus the strongest forces promoting office mobility are factors pushing firms from their present sites, with which, from evidence set forward in this study, the majority may

be quite satisfied.

Conclusion

At the moment factors which favour continued concentration of office development in the city centre are dominant. They include the availability of office accommodation and staff, bolstered by inertia and associated considerations of prestige and tradition. However, the strongest of these factors is probably the maintenance of business contacts, especially those with customers and clients, professional services and central government.

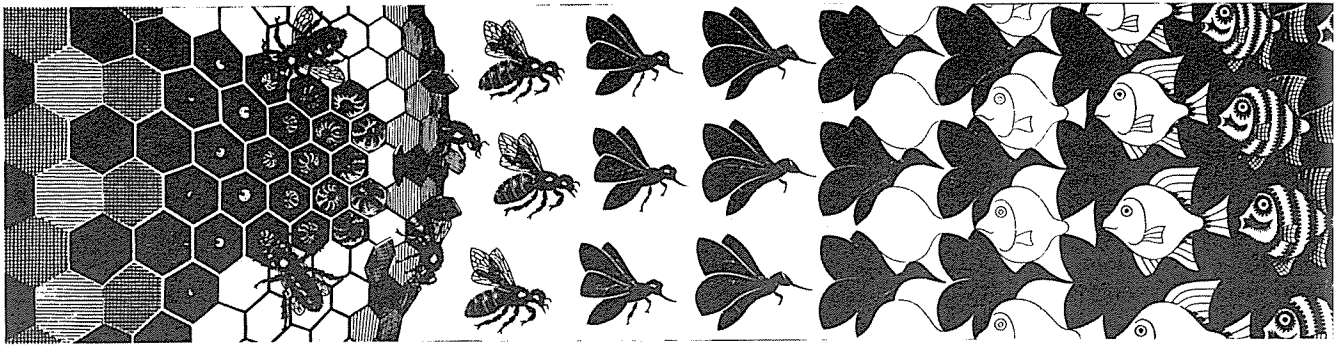
Factors working against concentration are much weaker and have had little effect as yet. The chief of these is inadequate parking which is bound up with the transport network of the metropolitan area. Other disadvantages of central location include noise, congestion, especially at peak hours, and the scarcity of certain types of office staff. These factors are likely to become more assertive as concentration continues.

The ties which bind offices to the central area may be grouped as those associated with contacts, staffing and locational needs.

From information presented in this study, some assessment of their strength in relation to groups of offices may be made, and thus of the offices' capacity for dispersal. Firms most disposed towards outward movement by these criteria are the offices of manufacturers and wholesalers, and to a lesser degree, transport firms and miscellaneous services. Some financial firms may be included, especially departments of large firms handling routine tasks. Professional and import/export firms seem to be closely tied to the city centre.

Should a policy of encouraging decentralisation of office development be accepted as a planning policy, by local or central government then relocation in established suburban service centres would appear to be the most beneficial. This would diversify economic opportunities in suburban areas and reduce pressure on the central city.





Woodcut by M.C. Escher
Phoenix Gallery, Berkeley

PLANNING IN RURAL AREAS

Theme of the New Zealand Planning Institute's Annual Conference in May

The conference and its theme is intended to cover a field that has received little attention at recent town planning forums and conferences, where consideration has tended to centre on municipal planning problems.

Nevertheless planning is becoming, through the requirements of the Town and Country Planning Act 1953, an increasingly time-consuming and costly responsibility for 'rural' local authorities. It is hoped that the conference deliberations will clarify, and assist with, the responsibilities of rural local authorities in their planning role.

The Institute's Conference will be held for the first time in Whangarei, (at the new Onerahi Hotel) and one of the three papers to be presented will discuss the practical application of planning in the Northland region.

Open Papers

During the first day of the conference (Monday, 15th May), which will be open for attendance

by all interested persons, three papers will be presented. The following two days will be taken up with business of the Institute only, including its Annual General Meeting. The conference will be opened at 9.30 a.m. by the Mayor of Whangarei, Mr K. Haslett, and the session for the third paper should finish at 5 p.m. A luncheon address on this open day will be given by Mr R. K. Trimmer — chairman of the Northland Harbour Board.

