One Corridor of Participants

−Not Seven Corridors of Power

PART THREE

plan for melbourne

Title plan

PLAN FOR MELBOURNE
PART 3

One Corridor of Participants
—Not Seven Corridors of Power

being argument in support of

AN "OBJECTION" (ALTERNATIVE) TO THE
MELBOURNE REGIONAL PLAN PROPOSALS

(NOTE: The formal objection is contained in Appendix No. 1.)

by RUTH and MAURIE CROW

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ACKNOWLEDGEMENTS

A TRIBUTE
(By Way of Amends)

In addition to the acknowledgement to the book of Chermayeff and Tzonis "Shape of Community" (above, in the text and in an appendix), we here pay a special tribute to them somewhat by accident.

Several small typographical errors, hardly worth an "errata" have occured in the text. One amounting to a misquotation must be corrected. Only one letter is involved, but it makes senseless a key concept. The word "or" in the 10th paragraph, (second line) of page 19 should be "of" to read "systems of sub-systems", (and also please alter page reference at the end of the quotation from "page 7" to "page 110").

Our tribute is to quote the passage in this pride of place in full:

"Density of population per se is not a measure of urban decline. Appropriate systems of sub-systems, properly designed, could make life very pleasant in densities now considered dehumanising. The measure of human condition lies closer to qualitative change than to the problems of territorial growth" (p. 110).

As we say: "structuring of corridor Melbourne and restructuring of present Melbourne, can begin the remedy" (p. 19).

Life-style changes in the "collectives" operating in the "concourses" of the "core" and the "heart" of the proposed future "mini-metro" suburbs and, gradual restructuring of our present suburban centres along the same lines are, in one aspect, what this book is all about.

"Sub-systems" of human associations which are at one and the same time ecologically and sociologically tolerable, bound together by "systems" (such as our proposed Gippsland corridor based on rapid transit; or the much more difficult "restructuring" techniques) are at the opposite pole to the destructuring and system-disintegrating process of random car-for-all-purposes non-planning which lies at the foundation of the official Melbourne Regional plan.

ABBREVIATIONS

The following common abbreviations are used in the text (except where first appearing).

C.B.D. — Central Business District.
M.M.B.W. — Melbourne and Metropolitan Board of Works.
T.C.P.B. — Town and Country Planning Board.
M.C.C. — Melbourne City Council.
M.T.C. — Melbourne Transportation Committee.
R.A.C.V. — Royal Automobile Club of Victoria.
V.C.O.S.S. — Victorian Council of Social Services.
"1971 M.M.B.W.
Regional Policies" — "Planning Policies for the Melbourne Metropolitan Region 1971" (i.e. the report accompanying the proposed planning scheme amendments, Nos. 3 & 21, for Melbourne's future growth).

"1967 T.C.P.B.
Strategic Planning" — "Organisation for Strategic Planning. A Report on Future Growth of Melbourne 1967."

DEFINITIONS

For the convenience of readers who may come across an unusual word or a word which has been given a special meaning and who wish to refresh their memory of the definition given earlier in the text:—

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"Magnifying power (in the physical sense) is ecologically harmful
Magnifying power (in the administrative sense) is sociologically harmful
Participatory activities can reduce both sorts of powers
So the new imperative is: magnification of people".

— The Crows

1. WHY THIS BOOK HAD TO BE WRITTEN

Melbourne cannot be planned as if it were a neutral City of Paradise detached from history; as if its decision-makers were saints, and all its citizens well intentioned angels.

Melbourne in the 1970s is not just a major city; nor just a major city based on modern industrial technology. It is also an advanced capitalist city, using the word "advanced" as one does when dealing with age: near the end of its life span, not just ripe but fast becoming rotten.

It is bedevilled therefore with problems of a special kind that spring from capitalism that has reached a stage that is ripe for a fundamental change to a system that is no longer capitalism.

Symptomatic are the series of take-overs of Australian enterprises by overseas big capital

(especially American), and take-over of our foreign policy by America, reversing the earlier trend when Australian capitalism was in "better heart" and fought for and attained a measure of independence from the original British economic and political domination.

Just as symptomatic but more threatening are the internal social changes, visible on every hand, that spring from unresolvable contraditions of a dying social order; and education system that produces unacceptable education; churches that secularise themselves; travel, T.V., and drugs offering escape; sects offering off-beat salvation recipes; and senseless emphasis on much meaningless production and consumption making jobs distasteful and living inane for more and more. To cap all, the recent rapid spread of ecological knowledge has focused a searchlight on capitalist Melbourne, as elsewhere, revealing a system of wanton wastefulness that has given a new dimension to immorality.

In the rather unlikely circumstances that one of the shrinking class of mighty magnates, here or overseas, who have a decisive "say" on our "development" should purchase this book and read thus far, he will no doubt be offended if not infuriated. No-one likes to feel unwanted (a theme, incidentally, to which we will return).

This book can only be said to be written for them in a special sense.

In effect we say: "Mr. Monopolist: we offer the people of Melbourne a plan for their city involving a fresh way of life. We consider that this, or something like it would suit them quite well, and at the same time pay some regard to our international ecological obligations. If you, the supreme decision makers, the priority determiners can re-organise your capitalist system to carry out something like this, well and good!"

"But if you cannot, please move aside, and allow the people, if they find it to their liking, to organise an Australian-style socialism!"

And if there are political theorists who want to argue that the REAL power is not in the hands of monopolists, but resides somewhere else, we won't quibble, but merely add "come out, whoever you are, and accept the challenge!"

There is another class of persons, a rather small minority too but a growing minority who may think the book is not for them, but they are mistaken.

They have become so appalled with the rottenness they find around them, that they want to "opt out" of capitalism, "opt-out" of modern technological society, and "opt-out" of big cities anywhere. They not only want to "decentralise" they want to "disurbanise".

Many seem to argue for the simple life, as if it would be in a pre-capitalist pre-feudal, pre-slavery era and yet without assuming either the predatory characteristics of nomadic hunters, nor the grinding stupifying toil of the primitive tillers of the soil.

To them we say; "Please read on. We share your abhorrence of the rottenness around. But before you "go bush" or retreat to some urban enclave consider: your very sensitivity and humanity does not spring from the life-style of hunters or peasants. It is an historical product compounded of everything that is finest that both social productive effort and creative priviledged leisure has been able to bestow upon man, and it has been cradled not in the forests and the fields, but in the cities of the world."

"You cannot find your inner essentially civilised character by fleeing from the challenges which today, as in the past, have arisen in the cities and can be solved, not by abandoning the cities, but by struggle to overcome and remove that which has become obsolete and therefore inhuman."

There are plenty of other minorities we hope will read the book, including those on "the left" who may think we should have written "smash Amercian Imperialism" across the front cover, or others who may think we could well have had a photo of Moscow University as a beacon of hope.

To them we say, "Friends, if you think Marxism means following Mao or following Moscow you are profoundly mistaken. Marxism does not even mean following Marx as that gentleman himself pointed

out. If you don't mean that and just think it is effective tactics, we still desagree with you. But either way, we will not call you names; we are interested to know what you think of the arguments in this book."

Marxism means for us, applying science to society in the interests not of the ruling class but of humanity. We regard the Australian working class, some 80% of the population, as the main historical instrument which will effect this political transition to a classless society here. Included in this 80% are industrial workers and white collar workers and now an increasing proportion of tertiary-trained professional and technical employees.

It is not really for the minorities but for this 80% (of which they are a part) that this book has been written and for the 15% of owners of modest or moderately large businesses who by no stretch of the imagination can be regarded as part of that grouping of the "establishment" of giant corporations and establishment-orientated administrators and politicians who "run the show".

Any responsible plan for Melbourne that wants to avoid the judgement of history that it is drift-planning, must set out to tackle Melbourne's share of twin "western world" problems relating to cities:-

    (1)   the ecological crisis
    (2)   the decadence of social values.

"Plan for Melbourne" Parts 1 and 2, whilst they showed a central concern for better social values, lacked an understanding of the size and seriousness of the ecological problems and impact of these problems on all aspects of human life.

Consequently, not only did these earlier publications fail to grasp the depth of re-think required, but, in any case, they did not set out to foreshadow the sweep of policitical revolutionary changes needed, nor to strike a note of urgency for these changes which the situation calls for.

This publication attempts to remedy these defects to some degree, but not by rejecting such value-judgements and solutions as were advanced in "Plan for Melbourne" Parts 1 and 2, which viewed in retrospect, seem to lie in the right general direction. In part, this volume is also an argument in support of the official "objection" to the Melbourne regional plan lodged by M. Crow. Because of this circumstance, and also time considerations, certain other far-reaching proposals are not discussed fully in this volume, or not introduced at all.

It is hoped, in a volume 4 of "Plan for Melbourne", intended to follow this publication, to make an attempt to project new horizons for the required integration of science, industry, culture and politics and new-type social life styles, and political and administrative procedures (including public participation) required to encompass this integration.

The authors are acutely aware that, at best, this document is more in the nature of a first draft aimed at charting a general direction, and at that, because it lacks the very team work it advocates as a remedy generally, it is unavoidably lop-sided, and insufficiently expert.

However, if some of the ideas seem strange that does not necessarily mean they are utopian or will for long remain unacceptable: what will surely seem to future generations even more strange is how the generation that spanned the 1930s to the 1960s pig-headedly clung to an outworn social system whose set of crystallised institutions and practices were so much at variance with crying ecological-sociological imperatives.

If some of the ideas are as yet in very rough outline, without much polish nor with all implications thought through; and even if some of the ideas are shown by time to be untenable, the authors hope at least the publication will have pioneered a modest part in the ferment of fresh thinking required to help the community to add its own contributions to far-reaching transformations that can be wrought only by the community.

These transformations are so overdue that this book HAD to be written!

2. THE "EVANS" PLAN VERSUS THE "CROW-FRASER-STRETTON" PLAN

"Nothing fundamental about that!", we can hear the reader murmur as soon as we have explained that what we first want to discuss is the shape of new urban growth around the city.

Hold hard! Before you throw the book away in disgust, reflect on two things:-

Form follows function. If there are to be new life-styles, new ways of working and new ways of living, a better "quality of life", quite inevitably there will be new organisations of our cities, which in turn will alter their shape.

And if you think: "Why bother about future growth? I live in old Melbourne so it won't effect me", you will be wrong on two scores. First that all planning is concerned with the future, the future is always to do with youth, and it is the needs of youth therefore that should receive priority consideration.

But, in any case, secondly, the shape of future growth and the principles underlying it can have a big impact on the "built-up" areas, especially if the principles proposed for new growth are progressively applied to the older growth by restructuring, as we will come to explain.

Thirdly, however, it can be quite tedious to have a long discourse on how an author arrives at a solution, before giving the solution. Some reader can take it, others cannot.

We have decided, therefore, to reverse the now fashionable order of presentation: "first the value judgement, then the physical planning" and start right in with an outline of proposed major physical planning for future Melbourne.

More-over, it will start in the form of a polemic so that what we regard as obsolete and bad can be seen in concrete terms against what we regard as new and good.

There is enough of implied generalised value judgement in the preface, "Why This Book is Written" to make it clear that values based on ecological needs and values based on human creative satisfying labour and leisure are our top criteria.

These two values, ecological and sociological, intertwine to dictate the physical design concepts.

Having outlined broad physical planning concepts we will then proceed to argue through more detailed design concepts backwards through the more traditional planning arguments to the newer basic sociological-ecological value-judgements, aspect by aspect.

Instead of paying initial lipservice to "planning for people" and then forgetting about them and thinking of property values, traffic volumes and housing densities we will outline at least some of our physical plans first and show how they derive from what we conceive to be the people's needs.

On page 5 is depicted, schematically, 3 diagrams, all for proposed future growth of Melbourne (Figure 1). The first of these is that of the Melbourne and Metropolitan Board of Works (M.M.B.W.); the second is that of the Town and Country Planning Board (T.C.P.B.), and the third is our proposal.

The author, M. Crow, lodged a formal "objection" to the M.M.B.W. plan in June 1972, this being the only way in the primitive "participation" procedures available to try to have serious attention paid to any ideas at variance with official planning concepts. The "objection" was in the positive form of which the third alternative plan shown in Figure 1. is the graphic depiction. (For text of objection see Appendix 1).

What is at stake, at the time of writing, is the M.M.B.W. radial-spoke corridor plan for Melbourne (which we will call the "Evans" plan for reasons to be explained) versus a linear Gippsland-corridor plan (which in its generalised form we will call the "Crow-Fraser-Stretton" plan). The persons mentioned having publicly championed such a scheme in that chronological order.
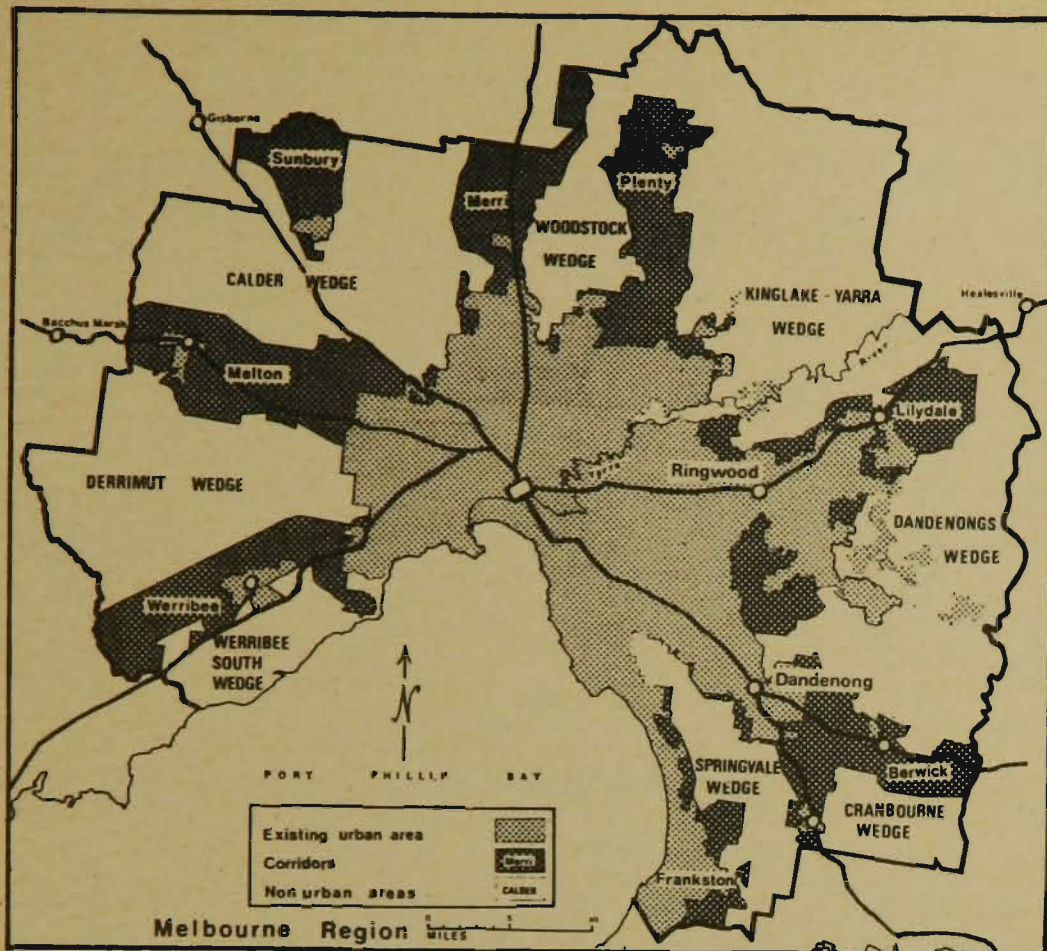
Figure No. 1 – 3 Plans for Growth

"EVANS" M.M.B.W. PLAN ➤

"FRASER" T.C.P.B. PLAN ➤

Melbourne Region MILES

Existing urban area
Corridors
Non urban areas

Gisborne
Sunbury
Morr
Plenty
WOODSTOCK WEDGE
CALDER WEDGE
KINGLAKE - YARRA WEDGE
Healesville
Melton
Lilydale
DERRIMUT WEDGE
Ringwood
DANDENONGS WEDGE
Werribee
WERRIBEE SOUTH WEDGE
Dandenong
SPRINGVALE WEDGE
Berwick
CRANBOURNE WEDGE
Frankston
PORT PHILLIP BAY

POSSIBLE FUTURE TRANSPORT CONNECTION

POSSIBLE FUTURE AIRPORT

PORT PHILLIP DISTRICT
OJECTED PATTERN 2

"CROW" PLAN

Background briefly is. . . . . .