Subject and Authors of Open Papers

The role of Legislative Planning in Rural Development by Mr A. R. Turner S.M. Chairman of the Number One Town and Country Planning Appeal Board.

The need for Planning in Rural Areas by Mr F. W. Norton, County Engineer and Planning Officer for Piako County Council.

Planning in Northland by Mr W. Taylor, Regional Planning Officer for the Northland Regional Planning Authority.

Registration for the Open Day

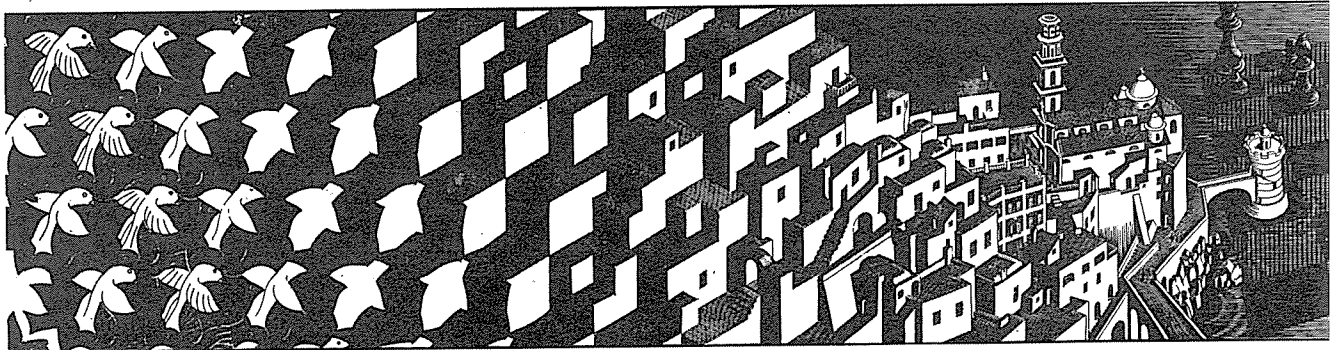
Registrations for the open day of papers, will be accepted up to 7th April 1972, and should be addressed to:-

The Conference Committee Secretary,
c/- Northland Regional Planning Authority, 17 Rose Street, WHANGAREI.

Registrations should be accompanied by a remittance for \$5.00 per registrant, and this fee covers the cost of the papers, which will be circulated prior to the conference, and also the cost of morning tea, lunch and afternoon tea.

Registrations by Institute Members

Registration forms for the whole conference will be individually circulated to Institute members.



Reviews

Hawkes Bay Region, National Resources Survey Part VI, Ministry of Works,
Government Printer Wellington
1971, 233 pp, 7 colour maps. \$8.00

The Town and Country Planning Division of the Ministry of Works has assembled in one place a large amount of descriptive data about the area, defined by the ministry as the Hawke's Bay Region. This volume of the National Resources Survey follows much the same recipe as the other five. It describes (in some detail and in an abstracted sort of way) the physical components of the Hawke's Bay Region, its land use patterns, agricultural and industrial characteristics, transport network, demographic structure of the population and the institutions of local government. It looks and reads like an old-fashioned approach to regional geography in which a predetermined list of elements is carefully described. It shows little advance in basic concept from the first volume in this series published in 1959.

It would have been refreshing if in this latest volume the proportions of long description and short analysis could have been reversed, but while the volume of data has increased the ratio of analysis remains unaltered. What analysis there is, is confined to descriptions of some of the things that can be read out of the tables "making certain (unspecified) assumptions." Anyone using this type of analysis will be more concerned with the assumptions than conclusions, some what hedged by "trends will probably continue". This is not particularly high-powered stuff from which dynamic planning decisions might be made.

Objectively (the portrayal of facts uncoloured by feelings or opinions) with which this volume abounds, is an undoubted advantage in presenting information. But the selection of information to be presented must have some aim in mind. Without this even the most objective survey seems a little pointless. Even if New Zealand had a viable regional planning system it is difficult to see where such a compendium of useful information fits. Volumes of this type produced by planning agencies in other parts of the world are a postscript to particular planning studies not surveys in themselves.