(1)   3.5.66. Minister for Local Government (then Mr. R. J. Hamer) asked M.M.B.W. (the Melbourne regional planning authority) and the Town and Country Planning Board (T.C.P.B., the Government's advisory planning authority for the State) each to submit proposals on the most desirable shape and nature of future Melbourne growth.

Hamer loaded the question somewhat when he wrote *"I would urge the Board to give particular attention to the possibility of urban decentralisation with provision for "satellite" towns of, say, 100,000 or even greater population......"*

Mr. R. D. L. Fraser, Chairman of the T.C.P.B. explained to the press what his Minister meant: satellites within thirty miles.

(2)   16.6.1966. We proposed a "Gippsland"...Melbourne in a long south-eastern corridor into the Latrobe Valley, retarding future growth to the west, north and east (see article: "GippslandMelbourne... an alternative to satellite cities", "Guardian" newspaper 16.6.1966).

(3)   June 1967 the M.M.B.W. produced 6 alternative plans. One with satellites only, some plans with radial corridors and "green wedges" of non-urban land between, and some a mixture of corridors and satellites.

The M.M.B.W. gave cautious, half-support to one such "mixture plan", thus giving Hamer the go-ahead for "satellite" investigation which he had been angling for.

The most important aspect of the M.M.B.W. plans, however, was that **a common feature of the whole six of them was growth to the west and north!!** (see "The Future Growth of Melbourne" after page 29. Plans 2,3,4,5,6,7.)

(4)   8.8.1967. We publicly advocated all future growth to be in a linear Geelong-Melbourne-Gippsland corridor around a rapid-rail system at the Australian Resources and Living Standards Convention. M.M.B.W. Chief Planner, Mr. A. Hepburn, one of the guest speakers, heard the case (See "Town Planning Co-ordination or Chaos?" Report of Seminar Proceedings, M. Crow's speech at pp. 34-36 plus 2 pages of diagrams.)

(5)   4.9.1967. Release of T.C.P.B. report followed by "workshop forum" of explanation by Mr. R. D. L. Fraser and discussion on 7.10.1967. This report showed schematically "an area of study for strategic planning" (a) no growth to west or due north,(b) restricted growth north east and east, but (c) a very elongated south-eastern corridor towards Warragul (with a branch south ward to Westernport) (See "Organisation for Strategic Planning after page 16).

The Fraser plan was similar, from a growth pattern point of view, to our idea except it had no concept of rapid transit in the long Gippsland corridor. But it proposed a series of separately identifiable "metro-towns" within each corridor.

Mr. Bernard Evans (now Sir Bernard Evans) was the main antagonist of the Fraser plan at the forum.

He started from the fact that Melbourne's growth hitherto had been lopsidedly to the east and south and argued strongly for the M.M.B.W.s case for a "balanced" Melbourne.

By this he meant that there should be planned development to the north and west so that the Central business district (C.B.D.) would be centred in the metropolis. He pointed out that it was reasonably developed for trading and best use could be made of it by western development aided by the new Lower Yarra Crossing (Westgate Bridge).

For the same reason of "stabilising the central city area" he supported plans for redevelopment in the inner areas which, he said, made stronger attempts to attract population than Fraser's report.

In fact, although careful not to recommend anything, the M.M.B.W. report talked of *"500,000*

more people accommodated in 8000 acres redeveloped at a net density of 130 to 160 per acres..." (which would) *"...necessitate clearing and rebuilding some 240 acres of land per year which can be compared with the total redevelopment of some 132 acres by the Housing Commission to date"* (p 12).

Bernard Evans at this time held two key positions: Chairman of the Melbourne City Council (M.C.C.) Building and Town Planning Committee and Vice-Chairman of the M.M.B.W. Planning and Highways Committee (The Chairman of the M.M.B.W. is ex-officio Chairman of all M.M.B.W. Committees).

Hence we call these "balanced growth" patterns generally "The Evans Plan", after their champion under whose chairmanship the M.M.B.W. produced six alternatives all basically radial pattern growth with forced west and north growth.

(6)   24.2.1968. Hamer, in a Ministerial statement to Parliament on the Victorian Government's new town planning policy passed over the Government's own T.C.P.B's advice on the matter of Melbourne's growth patterns and opted for the Evans "balanced growth" plan, announcing that development to the west and north would have to be subsidised. A radial corridor plan with "green wedges" between and possibly satellite towns at Melton, Werribee and Whittlesea were favoured, and massive redevelopment to accommodate an extra 600,000 in the inner areas.

However the T.C.P.B's concept of "metro-towns" within a corridor was adopted as well as the T.C.P.B's proposal for a State Planning Council. (Hansard No. 16, 1968 at page 3244).

(7)   16.5.1970. Hugh Stretton's book "Ideas for Australian Cities" appeared. Although despairing of Melbourne's public service ever proving capable of rising above the conservatism of its citizens to give imaginative planning, he threw his sympathies behind Fraser's concepts (pp 63-69 and pp 206-207) injecting his own ideas of a linear corridor and suggesting, in one phrase, "a fine new city at the gates of Gippsland" (p 235) and pointing up the whole with a feature press article under the caption "Fat old Melbourne should have been long and thin" with a cartoonist fancy showing it streaking through the entire Latrobe Valley "100 miles long and 3 miles wide" (the "Herald" 15.5.1970).

Aside from a radio talk by Prof. F. Ledgar of the Melbourne University which went no further than to discuss the feasibility of Stretton's ideas of a Gippsland corridor with Geelong-sized cities every so often or Adelaide-sized or Hobart-sized cities more frequently, no other public figure emerged to champion any variant of the Gippsland corridor, so far as we are aware.

(8)   29.11.1971. The M.M.B.W. released proposals for a new strategy plan (see Figure 1. for a rough presentation of the pattern) consisting of seven radial growth corridors with forced growth to west and north.   (See the M.M.B.W. publication, "Planning Policies for Melbourne Metropolitan Region", No.71 at page 53 and Amendments No.3 and 21, to the Planning Scheme.)

Looked at from the stand-point of patterns for future growth, the 1971 M.M.B.W. Plan is the Evans radial plan adopted by Cabinet in 1968 although of course worked up with sufficient definition of boundaries and new-type zoning for the "green wedges" to contribute an enforceable plan.

There is curious internal evidence of apparent misgivings on the part of the M.M.B.W. planners with the Evans plan which we will mention later.

Also worth noting is that outward growth provision will now be greater within the four years from 1967 to 1971, both the Government and the M.M.B.W. have discreetly abandoned the idea of massive bull-dozing and redevelopment of the inner areas to accommodate an extra 500,000 and watered it down to "the target . . . should be to maintain the current population levels" which could mean rehousing at higher density some 40,000 displaced by freeways (p.72). Indeed a credit to four years of hard campaigning by inner residents associations!

The minor element affecting growth patterns, namely, different emphasis on redevelopment in the inner areas, as between the Evans plan and the Fraser plan, therefore seems to have been resolved; although vigilance by the inner area residents against the old fashioned bulldozer approach will no doubt be required for many years to come. There remains to be solved the major element affecting growth patterns, namely a radial pattern or a linear pattern.

3. THE TRADITIONAL CRITIQUE

What are the respective merits of the Evans plan and the Crow-Fraser-Stretton plan judged by some of the more conventional planning and conservation standards?

(1) More Pleasant Place to Work and Live

It is not an accident at all that Melbourne grew lopsidedly to the east, south and south-east. The country here was more pleasant by far than the country to the west and north.

"The proximity of the bayside beaches, the lighter soil and gentle slopes have all contributed to the popularity of the southern district. In the east, the higher, more undulating terrain, while adding somewhat to building costs, has resulted in many delightful residential areas which added to the proximity of the pleasant hill country further out have had an increasing attraction for home seekers. In the west, on the other hand, the country is flat, windswept and barren. The soil heavy and tenacious, the rainfall low and generally the area is more suited for industrial than residential use. The north, while more attractive than the west, has not the same appeal as the east and south. It is not surprising, therefore, that over a period of 50 years, two thirds of the population increase has settled in the eastern and southern districts. This trend expresses a strong desire which cannot be ignored."

Rather strong words. These words are from the "Survey and Analysis" of the M.M.B.W. which accompanied the 1954 Planning Scheme Report (p.49). Little more than a decade later the M.M.B.W. itself, with its planning committee under the leadership of Evans, not only "ignored" these factors in its planning, but didn't even so much as mention the Board's own earlier analysis or explain why it no longer operated or was no longer important!

The above words are generalisations, but there are some instructive details elsewhere in the same publication.

For example, surprisingly, while the 20 inches rainfall line twists through Werribee, Williamstown, Footscray, Sunshine and Melton, and it is less than 20 inches within that arc, it is 30 inches as close as Kew, Hawthorn and Camberwell (p. 19).

Anyone who has lived on the "newer volcanic soils" of the western and northern suburbs, and which are not to be found anywhere south of the Yarra, will appreciate the scientific description:"grey basaltic clay which is sticky and tenacious in wet weather, unsuitable for garden cultivation and subject to marked change in volume with variations in moisture content",(p.19).

In less scientific language (and paraphrasing Oscar Wilde's remark "Anyone who calls a spade a spade ought to be made to use one")"Anyone who calls this soil 'volcanic' or 'basaltic' ought to be made to play football on it in winter and dig it in summer". They would soon embellish it with the Australian adjective!

It will be noted that the 1954 report describes the "flat windeswept and barren" plain of the

west as "more suited for industrial than residential use", and indeed zoned extensive areas of land for industrial development in the west (See Map 8 of 1954 Planning Scheme Report at p. 49). Indeed at first glance, there would appear to be more industrial land in the west than in all the rest of Melbourne put together.

Most certainly this would be so, if the industrial land at Fisherman's Bend is not counted.

Now we read in the 1971 M.M.B.W. "Regional Policies" statistics on p.29 as follows. . .

MANUFACTURING EMPLOYMENT			
Sector	1949	1968	Percentage Change
Central	142,413	123,207	− 13.5%
West	34,998	54,543	+ 55.9%
North	27,117	69,300	+ 155.6%
East	9,876	33,294	+ 237.1%
South	24,231	88,747	+ 266.3%
Total	238,635	369,091	+ 54.7%

That is, the east and south, from supplying about half as much as the west and north in 1949 (34,000 as against 62,000) already by 1968, approximately equalised the figures (122,000 against 124,000).

Another set of statistics show a very rapid shift of employment in the *heavy manufacturing industries* ("industrial metals, machines, conveyances") during the 60s from the west to south. The percentage change is a drop of 1.1% for the west and a gain of 8.6% for the "southern sector" which takes in the south eastern Dandenong-Berwick corridor (at p.110 Appendix 2.7) and which is the biggest gain of any industrial group shown.

The comment made by the 1971 M.M.B.W. "Regional Policies" on this is: "The proposals in the 1954 metropolitan planning scheme assisted this shift in manufacturing location which considerably reduced the inbalance of the 1950s when 85% of work places were located in the central west and north sectors, whilst two thirds of the popluation lived in the south and east sectors (p.29).

That is as maybe, and, to give it its due, the 1954 plan had set out to "even up" sector by sector the number of jobs with "resident industrial workers" by creating sufficient industrial zones in the south and east.

The 1971 M.M.B.W. report observes (understandably without comment!): "The marked preference for the east and south-east is expected to continue" (p. 18), failing to link this either with its 1954 thinking or with the above statistics or with its own generalisation: "In the outward movement of industry . . . Oakleigh, Moorabbin, Dandenong and Springvale have emerged as leading areas".

So! Workers, including heavy industrial workers "prefer" also the south-east! The Evans plan forcing them westward to follow jobs there is discrimatory planning against such workers.

(2) A Cheaper Place To Live

The cost of installing water, sewerage and gas is higher in the west than in the south and south-east because of the higher cost of undergrounded services. The difference was estimated at $250 in 1952, but this figure, of course would be much higher in today's prices (see M.M.B.W. Surveys and Analysis, Table 60 on p.125).

"In addition to these figures, in the volcanic areas the cost of private street construction is substantially greater and there is some extra cost in the dwelling itself. When locating residential areas, all these costs must be taken into account and balanced against other factors, such as transport, in assessing the total cost to the community" (p. 125).

If the concept of "total cost to the community" is added to the cost of an individual's block of land, there are obviously further advantages in Melbourne growing in a long south eastern corridor.

Advancing in this direction, it is going towards the sources of
(a) water supplies in the Great Divide;
(b) electricity in the Latrobe Valley;
(c) natural gas from the same direction.

Indeed the total difference in cost between developing land in the west and developing it towards Gippsland must be quite considerable.

We are not opposed to subsidy, and as the economy rests on all manner of subsidies and concessions to primary and secondary industry, see good reason why there should be subsidy for the cost of land development, if there is some good over-riding social factor.

But what is the point of the government's promise to subsidies the Evans development to the north and west, when the country to the south-east is not only less costly to develop it is more pleasant as well?

Furthermore, the 1971 M.M.B.W. "Regional Policies" make it clear that the further urbanisation extends in the valleys of the Yarra or any of its tributaries, the higher will be the cost of flood mitigation works.

"Whatever flood mitigation works are eventually found necessary, it is considered that costs of major magnitude will be involved. However it is considered that it would be unrealistic to put further constraint on development than proposed in this report, and that the distribution proposed within the catchment of the Yarra River and its tributaries will result in the least flood potential, and will permit maximum deferment of the time in which major flood mitigation works will be necessary".

"The provision of flood mitigation works at high cost must be recognised as essential if increases in population, as predicted, are to occur in the metropolitan region" (p.58).

In summary, then, on economic grounds the general conclusions appear to be that it is cheaper to develop in a Gippsland corridor than either west or north (because of the terrain and the distance from resources) or north-east or due east (because of high cost of flood mitigation works due to urbanisation of the Yarra or its tributaries).

(3) Conventional Conservation Considerations

"Man's metropolitan environment only began to take shape as recently as 150 years ago. By the last decade of the nineteenth century the vast majority of the inhabitants of cities like London were prisoners of their surroundings. They could not escape by rail because they could not afford it."

"Edwin Chadwick, the great English reformer, in 1842 when he was secretary to the Poor Law Commissioners said in a report that 'by no providence on their part can the poor escape the dreadful evil of their surroundings.'

"Technological improvements such as the invention of the motor car and the electrification of railways, combined with increased affluence, released man from his city prison and enabled him to reach the open countryside again where his spirit could revive."

"Unfortunately, in invading the countryside man has started to destroy it and there are signs now that he is again becoming a prisoner of an urban environment. Traffic jams in London, and in many American cities are bad enough to act as a deterrant to those who seek the open country side. It is tragic commentary upon our modern cities for it to be able to be said that the best cities are those from which it is easiest to get away." (Dr. F. W. Ledgar, "Town Planning Co-Ordination or Chaos" op.cit. at p.11).

We will be returning to this last fruitful thought, in another context, in the meantime we have quoted the above passage to outline what we mean by the more conventional conservation approach. It is not incorrect. It is important. It sees the need of man for nature. After quoting Lewis Mumford that we have the alternative of "humanising the city or dehumanising the population", Ledgar later related his ideas to Melbourne: preservation of the Yarra Valley, the Dandenongs, the Mornington Peninsular, the need for local Councils not to abandon the idea of parks for passive recreation as distinct from playing fields and so on. Actually Ledgar "skips" several stages of attempted escape to nature in the above quote. The Australian garden suburb is one attempt, but they have proved to be neither satisfying "country" nor "town". The holiday resort and decentralised cities are others, but in the Australian conditions they tend to reproduce the suburbs.

Without going deeper into these issues at this stage, but keeping the problem on the level of "escape to the country side from the city" how can the Evans M.M.B.W. 1971 plan be assessed as against the Crow-Fraser-Stretton Plan?

First, the M.M.B.W. plan has corridors which avoid the bush near the Lerderderg Gorge, the Maribyrnong Valley, the Kinglake area, the Yarra Valley (to some extent) and the Dandenong ranges. But any Gippsland-corridor scheme would not affect these areas anyway. The score so far is even.

Secondly, the M.M.B.W. plan, by providing radial urban corridors, creates "green wedges" between these corridors, so that a person living in any one of the seven corridors has countryside not far away.

Let us not pause, right here, to consider whether the "green" wedges really are green or a sunburnt brown, or chocolate or have trees or whatever, or whether man actually has to get into the greenery to revive his spirits or whether it is enough simply to look at it from a distance or hurtle through it at 60 mph. in an air-tight compartment.

Let us assume on the face of it, that any sort of countryside is healthy to have within a mile or two whether you have to be a trespasser to set foot in it or not. Then the Gippsland-corridor scheme is as good as the seven spoke M.M.B.W. scheme. Everyone is just as close to "green".

If anything, those living in a Gippsland corridor would, on average, be nearer the bigger mountains, more ocean beaches and more extensive forests, just as the 1954 M.M.B.W. "Survey and Analysis" mentioned.

But let's play fair. Some people prefer Bell's Beach to Eildon, or the Grampians to the 90 mile Beach. Let us say the score as between 7 corridors and 1 Gippsland corridor is still even.

Thirdly, comes that aspect of conservation which we now usually call pollution: how much of the "greenery" or the fauna that lives on it, is thriving, or indeed surviving?
How fresh is the air? The stream? How ugly the mess and muck of the undisposed wastes of the city spreading over the countryside?

Admittedly, this definition of pollution and conservation is superficial, seeing the problem almost as a psychological one only: man is used to the smell of clean air, the sound of birds, and beautiful nature, on a par with "Keep Australia Beautiful" level, or seeing the problem as a primitive health measure; trying to avoid having to forbid swimming or the menace of smog inversion on a few days of the year.

We will deal with more far-reaching aspects of conservation later in the section "The Ecological-Sociological Critique", under this heading-"The Traditional Critique", however, we are approaching the problem at the level of the M.M.B.W. planners.

"The conservation of open areas of forest, bush and farmland which can provide breathing spaces and areas of visual stimulation and recreation close to the settled areas "is set down as "Objective 2" in the 1971 M.M.B.W. "Regional Policies" and "pollution controlled environment" is part of "Objective 1" (p.16).

Now at this level the M.M.B.W. has done much as they had been asked to do by the conservationists organised in the Conservation Council of Victoria, or by the Yarra Valley League.

The proposals create 5 new-type non-urban zonings (namely extractive, general farming, intensive agriculture, landscape interest and conservation), for the eight green wedges which give protection in the main areas requested.
Certainly there are some misgivings by the conservationists as to the efficacy of the proposed controls or the details of zoning boundaries or the precise definition proposed for the landscape interest and conservation zones (see for example the address of Dr. G. N. Christensen and Dr. L. R. Allen to the M.M.B.W. Seminar 26.2.1972 in "Report on Proceedings" at pp 28-32).

But the M.M.B.W. even used the Prof. McHarg method of a series of transparent over-lay maps each one showing a different aspect, including non-economic factors such as areas where flood control would be

necessary, areas needed to protect water quality, areas where water pollution control would be difficult, areas of high noise level, areas of adverse terrain as well as areas of conservation, landscape interest or intensive agricultural significance.

The idea is that by "over-laying" all sheets one can see the areas most favourable for urban purposes from all points of views (See 1971 M.M.B.W. "Planning Policies" the 7 transparency overlays are on Plan 4 between pp 48 and 50).

The authors are insufficiently expert to know whether this McHarg technique was wisely applied or not (e.g. 3 of the 7 "constraints" are to do with water which one would have thought over-weights the water factors) but there has been no known questioning in this respect from those who are experts.

It should be recalled that the M.M.B.W. long before it became a planning authority was a water authority and as such has its own history of strong attachment to "closed catchments" policy, as distinct from opening the catchments to multiple-use and treatment of the water, and is keen to see sewerage a precondition of all urban development, and to this degree is conservationist-minded.

The question posed here however is whether a Gippsland-corridor pattern of growth would be more or less favourable than a 7-spoke M.M.B.W. type pattern from the level of conservation issues under consideration and given a uniform operation of the measures of the Environment Protection Authority? A Gippsland-corridor would pass to the north of Westernport, whose waters are said to be far more vulnerable to pollution than the waters of Port Phillip Bay because there is less movement of water to and from the ocean.

Especial care, at a cost, would therefore have to be taken to ensure high levels of pollution-control in the country to the north of Westernport which drains into it. This is an argument that could be used against a Gippsland-corridor.

Counter balancing this argument, however, is the fact that extensive pollution-control measures are the cost of the extension of urbanisation in the M.M.B.W. corridors to the north, north-east or east. The "Merri", "Plenty", and "Lilydale" corridors all drain into the Yarra either directly or indirectly through tributaries and the 1971 M.M.B.W. "Planning Policies" report acknowledges that, in addition to costs necessary for overcoming the "marked deterioration of Yarra River water since 1947" (p.60), there would be anti-pollution costs of further urban development in the valleys, which east of Warrandyte would require "major works at high cost......to provide principal sewers and treatment capacity",(p.61).

If to these factors, are added the heavy costs of flood mitigation works (already quoted) there seems quite formidable problems associated with any further urbanisation of the valley of the Yarra and its tributaries. Indeed the M.M.B.W. report itself seems to sound an ominous note when it says (as quoted) "......it would be unrealistic to put further constraint on development than proposed in this report" (p. 58) as if it *should* but dare not.

"Unrealistic" for whom? Conservationists? Hardly. Citizens seeking recreation near Melbourne? No!
Then "unrealistic" for the Board of Work's planners themselves, struggling to contain their planning sense within the Governments "green wedge" formulas? Or land speculators? Maybe a bit of both!
On balance, weighing the pollution "pros and cons" as between a linear corridor, and a 7-spoke green wedge pattern we would hesitate to allocate the formidable Yarra-valley problems as an outright "win on points" over the as-yet indeterminate pollution problems of a Gippsland-corridor.

Shall we say on this aspect the score is even?

Summing up this last section on liberating man from the prison of his urban environment to give him ready access to greenery to revive his spirit in pollution-free air and water, there is nothing that the Evans M.M.B.W. plan offers that is better than the Gippsland-corridor scheme.
On the score of traditional planning and conservation standards therefore the Gippsland-corridor scheme is to be preferred on the value-judgement that it is located in areas that are more pleasant places to live than on the western plains or to the north, and living would be less costly, too, than development in any other direction. Furthermore it would leave more of the Yarra Valley free as a potential, recreational overflow space for the future generations of "older" Melbourne.

4. THE "CROW" CONCEPT AND
THE "FRASER-STRETTON" CONCEPT

Before examining the Gippsland-corridor as against the radial pattern in the light of more extensive ecological-sociological considerations, it is necessary to outline some more aspects of the physical plan, in accordance with our scheme of presenting the physical first, and justifying its value judgements later.

To do this we have to add to the form of our polemic, because our concepts of the reasons for, or nature of, a long Gippsland corridor do not correspond fully with those of Fraser or Stretton, although we believe they greatly strengthen their case.

It should be emphasised, from the outset, that the nature of the "old polemic" and the "new polemic" are quite different. With the Evans plan polemic it is a question of plans which have different purposes, for which compromise is not only pointless, but wrong, and therefore it is a question of confrontation; one or the other.

As regards the Fraser-Stretton concepts, however, we are not opposed to their basic intentions at all. At best we see our ideas as carrying out the intentions of both in a more thorough-going way, a newer way and consequently more successfully. At worst we detect some difference in emphasis arising from different long-term objectives.

The new polemic issues therefore we feel we are arguing, as one will argue, with friends, although we do not know Mr. Fraser or Mr. Stretton.

Furthermore, the authors do not wish to appear to take a position of lofty superiority. We have for example changed our own ideas on the Gippsland corridor since 1966, as will appear. And, as far as an understanding of the implications of the impact of modern technology on the ecology, much of the knowledge on this is very recent; or at least, the scientists have succeeded only very recently in "getting across" to the other professionals and the public at large the size and seriousness of the problem.

Fraser's "Strategic Planning" report appeared in 1967 and Stretton's book in 1970 although the writing of both may have taken place several years earlier, and both, it is conceivable, if they had yet had time to allow the significance of ecological issues to penetrate their own sphere could by now think and write differently.

For that matter, so could the M.M.B.W. planners, and in his formal objection to the M.M.B.W. on the regional plan M. Crow wrote......."The objector has no pretences to be an expert on such (ecological) matters, and is not critical that the Board's proposals do not deal with them, because the Board's plan had to be worked out a few years too early to be expected to take account of such considerations. Moreover the Board's planning possibly had to be an exercise within the constraint of announced Government policy as long ago as 1968 on so called 'balanced' growth patterns for Melbourne.

"However, confronted with a set of alarming and hitherto unsuspected facts about conditions of survival of future generations, it is submitted the Board's planners should re-think the regional planning problem..."

So it is not in the spirit of rivalry, "one-up-manship", or superiority that the authors enter the lists with the planners, but rather in the spirit that ecologically speaking we are all in the same boat, we look like sinking it if we don't find a solution, and all men of goodwill should be prepared to re-examine their previously held positions, however "sound" those positions may seem from a more traditional approach.

So now we will first advance, in accordance with our procedural method, some further aspects of the physical planning of the Gippsland corridor and will later argue them through to justify the value-judgements on which they are based.

One essential element in our concept of a "Gippsland" - Melbourne is rapid transit.

How rapid?

We suggest with peak speeds of not less than 150 mph (as in Tokaido railroad between Tokyo and Osaka). There are more rapid systems up to 500 mph (as with the tube transport system devised by Mr. L. K. Edwards with the Massachusett's Institute of Technology).
Passengers could then change from rapid-transit to the ordinary suburban train system for any destination between rapid transit stations.

We do not presume to indicate the preferability of one rapid-transit system against another. It should be observed, however, that it does not necessarily follow that really rapid speeds have to be associated only with long-haul transport, in the sense of distances of say 50 miles or more. For example, in the vacuum tube system mentioned, there have been two possible types investigated: one could be called "long-haul", the other a commuter system, which, with stations spaced at 8 miles could attain a top speed of 335 mph. ("Scientific American" August 1965 pp. 30-40). The cost, apparently, could be comparable with the Tokaido more "conventional" type of transit, or even less costly; but we do not know whether this was due to lower construction costs, or whether acquisition costs were also included in the estimates.

With a long-haul design and with three or four stops, you could go from Traralgon to Flinders Street in about half an hour,and from Warragul to Flinders Street in about 15 minutes.
In a commuter type tube system, with say 12 or 15 stops, every 8 or 10 miles or so, you could go from Traralgon to Flinders Street station in about one hour and from Warragul to Flinders Street in about half an hour.

On the time scale, the run from Warragul to Flinders Street could equal or better present outer-suburban Melbourne train schedules, on the Tokaido system; or the 100 mile run from Traralgon to Flinders Street on the tube system could take less than from say Croydon or Frankston to Flinders Street!