Similar data produced, for example, by the State of Hawaii appear as part of general plan recommendations; the data is used to purpose. Comparing this volume with the data presented as part of the **State of Hawaii Land Use Districts and Regulations Review** (1969) the information is similar in type but much different in emphasis. While the Hawaiian example is clearly a planning document it is hard to see where the resources survey fits into the planning process.

It is claimed in the preface that this survey "will be of direct assistance to local government and other public bodies involved in planning for the region's development". Because of the static nature of this type of survey, because of the lack of up-to-date statistical information, and because of the lack of specific purpose, the directness of its assistance will decrease with some rapidity. It will then be reduced to a useful "historic" record.

It is to be wondered what is to be gained from such a prestigious publication. A loose leaf binder with a ready supply of updated data sheets may serve just as well. But what remains at the end of reading this volume is the question of exactly what position this type of survey-before-plan plays in a realistic planning process. It would be interesting to know.

— M. H. Pritchard

Experiments in Recreation Research
by Thomas L. Burton, London,
George Allen and Unwin Ltd., 1971.
pp. 365 U.K. 5.25 pounds

This is a book which will have great value to all those planners confronted with the necessity for planning positively for recreation. Its comments on the methodology of various recent recreation studies will also be useful to those concerned with the more academic aspects of recreation research.

The first part of the book is concerned with a critical methodological review of recent recreation studies. It includes a review of the merits and limitations of various data collection methods as used in a number of social science and recreation researches; a critical discussion of the analyses used in three major U.K. recreation studies; and using mainly U.S. examples, an identification of the basic concepts and techniques used in forecasting base variables. This appraisal of methodology identifies three major groups of problems which appear in the studies discussed.

- 1) The classification and analysis of recreation data in such a way that prediction of future trends becomes possible (one of the key problems is to identify recreation types).
- 2) The kinds of profile data needed to secure greater comparability between studies.
- 3) The value of alternative methods of securing data, especially the potential value of such procedures as reanalysis of previous studies and use of time budget diaries.

The main part of the book contains reports on the experimental studies carried out to clarify these problems. Particularly interesting are the results obtained from the use of "mixed surveys" that is, each household may provide a personal interview, a self-administered questionnaire and a time budget diary, thus obtaining a great deal more information at little extra cost. Also valuable are the investigations into the concept of recreation types and methods of grouping different recreation activities to simplify analysis and to ensure comparability between different studies.

The last part of the book is

written by A. J. Veal and is entitled "A Strategy for the Provision of Recreation Facilities." This section presents a model designed specifically for use by local authorities in making decisions about the provision and location of recreation facilities, as opposed to the more academic approach of the earlier sections of the book. Veal develops a theory and model based on the gravity model concept, which can be made to explain existing recreational use situations. This model can then be used to show the consequences of a number of different possible solutions to the problems of the extent and location of new recreation facilities. An appendix to the chapter containing the theory outlines sets out detailed specifications of the model. The subsequent chapter on data collection for the model discusses the use of site surveys as a means of securing the required information.

Finally an experiment, based on the use of two libraries, is carried out to test data collection methods and the model. Although the experimental study was limited in scope, analysis of the results indicated that the gravity model concept has much potential value in recreation planning, in helping to formulate decisions about whether or not to provide new facilities and where to locate them.

— Jan L. Holloway

Pricing and Project Evaluation,
J. R. Meyer and M. R. Straszheim,
being Vol. 1. of *Techniques in
Transport Planning*, ed. J. R. Meyer
Brookings Institution, Washington
D.C. 1971, pp 342.

This is a book about transport problems as seen by economists and is of interest to town and transport planners for two reasons. First, like all new approaches, it will encourage then to look afresh at accepted perspectives and long established assumptions and procedures. Secondly, other disciplines might indicate ways of filling gaps in one's methods.

This book succeeds in stimulating these thoughts and is therefore a worthwhile complement to, say, "Traffic Systems Analysis" which, although containing economics, does so in a traffic engineering framework.