Of course, whether running at speeds three times as fast as the present rail top speeds (as with Tokaido) or 10 times as fast (as with M.I.T. tube), it would not be practical to have railway stations a mile or so apart, as with the present system.
Therefore it would be necessary to retain the present Gippsland rail service, suburbanising it as development proceeded outward from Dandenong. This line, incidentally, is already electrified as far as Traralgon.
Whatever rapid transit system is selected, whether Tokaido-type, some variation of tube-type, or whatever other type seems attractive, we suggest, rather tentatively, that it would be better to elect for a system where stops are not further apart than, say, 10 miles, even though this would sacrifice potential average speed as compared to more widely spaced stations.

For purposes of brevity we will henceforth use the following terms:-

"The Spine public transport" ("Spine" for short)	=	The public rail transport spine (both rapid transit rail and suburban electric rail) running down the centre of the Gippsland corridor.
"Spine Rapid transit rail" (for short "transit")	=	The rapid transit railway (surface or tube) along the spine.
"Spine electric rail" ("Electric" for short)	=	The current type electrified suburban railway (updated) running in the same reservation as the rapid transit rail.
"Corridor freeway"	=	The divided highway serving the Gippsland corridor (not necessarily alongside the spine).
"Corridor Melbourne"	=	The future part of metropolitan Melbourne to be built along the Gippsland corridor.

"Present Melbourne"	=	Built-up part of Melbourne metropolitan area as it was in 1972 (or such other minor peripheral growth as may be permitted to take in present, immediately planned growth as distinct from " corridor Melbourne".
"Future Melbourne"	=	Present Melbourne plus corridor Melbourne.

b. Metro-Cities, Metro-Suburbs and their "Hearts"

The second feature of our concept is a major metro-city centre every 10 miles or so, around each rapid transit rail station, and every one to two miles or so between, a mini metro-centre around each electric rail station; all metro-centres and mini-metro-centres to be served by strong home-to-centre public transport.

One main purpose of this is to ensure that all major centres of attraction should be grouped and lie on the major public transport spine and be more readily accessible by public transport than private transport at least from any other centre on the spine, and that the further the distance travelled, the greater would be the saving of time by the public transport user.

By the "centres of attraction" are meant not only shops, offices and theatres (found in concentrated form in the traditional C.B.D. functions), but also a range of major factories, educational institutions, hospitals, recreational arenas and cultural facilities (to be found typically in the inner areas of Melbourne), that is any centres which bring people together whether for work or other purposes, which collectively we shall call "the heart" of the area served by such a centre.

For purposes of clarity we now define such "hearts" or "centres of attraction" in terms of the size and character of the areas they serve, relating the terminology also to that used in "Plan for Melbourne Part 1".

Type of Centre (Grouped mass facilities)		Area it serves
Melbourne's heart	=	Region of several millions of present and future Melbourne.
District heart	=	Grouped suburbs of present Melbourne into districts of several hundred thousands.
Suburban heart	=	Local centres in present Melbourne suburbs.
City-metro hearts	=	A new metro city in corridor-Melbourne of about one hundred thousand (100,000) equivalent to proposed district centres of present Melbourne areas.
Mini-metro hearts	=	A metro-suburb in corridor Melbourne of about ten to twenty thousand (10,000 — 20,000) equivalent to local centre in present Melbourne.
A Core	=	A high density central part of a "heart" based on a rail station.

It will be observed that "district hearts" in present Melbourne do not exist.

"Plan for Melbourne Part 1" suggested that they *should* be brought into existence.

"Restructuring" is required as we will propose later.

And it will no doubt be asked at once: Why distinguish "city-metro hearts" and "mini-metro hearts" in corridor Melbourne from "district hearts" and "suburban hearts" in present Melbourne?

The reason is the suburban hearts grew like Topsy, taking on the character of the era in which they had their origin; strung out along the cable tram routes in their early days, later clustered around the new electric rail stations, later still super-market type centres located by careful research as to the market, but with complete randomness as regards location in relation to railed transport or other social facilities.

The trouble with unplanned "Topsy" growth is that in the new residential areas the elementary, indispensable, commercial functions of shopping supplying the bread and butter commodities came first, predetermining the location of the community "heart" and often crowding out the equally indispensable services and spiritual functions of the community such as libraries, infant welfare, child centres, health centres, clubs, entertainment, recreation and cultural facilities. Such community services typically depended on voluntary effort or government support, based on shaky financial foundations and which could not afford, or could not appreciate the value of, locating where they should locate, right at the centre of the heart.

Still less has there been a planned integration of places of employment with a high labour content, or schools, within easy walking distance of the suburban commercial-community centre, although earlier cable tram and electric train based localities (as distinct from car-based localities) tended to organise such relationships in practice.

What we propose for mini-metro hearts is:

(i)   That there should be total design planning to incorporate the above mentioned complex of functions (about which more later).

(ii)   That all of them should be located on the spine,(a) making them within easy reach of any other metro hearts, or (b) within easy reach of the nearest city-metro heart by electric or (c) thence to other city-metro hearts or to Melbourne's heart by transit.

(iii) That they should be so located within the metro suburb and so well served by home-to-heart public transport, that it would be quicker and more convenient to travel to the nearest mini-metro heart by public transport from the area it is intended to serve than to travel to any other mini-metro heart or the city-metro heart by private transport.

As we have said, one main purpose of the above mentioned inter-relationship between mini-metro hearts and city-metro hearts is to have lively centres of grouped major attractions and have them very strongly and conveniently served by public transport.

Another equally important purpose effected by the above mentioned organisation of the distribution of locations in relation to transport is to overcome the randomness induced by car domination and lay the emphasis on cohesion.

Thus for the most elementary goods and services, whether of a commercial-commodity or voluntary-effort character, it would be more convenient to go to the mini-metro heart than anywhere else, and here one would have a higher chance of forming an acquaintance with more vital people interested in any particular aspect of life.

Thus too, for more specialised or higher performance standards than are to be found in the mini-metro heart one would find it more convenient to go to the nearest city-metro heart rather than any other city-metro or to Melbourne's heart, where would tend to be found the most unusual and non-standardised and the most selective high-performance activities.

Nothing is really new in this idea of a hierarchy of urban centres organised on the principle of proximity, which no doubt have appeared in planning manuals since the dawn of the sub-urban era. What is new, is the proposition that public transport, uplifted by modern technology should be so integrated with metro-city design to maximise the chance of making the local centre a neighbourhood focal point, and the successful establishment of it as just such a focal point will in its turn strengthen public transport, and both together will maximise public concourse.

Aspects of this and other interrelations we will deal with later.

At this point, however, it would be useful to define the word "concourse". By this we mean the voluntary coming together of people around some mutual interest, either educational, cultural, political, ideological, recreational, or otherwise (provided the purpose is not to damage or disadvantage the community or some section of it).

We are indebted to Chermayeff and Tzonis in their book "Shape of Community" for resurrection of the concept, which for them, as for us, is a central purpose. *"Simply stated our committment is to the provision of places of concourse, where meaningful community intercourse can become complementary to meaningful solitude."* (p. 28).

For us "concourse" will not embrace involuntary social contact (such as inmates of a hospital, prison, or child minding centre), or semi-voluntary social contact where there are overwhelming social compulsions (such as attendance at factories, schools, or offices), or fleeting social contacts of the commercial world (such as with shop assistants, bank officers, barbers, taxi-drivers, and hairdressers, and tram conductresses).

It will mean more deliberate voluntary involvement around a common purpose, not in the sense of an entertainer and a permanent passive audience, but a group of people arising out of which a "collective" begins to form.

By "collective" we mean a team, for which, since there is a common purpose, there begins to develop a spirit of each contributing as best she or he can, some with highest skills, others with humble offerings, but all with a quickening appreciation of each other, all teaching and learning from each other, all developing a more elevated concept of their aims, and with it, incidentally, an increasingly more effective impact on the "tone" or "ethos" of the community generally.

In a manner of speaking a "collective", collectively speaking, must be a "do-gooder", not in the old pious, ceremonial or symbolic connotation of the word. "Do-baders" such as drug peddlars, safe breakers, gangs of vandals, however much team work they may display do not come within our definition of a "collective" for which places of concourse are required.

"Do-baders", in fact, are either in the game as a commercial game carried on (without some of the rules), but with all the aggressiveness, deception, self-aggrandisement and basic immorality that stems from a system of selling for profit (often without the hypocrisy), or as with delinquents, finding such attitudes predominating everywhere around them, revolting, but using the same do-bad weapons against an oppressive world as has been used on them.

On the other hand, concourse at which collectives can flourish, is in no sense a formal activity to be solemnly performed only in designated planner-planned places. The essence of it is not "bricks and mortar" let alone specially christened "bricks and mortar",

Collectives can and do arise in factories, in churches, in schools, in hotels, not that most of the buildings housing such institutions have been designed to encourage them, but because concourse and collectives can spring up where ever people congregate provided they have time of their own and initiative of their own. Nevertheless the pattern of movement in relation to the location of attraction points can be so designed that randomness of association with people tends to become the rule and concourse an accidental exception.

Of course, what is involved in such fundamental transition from a state of casual association to a state of satisfying participation cannot be achieved by the design of transport and metro-centres alone, but for many involves a change in life-style, in moral standards, and in political and social effort. Why it is "good" to attempt such a change, we will come to later in our value judgements, but encouragement of "collectives" in "concourse" is the deliberately chosen principle underlying the design for the type of Gippsland corridor we envisage.

c. Choice of Density and Residential Types

The third feature of our concept is that every metro suburb and metro city should be organised on the principle of mixed zoning and high density at the core of the heart, mixed zoning and medium density around the core and surrounding the heart and low density residential areas further out.

Maybe, apart from "mixed zoning" concept, this is standard planning text book thinking too, but in the formation of new suburban centres in Melbourne it is just not done.

And even in the highest densities of the older suburban centres there has never been done what we propose. What we mean by "high density" is a density of the order of Melbourne's Central Business District, what we mean by medium density is equivalent to Melbourne's inner areas, or preferably somewhat higher.

Now this last sentence is far from "standard" so far as prevailing fashion goes. It is now taken as a gospel of elementary sociological truth by too many otherwise intelligent persons that higher densities mean "congestion" and "crowding" and from such conditions are generated disturbed mental states such as aggressiveness, or withdrawal and from this all manner of horrible consequences flow such as alcoholism, drug addiction, delinquency, crime and violence (See appendix 2, Victorian Chamber of Manufacturers Bulletin, Volume 17, No. 22 et. al.).

The "lunatic fringe" on the extreme political right embroider this with concepts of dehumanised receptive but violent "rabble" who are ripe for manipulation by power seeking rabble-rousers who are going to take over and run Melbourne by administrative decisions made by tens of thousands of people herded into Bourke Street!

It has not occurred to persons holding such beliefs that maybe the cause of the symptoms that horrify them is a moribund capitalism on its last legs (as we indicated in the preface) and not high densities or big cities as such at all.

We adhere quite firmly to the view that so far from the idea that "society must learn to spread itself out more evenly, if it is to preserve some sort of quality of life"(Appendix 2), the remedy lies in exactly the opposite direction.

In fact, one of the main reasons that people develop that unhinged feeling that they "don't belong" apart from their removal from decision-making processes on the job, is the fact that the car has disorganised and unstructured the former community organisations and associations of one sort or another which they had enjoyed off the job.

It is in fact precisely the car that has been the main technological instrument involved in "spreading society out more evenly" and it has resulted not in "preserving some sort of life quality" but destroying it. "More of the same" can only make the position worse!

"Structuring" of corridor Melbourne and restructuring of present Melbourne can begin the remedy.

In the words of Chermayeff and Tzonis: *"Density of population per se is not a measure of urban decline. Appropriate systems or sub systems, properly designed, could make life very pleasant in densities now considered dehumanising. The measure of human condition lies closer to qualitative change than to problems of territorial growth"* (p. 7).

Just as density, of itself, is not dehumanising, neither is it, of itself, humanising.

So deliberately built-in to the fabric of the metro-hearts and especially in their high density core, should be enclosed air-conditioned spaces and open-air spaces of all different sizes ranging from small committee rooms to big halls, equipped variously with seats and tables and food catering facilities available at minimal rent for any citizen concourse.

What the Railway Institute in its hey day was to railway employees and to many others; or what the University Club house facilities are for the students, so should each metro be equipped for all, and at higher standards, cheaper rents and greater availability.

In other words provision for "concourse" should be deliberately built in to the mini-metro hearts and city-metro hearts, just as we now "build in" parks and playgrounds (outdoor concourse provisions should not be overlooked either. See later for more on this).

Our concept of zoning in the metro-heart is also not standard. We subscribe to the aspect of Jane Jacob's ideas which stresses the value of "mixed primary land uses" in high density areas because it assists the variety and liveliness of such areas, bringing to the same area different sorts of persons at different times of the day for different reasons (see "Death and Life of Great American Cities").

Obviously such conditions maximise the chances of establishing viable "concourse", just as suburban random-mobility low density minimises it.

Equally obvious, from the nature of the density of the metro heart, great sprawling modern manufacturing plants could have no place in them, and would have to be located either in a belt between the metro cities or on the edge of the corridor beyond the low residential areas.

As it happens, there is an increasing degree of automation in most big plants so that the trend is toward low labor content in comparison to capital invested. Just the same both for the purposes of maximising freight delivery and commuting by public transport there would need to be either special spur lines or sidings to cater for such problems.

Places of work with a high labor content, whether they be factory, office or laboratory, subject to high standards of environmental control and to reasonable minimum density would be deliberately sited in the metro heart as part of the policy of mixing primary land uses.

Car parking in the heart would be limited, all day parking, except for residents, severely so, although hire-car and taxi service would be available and cheap.

There would be no attempt to deny choice of density or residential styles to inhabitants of a metro-city. They would in fact be consciously provided with a much higher range of choice of residential types than currently available in Melbourne; moreover, a proportion of the medium density and high density housing and their environs would be especially designed to cater for children, which is a rare exception in the range of accommodation now available.

However, there would be a much higher planned average density in corridor Melbourne than in the outer suburbs of present Melbourne. Those who choose to live in higher densities would have the bonus of living within walking distance of a hub of social activity. Those preferring lower densities would have to live further from such a hub and take longer by public transport to reach it. But in all cases it would be the choice of the resident as to which density was preferred. There would be choice of outer-layer, low-density residential, at one extreme through varying densities at the mini-metro heart, to the higher densities in the city-metro core.

d. Some Differences in Emphasis

(1)   Public Transport.

Neither the Fraser concept nor the Stretton concept visualise rapid transit in a Gippsland corridor.

The Fraser concept sees "land use" as primary and transport as "relatively incidental".

"It cannot be too strongly emphasised that the primary component of urban growth is land use, and that land use must be planned as an expression of people's needs for places in which to live, to work, to carry out their business and enjoy their leisure. Other components of urban growth such as public utilities and transport are relatively incidental and within practical limits must be planned for accordingly"(1967 T;C.P.B., "Strategic Planning", at p.3).

For the humanistic approach lying behind this sentiment we have the highest regard. Certainly the "transport" tail should not wag the dog, just because people have cars and cars can go everywhere! It is worse than non-planning: it is permitting the car to take over planning!

But then surely, it is not "land use" in itself either, that should constitute "the primary component" of urban growth? The primary component is "people's needs".
Whether in a city as big as Melbourne these needs can be met depends on people's ability to get to the place where they can "use land" as they will, or rather, find that particular association of other people to satisfy their needs.

It is true that the T.C.P.B. report on page 16 supports linear corridor growth because "it can serve increasing levels of activity while minimising transport bottleneck, i.e., can provide high density transport corridors capable of economically supporting efficient mass public transport facilities".

However, clearly, if to the traditional electric suburban type transport, is added rapid transit of a speed two or three times faster, it would add tremendous advantages to corridor development and overcome increasing remoteness from Melbourne's heart.

Mr. Stretton, on the other hand, comes closer to the concept of rapid transit, hinting at it with the word "monorails or channelled hovercraft or whatever is invented next" in the following passage which is well worth quoting for the wealth of other ideas...

"A linear city has simple communications. Channels run from end to end of it; arterial roads, express and local trains, and buses, monorails or channelled hovercraft or whatever is invented next. Some of these may share transport corridors or they may run parallel some way apart so that each stripe of the city is served by one of them, and busy centres span all of them. Short cross-roads make exits to the country-running freeways which skirt along outside the city, cutting corners where it curves. All these channels get such efficient use that the public ones can run high frequencies at low fares and justify whatever bridging, cutting and tunnelling are needed to make their routes fast and inoffensive.

"Because they run close to most homes, employments, institutions and consumers' centres, it becomes inoppressive to encourage people to use them. Possible politics may even run to a pattern of free public passenger transport, barely adequate arterial roads and the brutal restrictions of all day parking at busy centres." (Ideas for Australian Cities, p. 62.)

(2)   Metro Cities.

Neither the Fraser nor the Stretton concepts quite see "concourse" within the metro-city centres or smaller suburban ones as a therapeutic measure as Chermayeff and ourselves see it.

Fraser strongly supports grouping together in a corridor of major facilities into "metro towns" in place of the present trend towards random scattering. Indeed the very word "metro-town" which now seems to have passed into Melbourne's planning terminology seems to have been coined by Fraser.

"These communities would have a population capacity of up to 100,000 and could thus be identified as town units. They would not be satellite towns as they would lack the degree of physical separation and self sufficiency which is aimed at in that concept."

"Rather they might be termed "metro-towns" indicating that each is part of a group dependent on one major centre of commercial social and cultural interest and a limited number of major industrial concentrations." (1967 T.C.P.B. "Strategic Planning" pp. 16-17.)

Stretton's variation on this theme is thus: *"Along these communication lines centres are threaded. How big will depend on how often. If you like central Melbourne build it every 60 miles...the average journey to work in it need not be much longer, and might be quicker, than in Melbourne. Or build central Adelaide every 30 miles, or Hobart every 15 miles. Better still build some of each appropriately spaced. Whatever the big centres, the hierarchies of local, and district centres between them will be well placed to intercept custom and prosper and save the bigger centres from activities they don't intrinsically need."* ("Ideas for Australian Cities p. 63).

At another part, Stretton talks of a "fine new city at the gates of Gippsland" (p.235), presumably a second Melbourne-sized metro city around about Warragul.

(3)   Additional Corridors.

When we advanced the concept of a "Gippsland Melbourne" in 1966 and again in 1967 our diagrams made it clear that there would be a corridor also connecting Geelong to Melbourne and the Gippsland corridor would have a branch to Westernport.

The Fraser concept also shows a corridor branching to Westernport, two very short branching corridors beyond Lilydale and a stubby one north east (see figure 1).

According to Stretton, whose source apparently is talks with Fraser (because they do not form part of the strategic study recommendations in the 1967 T.C.P.B. "Strategic Planning"). There are other ideas for new town building apart from metro towns on the Gippsland corridor. Reference to Figure 1 shows a proposed "possible future transport connection" leaving the main Sydney-Melbourne railway somewhere near Craigieburn, and skirting Melbourne on the east, cutting through the urban areas near Ringwood and Dandenong to finish at Westernport. This is proposed as a standard-guage trunk service and not for commuter purposes.

Nevertheless, at its juncture with the Lilydale rail line near Ringwood and at the south east rail-line near Dandenong and at the terminal near Hastings, apparently thoughts for three bigger cities arise.

"One of them would be near the region's new port. Two would share its next major airport (immediately to the north of Westernport) and would soon also have a direct country route to Canberra. ("Ideas for Australian Cities" p.206).

We do not support this three cities idea, nor Frasers east and north-east "stubby corridor" ideas. They would detract too much from the long Gippsland concept and tend to unnecessarily sacrifice the advantages of the linear growth. Nor do we support our own earlier idea of a corridor to Geelong or Westernport.

A corridor to Geelong, apart from the interruption of the Werribee sewerage farm, is in an area not highly regarded as residentially desirable land. A corridor right to the shores of Westernport would, we imagine, complicate pollution-control measures which are going to be difficult enough with the big industrial complexes already located there. Any further urban development towards and beyond Lilydale or north-east we oppose for reasons already given.

However, the railway extensions (without a surrounding corridor) might both well be worthwhile on their own merits.

An extension of the standard guage rail to intercept the Gippsland corridor and continue to Westernport could provide an important economic asset. And an extension of rapid transit through Melbourne to Geelong could assist the development of Geelong and the corridor growth beyond Geelong

(4)   Densities,

Neither the Fraser nor the Stretton concepts are concerned with higher densities even for the centres of the metro-towns, no doubt because neither think it important, as we do, to maximise "concourse".

They are both concerned, certainly, with the "character" of urban growth, revolting against the present outer suburban type of development.

Fraser lists as one of the advantages of linear corridor growth that it "stops formless and characterless suburban growth on the periphery of the existing metropolitan area" (1967 T;C.P.B. "Strategic Planning", p.16).

And Stretton, with his sharp pen lampooning "fat old Melbourne" and with his different size cities threaded on the urban corridor (as quoted above) is strongly of the same opinion.

Stretton attacks superficial ideas that high densities automatically breed diversity and higher cultural attitudes, and equally superficial ideas that the low-density suburbs automatically produce dullness and conformity.

"For most urban excitements and facilities", he writes, " it is the people themselves who have to diversity... which means diversifying their origins and upbringings and life-chances. It's no good merely crowding more similars closer together" ("Ideas for Australian Cities", p.9).

We thoroughly agree. But the concept of concourse does not suggest crowding as a remedy. By providing groups of people around special interests it provides the outlet precisely for the blossoming of diversified "upbringings and life-chances", and higher density in the metro-hearts are not advocated by us merely as " good in themselves", but because they can more readily facilitate the practical organisation of concourse.

In defence of suburbia, Stretton writes *"It reconciles access to work and city with private, adaptable, self-expressive living at home. Plenty of adults love that living space and subdivide it ingeniously. For children it really has no rivals. At home it can allow them space freedom and community with their elders; they can reach bush and beach in one direction and in the other, schools to educate them and cities to sophisticate them".* (p 21).

Here surely, Stretton has overdrawn the virtues of suburbs somewhat! Children in all too many of Melbourne's newer suburbs cannot, independently, get themselves to bush or beach, or even school, or scout hall, let alone to the city. Many have to be chauffered.

Metro-cities with a range of densities from lowest to highest and really close to both bush and city in travel time, can indeed give those who prefer the 50' by 150' block of land, the choice that Stretton

mentions. But if the high-density metro-city centre element is left out of the equation, they will not have such a choice.

And without "concourse", there can be no "high aspiration". "High aspirations" are nothing new. Concourse where aspirations are nurtured is nothing new. Humans have always organised themselves to achieve such goals and done so consciously and the well-to-do have done so elegantly. But the car has torn aside the fabric of older associations based on pedestrian distance or directionalised public transport focal points.

The local Sunday cricket club drawn from the local lads and organised around the local pub is disppearing because the very local pub, "just around the corner" is disappearing;but big new pubs with pop music and extensive car parks serving whole districts are arising. Gone are the tennis club dances, but you can see Wimbeldon finals on T.V., The tendency is for the local public meeting in the local hall to be a memory, rather than an institution. The size of off-the-job Trade Union meetings especially measured against the population growth is dwindling.

Stretton does not try to deal with these trends. It is not enough for him to prove, as he does, that it is the suburbs that "nourish most of the best as well as the worst of Australian lives, including whatever are the 'worthwhile goals' of many of the country's best painters and poets, editors and critics, scientists, and other discoverers, politicians, public servants and professionals, all with a free choice of city apartments if they wanted them". (p.13).

A high proportion of the class of persons he mentioned have enjoyed a unique "concourse" at a very formative period of their lives, full time at that. Most of them have spent some years on a "campus" of some university or other tertiary institution. Indeed for those who have in fact formed the habit of adult concourse, who have been involved in a collective, who have learnt to value the thrust and parry and creative innovation flowing from the friendly stimulation of close teamwork, never need forget the habit.

They can manage to hold on to enough of the habit with a few soul mates and a few books and continue creatively despite the suburbia where they live, not because of it! They can consciously use their cars to maintain a tenuous contact with their few soul-mates scattered over Melbourne's 20 to 30 miles wide suburbia.

But the very ones for whom creative effort in some specialised aspect of life is cryingly needed to off-set the non creative monotony of their jobs, are denied this precious advantage at any high level. And the car is tending to rob them of the opportunity of a collective even around a beer-barrell or a local dance!

Not that there is, in itself, anything inherently wrong with the car which bestows the possibility of an undreamt of marvellous universal individual mobility.

What has to be done is simply to make the age-old conscious and deliberate attempt to create both concourse and aspirations in the new conditions for which the car has been a catylistic agent of transformation. This means deliberately re-uniting the elements of low-density residential and high-density city-type association, re-establishing the individual's need for pedestrian scale urban life by the twin techniques of built-in opportunity for concourse in high density mixed-use centres and ready transport access to all such centres.

Physical design relating space and time and human activities in different ways cannot alone achieve better aspiration. But failure to tackle the physical=design problem can defeat the attempt!!

Stretton, friend, we think your position does not really differ so much from ours, though on first appearances it seems to do. We quote your words:

"There certainly is room for much more medium density, and mixed densities...courtyard, patio and terrace houses mix well with standard gardens. The amount of medium density which people are likely to buy won't make a significant difference to the overall density or extent of the city. But it might cluster more people closer to their centre and transport stops, variegate the suburbs, mix the age groups more, and diversify many people's residential options". (p. 21).

Certainly! Only we would say "it would", not just "it might", And we would add: if some people of all classes prefer to live high density, in places that don't overshadow suburbia, why not ?

What we propose, in its intention, is well summed up in Stretton's own words.

"It would be good to conserve the freedoms of the traditional urban-suburban-country combination. It would be good to improve each part of that old combination; to build better centres and suburbs, to diversify housing as much as people actually wanted: to keep the countryside close but unspoiled, and to make quicker and cheaper connections between all three." (p.22).

Bravo! To actually do just that, we prescribe not only the Fraser-Stretton concept of Gippsland corridor with metro-towns strung along it, but, as well rapid-transit and high densities at the core of the heart of each centre, within which to re-establish "concourse" and link the "concourse-centres" time-wise closely together.

Why we place so high in our estimation this purpose of concourse will emerge in the section with which we now deal.

5. THE ECOLOGICAL—SOCIOLOGICAL CRITIQUE

We now turn to considering the demerits of the Evans-M.M.B.W. radial corridor plan and the respective merits of the Fraser, Stretton, and Crow versions of the Gippsland linear corridor plan judged by ecological and sociological standards of performance of a more fundamental character than those dealt with under the section entitled "The Traditional Critique".

"The Limits to Growth"

The book "The Limits to Growth" became available in Melbourne to us in mid-June 1972, a few days before these very words were being penned. It is sub-titled: "A Report for the Club of Rome's project on the predicament of mankind". It is a popular account of the studies on a global scale of an international research team at Massachusetts Institute of Technology commissioned by the "Club of Rome" which is an informal international association of approximately 70 persons from 25 nationalities, taking its name from the first of such gatherings which met in Rome in April 1968.

The findings of the report, which we quote because it is one of the most recent and comprehensive, have been presented to two international meetings, one in Moscow and one Rio de Janeiro, and according to the authors of "The Limits to Growth", "although there were many questions and criticisms raised, there was no substantial disagreement with the perspectives described in this report." (p.186)

It is not the province of this book to reproduce the lines of study in "The Limits to Growth"; we urge the reader to read it personally. We do not even propose to attempt to popularise in an appendix what already is a popularisation. What we will do is to give three brief conclusions of the study, and include in an appendix what the Club of Rome think should be done about the situation. (See Appendix No.3).

The authors, Meadows. D.H., and D.L., Randers J. , and Behrens W.W., say:

"The following conclusions have emerged from our work so far. We are by no means the first group to have stated them. For the past decade, people who have looked at the world with a global, long-term perspective have reached similar conclusions. Nevertheless, the vast majority of policy-makers seem to be actively pursuing goals that are inconsistent with these results."

"Our conclusions are:

1. If the present growth trends in world population, industrialisation, pollution, food production and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next 100 years. The most probable result will be a rather sudden uncontrollable decline in both population and industrial capacity.

2. It is possible to alter these growth trends and to establish conditions of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realise his individual human potential.

3. If the world's people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success."

Now, if any reader has had a first quick reaction along these lines. "What? 100 years! What nonsense! Why I won't be here! Anyway the Board of Works regional plan is only for 30 years!", he had better think again...and quickly:-

(i)   If the reader is young there is a chance one of his children will then be alive; if not, at least his grandchildren. His morality is at stake!

(ii)   If he rereads item 3 above, he will understand we have to **start** now. His commonsense is at stake.