There are, however, two aspects of the book which might reduce its usefulness to the planner. First the book is about transport planning in general, not urban planning in particular; many examples are taken from inter-city travel. Secondly the book gives an unbalanced picture of transport economic problems. This is a result of the book's parentage, for it is really a mixture of a long review article on transport economics and a set of seminar papers on particular aspects of pricing and project-evaluation. The planner should therefore read the review chapters in detail but would lose nothing by reading only the summary paragraph of the "seminar" chapters.

The book is split into four sections; costing and pricing; demand forecasting; project evaluation; and project interdependence. These fall into the two questions in which an economist is most interested: What is the interaction of price on transport and, what is the "best" transport plan? Sections are almost independent and reference to particular aspects of the book is made easy by an excellent index.

Chapters 2 and 3 deal with alternative pricing strategies. They are comprehensive and require careful reading. All facets of pricing policies, theoretical types and practical problems of measurement. Chapter 4 utilises the previous debate to look at a particular problem, congestion, in detail. Although clear, the discussion is too theoretical and would have gained from using one example along with its particular attempts at qualifications. The chapter on "second best" complications is one that can be neglected. The pricing problem is concluded by a discussion of criteria for choosing a best pricing policy; no one criterion is recommended but rather an examination of them all. Judgement must be the final arbiter.

Part two of the book is concerned with forecasting the demand for transport. Although the ability to predict well is an aim in itself, the economist is also interested in future demand patterns in order to evaluate alternative transport plans. Unfortunately this distinction of purpose is not made clear at the outset. Chapters 7 and 8 consist of a good summary of the problems inherent in existing methods of forecasting urban passenger travel. For example, the simultaneous interaction of urban form, modal split, the structure of the economy and the transport make it difficult to define the benefit deriving from transport investments. The next two chapters look, in rather too much detail for urban planners, at inter-city travel demand. What is interesting here is the use of econometric methods of prediction; and alternative which recently has also been attempted for urban travel. This approach answers directly some questions which the conventional transport only implies; for example, the responsiveness of car trips to changes in the price of alternative modes.

Part three of the book investigates project evaluation. The first and last chapters of the section summarise the theory of alternative benefit measures used in transport and evaluate them, but the debate suffers from a fundamental oversimplification. To assume a known demand curve, as done here, is to imply some definitive measure of both the perceived price of travel and travel "demand". Neither question is clear cut, particularly for road users. What aspect of travel is demanded: the number of trips or some surrogate for accessibility? What are the costs of travel in terms of time consumed, comfort, reliability or safety? These questions could usefully have replaced the next two chapters on discounting and the treatment of uncertainty.

A theme running through the book is what the authors call "systems effects". The construction of new roads may cause people and factories to move, changing both the city form and possibly stimulating regional or national growth.

These effects are not modelled by existing methods and the authors see this as a failing. In this they are correct, but it is hard to believe that the two narrowly based techniques described in the last two chapters contribute much to our understanding of these consequences. However the theme is illuminated more in the companion volume of this book which does describe a model which attempts to predict the effect on the economy of new transport systems, but this is rather specific to developing countries and hence not of general interest.

In summary, then, the planner should gain most from this book by reading those chapters which summarise the economics of transport problems and by relating these perspectives to the way in which he views the same problem.

— P. C. Brown

(The above two reviews were sent to TPQ from London. Mr P. C. Brown, BSc (Econ), M.Phil (Lond), is a planner and economist working in the Transportation Studies branch of the Greater London Council, Planning and Transportation Department. Miss Jan Holloway is a research officer in the same organization).

Beyond the Automobile: Reshaping the Transportation Environment by Tabor R. Stone. Englewood Cliffs, New Jersey; Prentice-Hall, 1971. 148 pp. \$2.75.