We are indebted to a friend for constructing for the use of mathematic laymen (such as ourselves) a simple diagram from which can be "read" an approximate answer to "exponential growth" (or "compound interest")problems without sliderule expertise or knowledge of logarithms (See Appendix No. 4). We include it as a service for those who, like ourselves, are not familiar with quantifying the relationship between rate of growth, the period of time, and the total amount of growth.

(iii)   In any case, without waiting for the dire catastrophe that will overtake us in 100 years, the

accumulating effects of present growth will commence to enforce mighty changes long before that. For example, on p. 58 in "The Limits to Growth" we learn that according to the best estimates then available the world's supply of natural gas and petroleum at the rate we are now using them will last 38 and 31 years respectively, at **the rate of increase** corresponding to ever increasing usage year by year (the exponential index) will last only 22 and 20 years respectively; even if allowance is made for discovery of 5 times the known reserves, they will last 49 years and 50 years respectively on the exponential scale. So, somewhere between 20 years and 50 years, we will be switching to coal for energy where we now use petrol or natural gas, if no changes are made in the present pattern of growth.

Long before that critical point has been reached, however, we should have to start re-organising for such a change. So any objector to the perspectives of the Club of Rome has not only his morality and commonsense in question, he even has his "pocket" at stake if it turns out to be short sighted to have spent $2221 million (in 1969 prices) on freeways by 1985 before even knowing what form of technology applied to mobility is to replace the petrol-driven engines!

Incidentally, whereas known reserves of coal at present rates of usage would last for 2300 years, when it has to substitute for natural gas and petroleum the "exponential" index comes down to 111 years. If 5 times the resources are discovered, the exponential index shows exhaustion of coal supplies in 150 years.

The dry, objective, scientific language of the ' Club of Rome" authors may hide from many the the colour that has become associated with the struggle for survival of the eco-systems of this earth's biosphere of which man himself is an integral part. It is all the more grim for all that! When the pollution curve goes up sharply and the population curve starts to go down, watch out! Many species will die out before man!

One last point from the "Club of Rome" thinking. Of the five major interacting components determining limits of growth namely (1) resources, (2) industry, (3) agriculture (4) pollution and (5) population, all five must be **simultaneously** tackled.

Any idea of tackling one or two factors and leaving others grow unimpeded could have worse results than a laissez-faire policy. For example, recycling wastes to conserve resources, or use of nuclear energy for the same purpose, may well mean a temporary increase in what we considered to be "resources", a consequent accelerated potential growth of industry and with it pollution and an earlier deleterious effect on agriculture and with it population.

But the book is positive: it aims to stimulate model-building to enable global equilibrium and to offer the first of many increasingly-accurate models we will need to successfully achieve this.

There are arguments barely touched on by "Limits to Growth" but which add to concerns which other scientists have expressed. If the gospel of 100 years limit turns out to be somewhat miscalculated, there will be other limits with other results not much later to do with serious climatic effects of world-wide "thermal pollution". Use of energy from fossil fuels (coal, petrol, natural gas) or from atomic energy must ultimately be dissipated as heat that will result in warming the atmosphere either directly or indirectly (p.73).

The authors of "Limits to Growth" make nothing much of this, although other scientists do. We certainly shall not put ourselves in the position of trying to adjudicate between the scientists as to which is the most horrible danger. Perhaps we can be philosophic and end on the general note, as does "Limits to Growth": "The crux of the matter is not whether the human species will survive, but even more whether it can survive without falling into a worthless existence". (p. 197).

And to add a lofty tailpiece of our own: the crux of the crux is whether the species can evolve a global ecologically-orientated socialism before capitalism turns existence into worthlessness! (For our views on this see reprint of article "The Ecology and Capitalism", M. Crow from "Lots Wife" 20;3;72. See Appendix No. 5).

Urban Growth Patterns to Conserve Energy

Now, whereas the State and Federal Government are "sovereign" over all matters, the power of the Melbourne regional planners is restricted. On the other hand they are planners, who are the very sort of people whose speciality it is to look far ahead, so that Governments are directed into the right road and not the wrong road.

Taking the five main components of growth isolated by "Limits to Growth", namely, (1) population (2) industry (3) agriculture (4) pollution (5) resources.
The M.M.B.W. planners have no power over population levels, can direct industry only as to location, but have no power over what sort of industry there should be, what it should make and how it should operate.

On the last two items, pollution and energy, however, they can have some impact. We are not referring here to the fact (already mentioned) that as far as pollution is concerned the regional planners

happen to be part of the same authority, that is, the M.M.B.W., which is also concerned with water supply and sewerage disposal, that is, with some parts of human and industrial waste; although the Environment Protection Authority is the one which will be concerned with other pollution standards.

Apart from that, however, the regional plan can have some impact on air pollution in the traditional sense and on the conservation of energy and world wide thermal pollution which are bound up with the rate of use of fossil-fuel resources.

Suppose the regional planners were to be asked: "Please design a pattern of urban growth that will maximise the energy required to convey goods and people around the Melbourne region."

The answer surely, would be a radial corridor plan or a radial-corridor-with–satellites plan!

Consider figure 2 which is a reproduction of a schematic diagram presented by us at the Town Planning seminar in April 1967 ("Town Planning Co-ordination or Chaos"... Australian Resources and Living Standards Convention, 8.4.67... between pages 34 and 35) headed "Satellites" and "Fingers" are variations of the present "spider-web".

The argument we underlined in the short address given was *"At all costs we must avoid a continuation of spider-web growth because this design makes public transport so difficult and expensive that it almost compels development based on the car between the radial railway lines."*

Our opposition, five years ago, to design patterns which gave impetus to reliance on car travel and freeways were mainly sociological and we will deal with this aspect later.

Now, however, the weight of ecological arguments have to be added, and many run exactly in the same direction!

There is more energy required to carry goods and people from one part to another in the Melbourne region on a radial corridor pattern than any other because:-

(a)   energy-expensive cars and trucks must be used in place of the more efficient public transport systems for cross-corridor transport.

(b)   The necessity to use cars and trucks for cross-corridor transport tends to consolidate and maximise this mode of transport also for trips which could otherwise be along-corridor public transport trips.

(c)   The universalisation of cars and trucks as a mode of transport tends to maximise the randomness of location both of residence and industry in relation to public transport, making it more and more difficult for such commuters or industries who want to use public transport to do so.

(d)   The consequent road cogestion followed by a freeway network to overcome it, will include freeways serving the radial corridors and these will minimise time for private transport used and entice them outwards rapidly along the radial corridors, further and further apart, making the cross-corridor trips. longer and longer.

(e)   The energy used by the ever more random, and the ever more radially-dispersed urban components will continually increase.

Therefore, the supply of a given human satisfaction in Melbourne, insofar as it involves internal transport energy, will be maximised by a linear corridor growth pattern, minimised by a radial one.

The energy used and heat produced, is not confined to the petrol and oil products consumed by the motor vehicle. It has to do, indeed, also with the energy and heat involved in the continual replacement of these vehicles, and back beyond that, of course, with the energy and resource-use of the steel, rubber and other material required by that manufacture.

Of course, any public transport would also have to bear its share of energy - both in its operation and in replacement, but all the experts who have ever spoken on this have always acknowledged the superior efficiency of public transport over private and of railed public transport (i.e. tram or train) over buses for any long-haul mass conveyance. Rails, incidentally, are the most efficient and space-saving way of bearing weight for transport loads.

The Crow-Fraser-Stretton plan, therefor, has a treble advantage over the Evan's plan.

(a)   It throws the emphasis strongly onto public transport by the location of all major facilities along a public transport route.

(b)   By grouping such major facilities as far as possible into semi-self-sufficient clusters, it minimises the amount of commuting.

(c)   By its very pattern it tends to strongly discourage cross-suburban commuting by car, and the further the corridor grows the less temptation there would be to do so.

When the devil (1970s style) having set himself the purpose of destroying the biosphere as rapidly as possible, came upon the Melbourne regional planners, he must have whispered "radial corridors" in their ear, it being the most energy-consuming plan of all! Cunning fellow as he is, though, he "sold it" to his victim as if it were the opposite!

Satellite towns (under
investigation by the Town &
Country Planning Board) and
"finger" development (favoured
by the Town & Country Planning
Association) would both give a
"greener" Melbourne than
unlimited outer-layer growth
as at present, but both would
suffer the defects shown below
because both

"SATELLITE" AND "FINGERS" ARE
VARIATIONS OF THE PRESENT
"SPIDER-WEB" DESIGN.
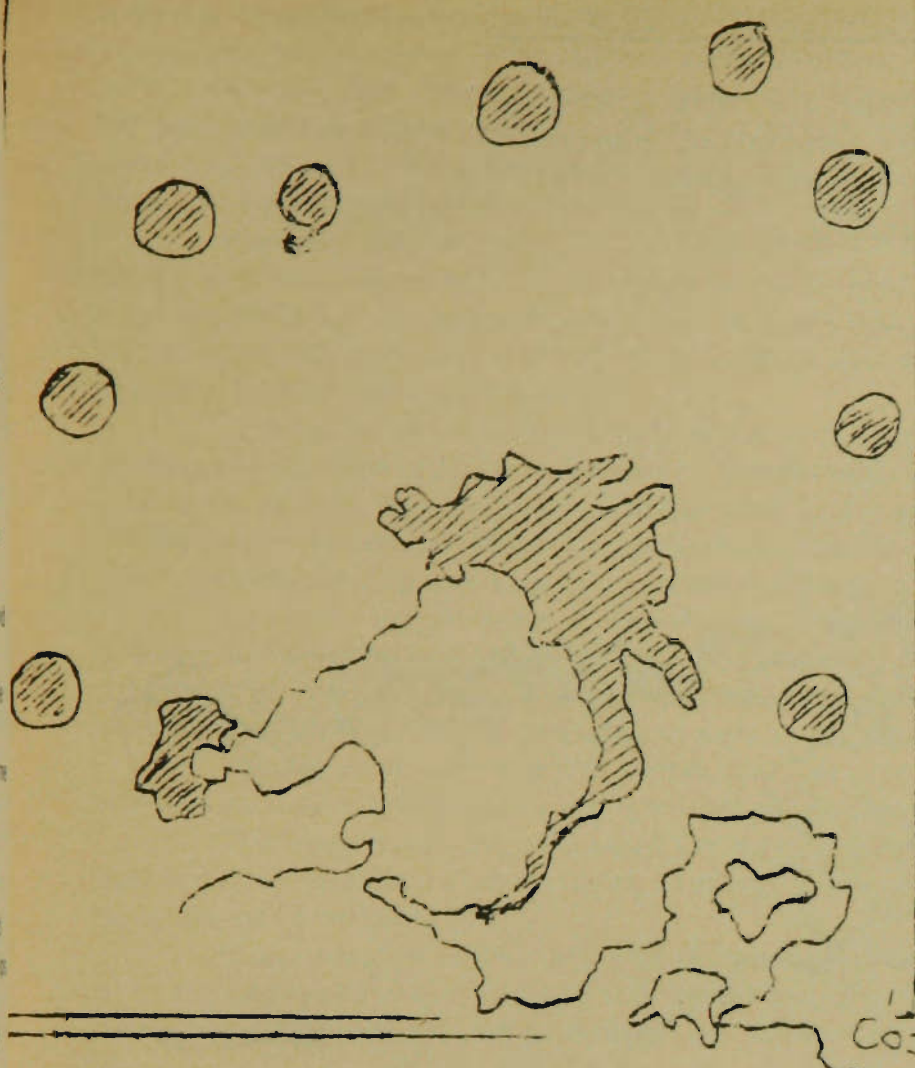
1. "Satellite" Towns

2. "Fingers" with "bulges" at end.
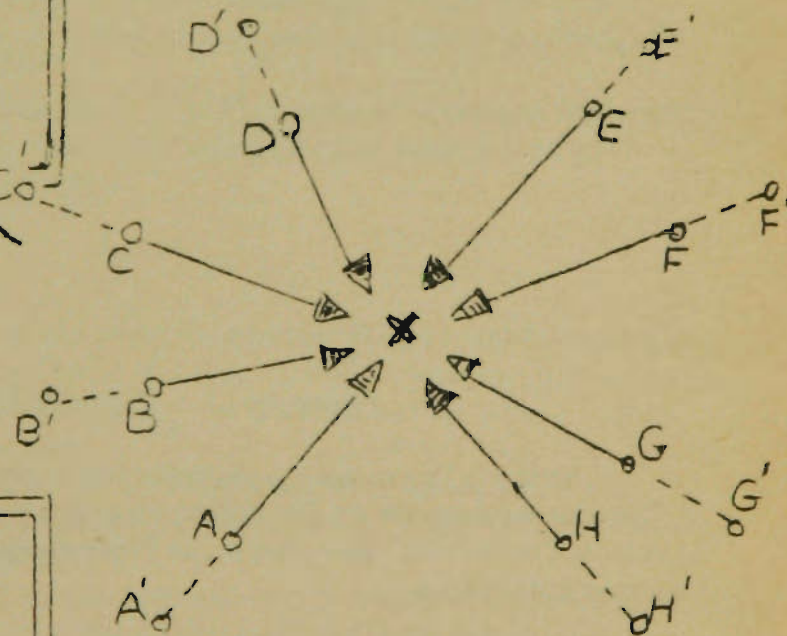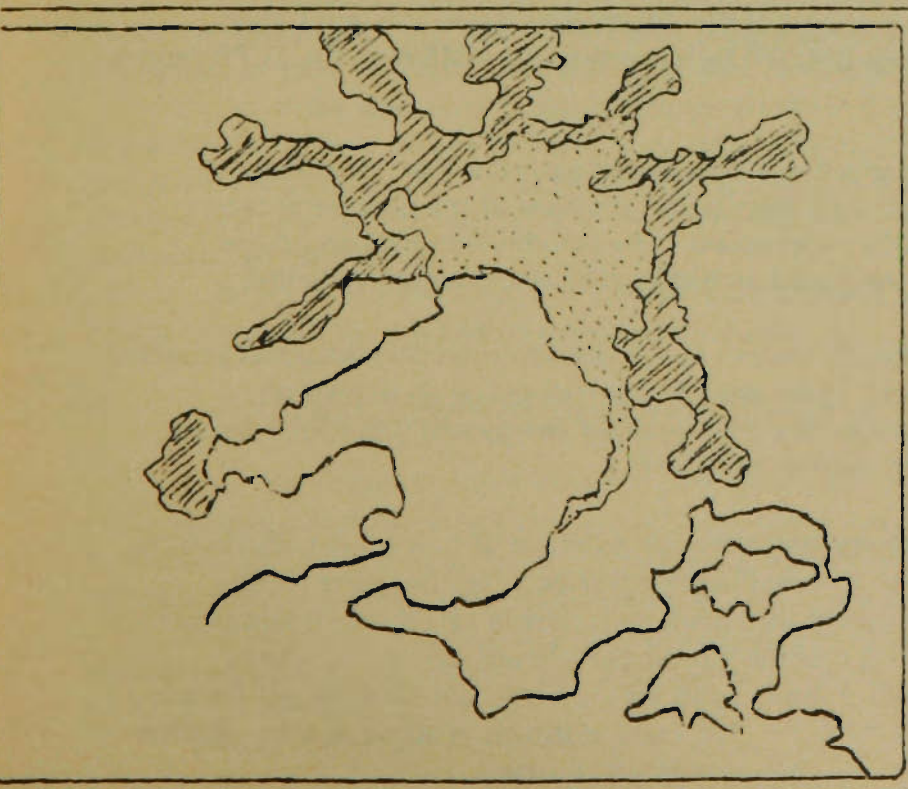
(a) The greater the distance
    from X to A, X to B, X to
    C etc. the greater the
    cost of cross-transport
    A to B, A to C, E to F etc.
    Compels cars and freeways.