This is a short-essay, carrying a misleading title by an author with the thought-provoking label of an architectural consultant for the Office of the U.S. Air Force Surgeon General. Mr Stone points out the urban-shaping potential of rapid rail systems, but adds nothing new to the subject. He acknowledges transportation's functional and environmental roles and then pursues the theme of the complementary nature of fixed and random route systems. He rejects buses as a valid

public transport alternative on the grounds that they compete with cars for the same roadway space, but he ignores road-pricing techniques and exclusive lane concepts. He ignores, entirely, land use manipulation as a potential ingredient in the process of solving urban transport problems.

As an aside, it really is time for the protagonists of urban rail systems to look for an introductory argument other than the one based upon the assumption that all cars average a mere 1.5 occupants, whereas all trains run always at full capacity.

— J. R. Dart

Correspondence

Protecting the Port Hills,

Sir,
My attention has been drawn to Mr F. S. Robinson's article, Protecting the Port Hills, part 3 published in the December issue of your journal. There can be no secret about the identity of the council referred to in the article "in whose area the greater part of the Summit Road area lies" nor can there be any secret about the fact that I represent that council on the Christchurch Regional Planning Authority.

The incident described is an interesting one and there is a version of it which is vastly different from that offered by Mr Robinson. There are a number of points which could usefully be pursued, but I shall confine myself to asking Mr Robinson a single question.

The Christchurch Regional Planning Authority's "Regional Policy No. 4, Recreational Open Space Technical Report No. 1, The Rapaki Track and Bridle Path Areas" was described as deceitful

in open meetings of both the council and the regional planning authority and in newspaper reports. To describe a technical report as deceitful is a grave charge, perhaps the gravest that can be levelled at such a document.

May I therefore ask Mr Robinson to explain why the Christchurch Regional Planning Authority failed to answer the allegation of deceit?

R. Thompson
(Christchurch)

Mr Robinson's reply

Sir,
As I am neither a member of the authority nor of the council, in writing my article I was able to assess the incident referred to from an outside viewpoint. The accusation of "deceit" levelled at the authority is part of a much wider issue which has, I understand, been brought to the attention of the minister by the council. As an officer of the authority it would be quite wrong for me to comment, or speak for the authority.

F. S. Robinson
(Christchurch)

Crown land subdivision

Sir,
Mr. Matheson in his letter published in TPQ 26 has drawn an unwarranted assumption from the question asked of the Minister of Works by the Piako County Chairman, Mr. R.T. Scott, which was published in 25 when he states - "Had it any authority in the matter, such a transaction would not be approved by the Piako County Council..."

Mr Matheson as a registered surveyor should be aware that no county council can approve (or otherwise) any plan of subdivision of over 10 acres (whether freehold or leasehold) because such plans do not fall within the province of the Counties Amendment Act 1961. He should also be aware that all plans deposited with the District Land Registrar must under Section 33 (4) of the Town and Country

Planning Act be certified as complying with any operative planning scheme. This certificate must be a straight yes or no and cannot be made conditional. This provision under present law does not apply to the subdivisions of Crown Lease land which are approved by the Chief Surveyor and not deposited with the District Land Registrar. If he has read the 1971 Town Planning Amendment Act (No. 2) he will also see that in Clause 3 of that Act the position as to Councils powers to dispense wholly or partly with the provisions of district schemes relating to land subdivision have been clarified and are now clearly stated to be restricted to land zoned for urban purposes. This amendment to the Act was made necessary because of legal rulings which held in effect that councils might not have had powers (other than by using Section 35) to allow such dispensations under the old form of the Act and this opinion has been available to my Council for some time.

Because of these facts my council when reviewing its operative scheme in 1969 decided that it would specify 50 acres as the minimum size of subdivision in its rural areas (which are almost all highly fertile and developed farmland) which it would allow as of right. It also indicated in the scheme that it would consider (by way of Section 35 applications) lesser sized subdivisions where it could be shown these were for economic farm units and certain other defined purposes. This became operative in 1969 and was introduced largely because of concern at the number of subdivisions of farmlands being undertaken which created lots of between 10 and 50 acres which were being sold to farmers other than adjoining landowners. This trend was effectively creating "fragmented" farms consisting of a number of small separated blocks of land with the farmers concerned utilising the roads in the area to move stock etc. between lots thus causing a nuisance and sometimes actual danger to the public as well as causing pressure to permit some undesirable uses in some areas.

The provision of a 50 acre minimum has been effective and has largely stopped the "fragmentation" of land which was taking place. It has resulted, in some cases where small farms are going out of existence and being divided amongst neighbours, in the surveyors concerned actually amalgamating the parts of the farm being divided into the titles of the purchasers and thus producing plans of over 50 acres which can be certified as complying with the Piako County scheme without the necessity for a Section 35 hearing. In other cases where this is not feasible (because of excessive survey costs or for other reasons) Section 35 applications have been lodged and heard and granted in some cases under conditions other than amalgamation of title which attempt to ensure that the amalgamated farming arrangement is a continuing one and cannot be abandoned without council consent.

Under these arrangements my council is acting as the planning authority for its district and is judging the merits of each case and deciding accordingly thus properly discharging the duty imposed on it by the Town and Country Planning Act.

With crown leases this process was being ignored — the Chief Surveyor was effectively deciding (with the Land Settlement Board) which cases could be allowed and no provisions that council is aware of or can enforce were being made to ensure the arrangements for combined farming will in fact continue beyond the immediate arrangement made. Collapse of any such arrangement will, of course, result in separate sub-standard lots coming into existence which is the very thing council wishes to avoid. No private land dealer has this privilege.

Therefore the question asked of the Minister was — "Can you, sir, give us an assurance that at least those land transactions involving the crown which amount to land trading are only done after compliance with operative schemes has been assured - even if this should require a change in existing law."

The subdivision quoted, in the circumstances which were made

known to council after the land had been subdivided, might well have been permitted - subject to suitable conditions imposed under the Town and Country Planning Act - if a departure had been applied for. The question was however, sir, not this subdivision but one of planning by crown privilege v. planning by the local authority.

The question posed has drawn an undertaking from the Commissioner of Crown Lands "that in future cases the department will tell lessees that the consent of the Land Settlement Board to a subdivision of crown leasehold property will require any prior consent necessary under an operative District Scheme" which has been endorsed by the Minister of Lands.

This seems to effectively dispose of the problem.

— F. W. Norton

Mr Matheson replies

Sir,
Thank you for the opportunity to comment on Mr Norton's letter regarding the Piako County Council and Crown Land Subdivisions.

In my experience Crown Land (with the exception of land for development under the Housing Act 1955) is not subject to the Town and Country Planning Act and there is therefore no consent necessary under an operative district scheme. A Section 35 hearing would be ultra vires in my opinion.

The so called "amalgamation" on survey plans does not of course preclude the subsequent issue of two new titles, one for the original area and a balance area being the part added, provided each is in excess of 10 acres. The legislature has provided control of subdivisions up to 10 acres but Piako County Council has specified a 50 acre minimum area and 5 chain minimum frontage in rural zones under its operative district scheme. Administration under existing legislation is complex and uncertain to say the least and in *Hussey v Waimairi County (NZTCPA, 3, 258-260)* the Appeal Board is reported as follows:-



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Porter and Martin
P.O. Box 5029
Wellington

... is undesirable that a ... should have to resort to this "standed" method of control ... and use for the lack of more adequate power under the Counties Amendment Act 1961 of carrying out the duties cast upon it by Parliament in the Town and Country Planning Act."

In its zeal to control beyond the bounds to which Parliament would go, the Piako County Council is attempting by a series of ordinance changes to set up its own "legislation" which of course finds itself in conflict with the administration by Government Departments represented in person by the Chief Surveyor and District Land Registrar.

The trend is for farms to increase in size and the Council's fear of fragmented titles is a boggy impeding simple implementation of the trend. As indicated in my letter to you (TPQ, 26) the present case arose because it is not possible to amalgamate crown leasehold areas with land for which there is a certificate of title. The Crown in this instance does not appear to be exercising any planning privilege nor has any planning principle been transgressed.

The time may not be far distant when all subdivisions including Crown Land will require planning approval, and rightly so, but that, sir, is not the present position.