(b) The greater the congestion
    at X the more radial free-
    ways, the more pressure to
    suburbanise A', B', etc.
    and unfreeze cheaper green
    land between radial towns.

Figure No. 2 — "Satellites" & "Fingers" Costly
The above is from a paper presented by M. Crow 8/4/1967. (For comment, and for Geelong-Melbourne-Gippsland
alternative — see overleaf.) Note: The artist drew the satellites in the above schematic sketches too far from Melbourne.
They should have been depicted about 30 miles from Melbourne.

3. "GEELONG – MELBOURNE – GIPPSLAND" MELBOURNE

(a) Lower costs of reticulation and transport
(b) Based on industrially potential region
(c) Fits with Bay and/or Westernport canal
     development (if feasible)
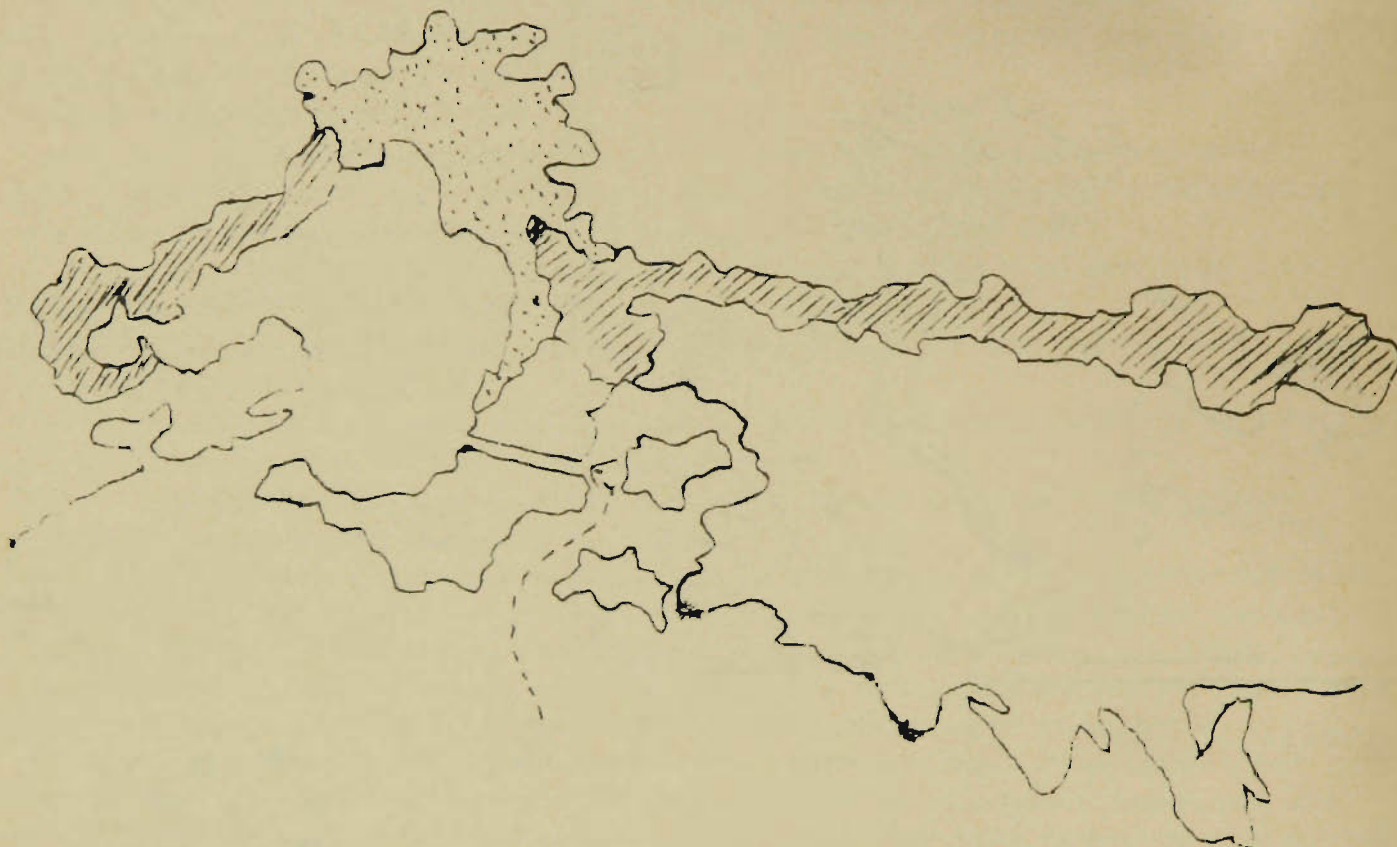
Figure No. 3 – "Gippsland Corridor" – 1967 Version

Note 1: The above is a reproduction of one of three sketches taken from a paper presented by M. Crow to the Seminar on Townplanning which was part of the "Australian Resources and Living Standards Convention" (See: Report of Proceedings 8/4/'67) before either the MMBW or the TCPB reports had been published.

The above concept which the author advanced was favoured as against either "satellites" or "fingers" which were rejected on the principle that they were both variations of the peripheral-type "spider-web" growth which Melbourne had hitherto experienced. The column and diagram on the right hand side of the page overleaf give the reasons, based on higher costs and freeway-style life.

Note 2: Conversely, the long corridor growth pattern above was favoured on traditional economic grounds of lower costs of reticulation and transport, and it would base Melbourne on industrially potential brown coal area. These arguments, to the extent they involved energy and fossil fuel, would be good ecological arguments also. (See also later: section on "Cost".)

Note 3: The above sketch discloses an interesting historical example of how recent has been the emergence of general concern for the ecology. The "Town Planning Review" for November 1966 published by the Victorian Chamber of Manufactures in its main feature article called for "linking Port Phillip and Western Port Bays by means of a canal across the Mornington Peninsula" (p. 1), on the grounds that water transport was cheaper than land transport and that it would cut 50 miles off the sea route of all shipping of moderate size from the east (p. 3). The canal is shown in above sketch. Neither the V.C.M. nor the authors were then conscious of possible ecological damage.

In the proposed plan, between the radial corridors lie "green wedges" which include areas judged as important from a conservation point of view by no less a body than the Conservation Council of Victoria, whom no one could accuse of being activated by base ecological motives!

So the radial corridor plan was proudly presented by the regional planners to the public of Melbourne as a package of goodness, labelled "conserve the green wedges!" although anyone scrutinising closely would find that not even this was the determinant of the pattern because clearly not all wedges had equal value and some had very little "conservation" value at all!

Probably, neither Evans, nor the regional planners nor Hamer for the Government, understood the devil's deep laid plans. Possibly they rejected a linear concept as advanced by the Town and Country Planning Board with no baser motive in view than the desire to compromise between pressures for "development" which naturally came from north and west as well as south and east, because capital interests, basically, have no geographic loyalties.

If the art of the so called "practical planner". is to "cunningly contrive" something that is a compromise for everyone, and if the art of "with-it politicians" is to endeavour to produce something which no one will protest, then the Evans plan appeared, on the surface, incontrovertible, *seeming* to embrace the legitimate interests of the age-old speculators with the new-fangled conservationalists, the interests of the modern freeway advocates with the traditional lovers of the central city areas!

However, it is not to be! A way of organising men's livelihood that conserves their Sunday morning golf and Sunday afternoon excursion into an ecologically-protected enclave of gum trees, but at the same time helps lay the basis for ecological catastrophe on a world wide scale and hence the destruction of their own grand-children is but the camouflaged work of the devil!

We, the authors of "Plan for Melbourne", are prepared to take on the devil, even if, temporarily anyway, we may appear to many well-intentioned people as devils ourselves!

The trouble with the *generalised* Crow-Fraser-Stretton linear Gippsland corridor, is not that it does not have *potential* for much saving of energy, but that it does not go nearly far enough to convert that potential into a certainty.

Our concept of *strictly* only one Gippsland corridor with no other stubby off-shoots to Westernport or to the east or elsewhere, and with mini-metro and city-metro concourses based on rapid transit with strong home-to-concourse public transport has three advantages:-

(1)   **The Saving of Commuter Transport Energy.**

For any distance more than about ten miles, journeys along the corridor for a commuter would be at least twice as fast by transit as by a private car; and any shorter distances could be made comparable by electric trains so that prohibitions of all-day commuter parking would not only as Stretton puts it "not be oppressive", it would confer a positive boon on the commuter.

Immediately, of course, "the exceptions" will be hurled into the argument. The doctor, the executive who has to rush to a branch office, the travelling salesmen. By definition, if their habit is to use a car as part of their business, they are not all day commuters.

For those who only occassionally use a car for business purposes, maybe a distinction needs to be drawn between those whose business is in other parts of "corridor Melbourne" and those whose business is in "present Melbourne".If it is in other parts of corridor Melbourne the public transport solution would be more convenient than private. If it is in present Melbourne maybe a hire-car pool - even a subsidised hire-car pool-could be considered.

By and large, however, the further the Gippsland corridor extends, the greater the proportion of Melbourne work force would be using public transport.

(2)   **The Saving on Non-Commuter Transport Energy.**

As time went on and the mini-metro hearts and the city-metro hearts became established as strong really attractive centres not by design alone, of course, but by a combination of reasons, many car trips would become unnecessary. Instead of friends, for example, "visiting each other", a habit of meeting at the neutral concourse would be a relatively minor shift of habit.

Or instead of rushing away from Melbourne in escape most weekends, for example, there could be local attractions of involvement as participants or spectators more compelling than fields far away that only appear to be greener.

We deal further with these aspects below under a discussion on the sociological critique.

As time went on there would be more and more industry located not only in corridor Melbourne but served with railway sidings. At first it would be difficult to break with the system of conveyance of goods by road freighter, now predominating, because, although it would be easy to load onto rail from a factory in corridor Melbourne, it could be nearly impossible to unload in a factory or storehouse of destination in present Melbourne.

In time, however, it would be not only possible but more economic to consign freight by rail instead of motor truck. This could be gradually extended into present Melbourne if the railways were given a charter to run cheap station--to-door delivery coupled with efficient containerisation and prompt delivery.

The concept of strata title flatted factories outlined in "Plan for Melbourne, Part 2", could be usefully adapted to mini-metro and city-metro small factory production and facilitate freight handling by rail.

To summarise the energy-saving feature of our Gippsland corridor proposals:

They could constitute a deliberately engineered "swing" back to public transport for these reasons

(1)   Location of all major facilities on public transport.
(2)   Grouping of facilities to minimise commuting.
(3)   Discouragement of cross-suburban car commuting.

(The above are common also to the Fraser-Stretton concept, except "the 3 city scheme" which tends to revive item (3))

(4)   Commuting more convenient by transit.
(5)   Focal concourse centre minimises non-commuter trips.
(6)   Ultimate possiblity of increased use of rail for freight.

(Points (4) to (6) above tend to be advantages that in reality would flow only from our concepts.)

By contrast consider the Evans-M.M.B.W. plan, and in conjunction the Metropolitan Transportation Plan which meshes in with the regional plan having been constructed on land-use radial growth patterns supplied by the M.M.B.W. to the Metropolitan Transportation Committee (M.T.C.).

The M.T.C. plan pays lip service to the need for improving public transport and proclaims that a "balanced transport system" is the result of its labors. The M.M.B.W. regional plan proposals adopt the M.T.C. plan and are couched in similar terms.

The reality is that no matter what improvements are made in public transport, even improvements that go far beyond those proposed by the M.T.C.,plans, they cannot hope to entice patronage from private commuters at a rate decisive enough to make a significant contribution to saving energy, so long as Melbourne's future growth is to be radial corridor pattern.

Sooner or later the energy-extravagant one-person-per-car long-distance commuting is going to be brought to a stop. For anyone who understands where we are heading ecologically it is downright immoral to entertain any radial-corridor plan. Clearly the regional planners did **not** understand the magnitude of the ecological problem posed by the car. The best they could say about it was as follows:-

"Motor vehicle engines are by far the biggest sources of(air) *pollution,the principle component from vehicle exhausts being carbon monoxide, hydro-carbons, and nitrogen oxides."*

"The discharge of pollution from these sources has major consequences in terms of effect on human health, buildings, and material and wild life."

"...The speedy development of new or modified power sources for motor vehicles, with substantially reduced levels of air and noise pollution, should be given the highest priority by the manufacturers, for if this problem is not solved quickly it could act as a constraint on future policies related to transport planning."
(1971 M.M.B.W. "Regional Policies" p.38).

In other words the most the regional planners had within their sights was that if car companies didn't produce cleaner fuels, public opinion would begin to oppose the freeway networks, because of the effect of emissions from exhausts!

Indeed this factor is bad enough, especially as motor vehicles are the "biggest source" of air pollution, but the exhaustion of petrol and natural gas supplies is not mentioned at all, nor does the wicked waste of energy rate a mention!

Clearly the regional planners urgently need to read "The Limits to Growth", if they have not already done so; digest it, rethink the regional plan, and urgently commence a study to quantify the total energy consumed by a seven-corridor radial growth pattern against a linear Gippsland corridor based on our proposals.

What is at stake is not simply the scaling down of a freeway system due to too much pollution

emitted from exhausts, so that human health and buildings suffer, but whether the fate of man is to rely partly on the unlikely possibility of the giant oil and auto-mobile corporations voluntarily scaling down their production and profits or whether they are nationalised so that the job of energy resources use is managed properly.