— G. R. Matheson

Letter of appreciation

Sir,

I take this opportunity, through the pages of your Journal, to express my heartfelt appreciation for the courtesy and hospitality shown to myself and family by members of the Institute during my study tour last year.

It was interesting to see many of the things, in action, which we are still talking about here; pedestrian malls in former trafficable streets, motorways, apparently effective urban renewal and rehabilitation, pedestrian path systems in private residential areas,

proper tourist planning and National Park planning in the grand manner. Furthermore, I was impressed with the mastery of technique shown by planners throughout the country, particularly the creation of new types of zones to guide new types of development or to conserve scenic beauty and natural features; not being hide-bound by models. Other particular aspects in this general area include the Waitemata "structure plan", the new Christchurch City Scheme and the operative scenic control on the Otago Peninsula. The willingness of planners from different organisations to form problem-solving teams and the frank but friendly informal discussions between planners from government, authority, council and private organisations - often under the umbrella of the Institute - were also of note.

Perhaps the only major disappointment was the lack of regional planning (excluding Northland) outside of the metropolitan centres. I think that the only way that New Zealand's overwhelming beauty will be protected in the long run will be by the creation of large regional planning areas with conservation as the basic brief - an example would be the Lake Taupo - Bay of Plenty triangle. I hope to read, before long, that these have been set up - perhaps ideally under the auspices of central government.

Again thank you to my many friends from Whangarei, south to Mosgiel and as one of them said in Auckland - "The best compliment you can pay a Kiwi is to return". Perhaps I'll do just that one day.

— Alan Hutchings,
Anzac Fellow 1971

Institute affairs

Membership

The following have recently been elected to membership:

F.G.J. Bergman, BA(Ch), DipTP (Auck),
DipTP (Lond), ARIBA, MRTPI
P. D. Scott, DipTP (Leeds)
G.O. Winn, MA, DipTP (Auck)

D. W. Simsion, MRTPI, (M), was recently elected a Fellow of the Royal Australian Planning Institute.

New Student Members

P. Crawford, MA(Hons), BSc(Cant)
R. M. Dunlop, BA(VUW)
J. R. Lang, MNZIS
D. A. Wall, DipUrbVal (Auck)
D. R. Anderson BA(Ch) (Auck)
J. L. Johnson BSc (Auck)

Under the provisions of S.11 (6) of the Constitution, R.B. Collins is no longer a Student Member of the Institute.

Recent Movements

Jennifer Baker, BA(Auck), (S), to Town Planning Dept, Lower Hutt City Council.
D: O. O'Hagan, DipTP (Auck), (M), MNZIS, to District Community Planner, Housing Division, Wellington.
E. K. Putter, BA (VUW), (S), to Community Planner, Housing Division, Wellington.
D.A. Rushforth, BSc, DipTP (Auck), (M), from Brazil to the Centre of Ekistics, Athens.
P. Simmons, MRTPI, (M), from Peter Bagnall & Assocs, Wellington, to Planning Officer, Waitemata County.
K. J. Tremaine, BA (Otago) to Asst Planning Officer, Mt Albert Borough Council.



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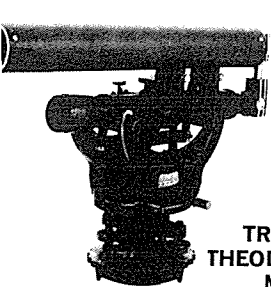
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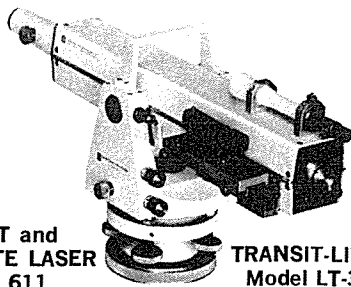
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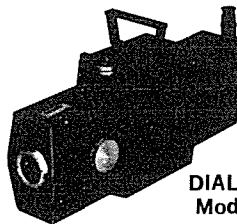
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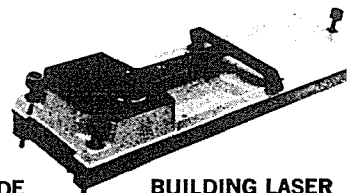
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