In the meantime if the Government permits its regional planners to proceed with a scheme which can have no other effect than guarantee the rapid expansion of auto-mobile and oil production, it casts itself as one of the decision makers culpable of "actively pursuing goals that are inconsistent" with the the effort to attain a "state of global equilibrium".

The Evans plan for Melbourne just happens to be ecological folly. The M.M.B.W. planners have only lifted their ecological sights to the level of "environmental management" of pollution and have not reached the level of the desirability of this or that commodity or service, or the rate of its utilisation.

Cleaning up pollution-caused mess is, of course, important; but tailoring human activity to conserve energy so that survival may be possible is even more important. The Victorian Government and indeed the Commonwealth Government have an ecological responsibility to ensure that Melbourne regional planners are directed to replan.

Where is my Neighbour?

We turn now to examine the Evans plan from the point of view of its sociological implications.

Before coming straight to the point, we find it necessary to have some preliminary examination of the sort of sociological problems we consider are significant, or should have significance in a regional plan.

Some sociologists explain that physical planners find it difficult to comprehend sociological planning which because it involves freewheeling individuals and unpredictable human association, cannot be expressed in terms of so much foreseen activity requiring just such and such space located just here and there and designed just so.

Maybe they have cause to complain that the regional planners in the "1971 M.M.B.W. Regional Policies", though they set out to analyse "structural elements" that go to make up the plan, have no analyses of people's needs beyond maybe "recreation" (pp. 34-35) and the physical needs of clean water, adequate transport, serviced land and the like.

By the same token, however, the physical planners could justly take the sociologists to task and ask a positive approach. The conservationists, after all, came forward and said "we want this and that conserved"; could not the sociologists have come forward with their own plans and analyses and suggest how the plan should be modified to incorporate it? (See Appendix No. 10 on The Victorian Council of Social Service objection.)

Indeed the 1971 M.M.B.W. "Regional Policies" does have one stray sentence that poses what seems to us the kernel of one of the main sociological problems of a capitalist city: what we might call ghetto-formation on a grand scale.

"In the Central, North and West Sectors", it says in rather more diplomatic language, *"the aim should be to encourage a greater diversity in population in terms of occupation incomes and ethnic structure and any incentive given . . . and they would be needed should be towards improved levels of amenity. In the North and West Sectors the establishment of satellite cities would seem to offer one means of achieving this but the feasibility studies currently being carried out will need to be completed before firm policies are adopted." (p.70)*

We will return to comment on the solution suggested, but first a few remarks about the aim, namely a diversity in the population in terms of occupation, income and ethnic structure.

This aim, sometimes called "social mix" for short, seems to be acknowledged as desirable by most earnest sociologists, planners and other people "committed" to social improvement, and we also think it is correct, subject to certain refinements which we will come to later. In the above definition we will also include diversity of age groups and marital status when we speak of "social mix".

First, however, it is right to pay our respects to Stretton for the contribution he made to this particular subject in his book "Ideas for Australian Cities" under the title "Who is My Neighbour?", with due acknowledgement also to the un-named planners of the national capital whose attempted practices he has analysed. They, however, prefer to "contrive" the social mix by subtle techniques which would tend to lose their efficacy, they believe, if they were theorised and publicised.

Secondly, interwoven with the problems of "social mix" are problems of designing urban growth so that there is a "mix" of the real needs of the old, the housewives, the young on the one hand, with those of the breadwinners predominately male on the other; Stretton deals also brilliantly with this, taking examples once again from Canberra. For brevity, we will call this problem the "age-sex-mix" which is another of the central sociological problem of big cities or small in a capitalist society.

By this we do not mean that people of different age groups and whether married or unmarried *live* (or do not live) in the same house or in the same neighbourhood (that comes under the heading "social mix" already given) but that facilities outside of the home and the ability to get to them, are not weighted for the exclusive convenience of the affluent male breadwinner, but also for his wife, his children, his elderly parents and everyone else, to the real advantage of all of them.

To deal with the "age-sex-mix" problem first and to give a simple illustration. It is all very well for the male breadwinner, especially the affluent one; he had his "life" at work and very often after work with his mates in the pub, at sport or elsewhere. But what of his wife and children? Taking one aspect of life, shopping, Stretton gives the results of the estimated total number of local shopping journeys made by the 1000 or so housewives in Hughes, a suburb of Canberra. Nearly half shopped on foot, slightly more than half shopped by car, *all* of the children shopped on foot or by bike; all of the husbands who shopped did so by car!

There were other aspects; as Stretton writes: *"One half of Hughes had a long pedestrian way underpassing the roads and serving the school, kindergarten, sports ground and (when it is built) the church. The other half of the neighbourhood has a conventional road plan . . . pedestrian routes to the centre follow the road and cross them often. By massive majorities the women in both halves of Hughes whether motorists or pedestrians themselves, thought the pedestrian half was best planned half."*

Stretton proceeds to explain how, despite all this, a new neighbourhood was planned (by affluent male planners who had to consider the affluent male parliamentarians), which sacrificed this whole principle "to take 60 seconds off the average drive from home to local shops". The result is that only one child in five will be able to reach school or kindergarten without crossing busy streets, instead of nearly all children having to cross no more than one quiet loop-street (pp. 79-93). Summarising Stretton writes that the rejected plan *"was rejected because of the most outstanding of its many virtues; its decisive judgment of respective rights of walkers and motorists. Many planners call this 'the relation between pedestrians and vehicles'. It has more to do with the relations between old and young, between some husbands and some wives, between most mothers and their children and between authority and independence in many of the children's lives (p. 78).*

"People adapt, of course. More adults will accompany children of higher ages to school and to play. More children will stay nearer home under more supervision; those that don't will face greater danger, and their mothers more anxiety. Research may reinforce these effects. Car travel will be found to be increasing . . . so why plan pedestrian ways? T-junctions will occasion less accidents than four way intersections did . . . so why worry about more safety? Children will be safe enough at home . . . but the sparse use of playgrounds may suggest to some future economizer that playgrounds are scarcely worth their costs. Many marginal effects on housewives and old folks movement won't appear in the figures at all. Tragically, it is by these Canberra compromises that many Australians, including many planners are likely to judge "modern" neighbourhood planning" (p. 94).

Well spoken!

A society dominated by men who are dominated by the car not only dictates randomness of location of formerly clustered social facilities (as we have mentioned), but even apart from this it begins to dictate separation of wives and children and the elderly from the neighbours they would formerly have found in such a centre. The male breadwinners also suffer, because, though they may be left with their

"work mates" they lose their "neighbourhood mates" which they once shared with their wife and children.

Cutting individuals off from the social hub of a neighbourhood or dispersing the hub, leaves the family with nothing better to do than turn inward — looking towards their own self-advancement where the advertising pressures persuade most of them to accumulate the "right" consumer goods to keep "in the swing" with the Joneses. Instead of "knocking around" with the Jones and their friends, they know them merely as symbols to "keep up with" and, every family tends to be "the Joneses" for every other family.

Planners, sociologists and everyone else should be "up in arms" not just protesting but constructively struggling to overcome this situation. Just as indifferent planning (all of which has sociological implications) can aggravate the problems of suburbia, so deliberate planning can assist to solve the problems.

But it needs to be far more extensive and intensive than "pedestrian ways" to a local centre. The car will still win such a battle if only because more and more housewives and elderly people are getting them, by-passing the local cente and going further afield leaving the poorer residents in an ever-worsening predicament.

What is needed is a deliberate design and controls to re-focus activities of a social character even more deliberately than a combination of "the market" and voluntary or government organisations had ever arranged before.

Furthermore, such focal social points should be so sited, and transport so organised that many can easily reach such a centre on foot, and the rest by frequent public transport. In the concourse of such a centre, "neighbours" can become acquainted: begin, in fact, actually to be neighbours.

That is why we have headed this section not: *"Who* is my neighbour?", as Stretton named one of his chapters; but: *"Where* is my neighbour?" The very concept of "neighbour" is a dying one: planners already talk of "neighbourhoods" being a dead concept, and rightly. Potential neighbours are either locked up in their house, or off someplace, locked up in their car: either way seldom seen, and intermittantly at that, and not known well enough even to nod to.

The type of local centre we propose concentrate everything in an area serving say 10,000 into one focal point. It would be a car-independent centre, with undifferentiated spaces for concourse deliberately left vacant inviting use right within the core of the social hub. The residential area served would be bigger than a Canberra neighbourhood and deliberately so, to help make it a "livilier" place worther going to. Whilst community open-air playground should be designed as integral with housing whatever density, the more organised social activity for children, as for their parents, would be at the local heart, and all "corner shop" functions would be found in the same place.

We are describing, in other words, precisely what we mean to be the function of the mini-metro hearts in our proposed corridor Melbourne. It is a physical design that lays the emphasis on focus. The aim is social cohesion, one aspect of which is the "age-sex-mix". But the flame of social re-union around this or that purpose would not be left to burst into flame by "spontaneous combustion" but would be deliberately organised.

Now, at first reading, this last idea could be written off as not only idealistic utopionism, but as elitist-inspired utopianism at that. We will deal with accusations such as this in Part 4 of Plan for Melbourne. Here we will merely assert that social satisfactions at any level have always been organised by those with special enthusiasms, and such a conscious elevation of ones relatives, friends, mates and neighbours is not "elitist".

Indeed in Plan for Melbourne Part 1 we mentioned the social role of coaches, producers, conductors, guides and inspirers of all descriptions as an integral part of a blossoming of the people's self organisation to escape the dead-end of keeping up with the Joneses consumerism (p. 4). The type of fashionable survey that records what workers do, or even asks them what they want, as a basis for

designing needs of which they could have had no experience and therefore no inkling are barren and useless.

We make no apology therefore for a concept of proposing a renaissance of deliberately-organised social activities of all types, nor to try to heighten the involvement in such activities by as many people as possible by a transport-land-use design that quite deliberately throws as many people as possible into contact with concourse where such associations can take place, instead of shut away at home or on a lonely highway going places and getting there, only to find there is no "there" worthwhile on arrival.

A community-organised, and not simply commercially-organised, concourse centre would be the sort of place a person went, because there, one's friends would be found, there the isolated housewife could safely leave her child, re-enter the adult world and overcome her isolation; from there the students could organise their actuality contact with the near-at-hand local industries, offices, laboratories. Here would be a mixed-up centre of sport, education, entertainment, culture: handy to local workers in their lunchtime and after work, to commuters-workers and commuter-students on their way home, to mothers shopping, children after school and anybody and everybody at the weekend.

Within such concourse centres there would be places where individuals could be more private and quiet than at home . . . reading libraries, browsing bookshops, uninterrupted film shows, craft rooms, places to study, rooms for occasional care of young children at one extreme, ranging to highly organised and "participatory" excitements at the other.

As can be seen our proposals, although intentioned much the same as Stretton's ideals of age-sex-mix, go very much further with measures calculated to achieve it. Stretton's eulogisms of the house-in-garden of Australian suburbia where "child, family and adult life can use overlapping" (indoors and outdoors) "territories without too often getting in each others hair" (p. 6) may be well enough domestic satisfaction (especially with houses designed to better enable just what Stretton has described, which can be achieved, if preferred in an area much less than ¼ acre). For young children such conditions may serve fine. On the other hand, although it could be true, we cannot go as far as Stretton in asserting that "limited, amiable, neighbourliness is commoner where there are private gardens". We'd be rather inclined to believe the opposite because the gardens are often not "private" enough nor are the activities that take place in them which can, as a consequence, often provide a source of annoyance to "next door".

But in any case, the important thing is that the home is a base from which people, of all ages (from the time they can walk) set out to meet the world, and "the world" in a big city segregated into class divisions in the first place, and disorganised by the car, in the second place, must be restructured to meet the social needs of everyone, because man and woman are social animals and not just domestic animals.

Stretton analyses the distress and to the extent of his championing of the equalities needed for women and children and the poor, goes a long way towards grasping the solution, but he does not push the remedy to the point where it can win. We thoroughly agree with him in debunking the supposed value of exciting casual encounters, said to flow from higher densities. He says "The oddest idea of all is the illusion that the strange encounters are always more 'creative'. Life as a long Cocktail Party is usually for consumers not creators. Most of the creators I know . . . poets, organisers, discoverers, and other originals . . . draw inspiration from the depth of a few relationships, not from an incessant pursuit of first nights" (p. 18).

Agreed, but this truth seems to act as a bottleneck for Stretton's thinking. There are all levels of degrees of "creativiness' short of "originals". Creativity is a product of social stimulation, not of hermits, or of women cut-off and abandoned in their house. Everyone yearns for an appreciation of their efforts if it is only from the "depths of a few relationships" of like minded people.

But where people have been cut-off from a real opportunity of discovering the particular way of "doing their own thing" amongst others trying to do similar things, the relationships need to be organised; or expressing the same idea in our terms, "collectives" need to replace the loneliness of disorganised living, however gregarious that disorgansied living may appear to be.

At least, though, Stretton poses the problem. Fraser seems to have no idea of structuring to defeat

the destructive dispersion wrought by the car in its impact on the suburbs, beyond the deliberate focusing of major industrial commercial and other facilities clustered in metro-towns.

This comment may be somewhat unfair to him because we gather our impression from the official 1967 T.C.P.B. report, "Organisation for Strategic Planning"; but it is fair to say that if he does entertain such notions, he does not elevate them, as we do, to the importance of strategic framework planning.

There seems to be nothing in the 1971 M.M.B.W. "Planning Policies for the Region" that really corresponds with anything approaching the concept of design of mini-metro hearts and city-metro-hearts, positioned on the stations to help achieve the "age-sex-mix" nor even the deliberate cluster of major facilities of Fraser's "metro towns".

There is a generalised statement of an organisational principle that could apply to scattered car-determined metro-towns growth as well as to any other form. "The growth corridors must not simply be new dormitory areas where residential settlement will occur, but dynamic growth areas where all forms of urban development must be positively encouraged. Each corridor will need to develop its centres of specialised activity around which new communities will be established having all modern amenities and facilities, such as schools, recreation, hospitals, and shopping facilities, industrial and commercial employment and professional services" (p. 68).

The proposed "Statement of Planning Policy" by the M.M.B.W. on the management of urban areas suggest an "outline development plan" for detailed planning of corridors in which the principles are even more generalised and vague (p. 102) and the fragmentary "Outline Development Plan" diagram for Berwick shows only "commercial areas" and schools nothing at all clustered, only roads, and no railway (plan 7, p. 56).

For us, however, the "age-sex-mix" and all that that implies cannot be achieved without structuring the corridor into car-independent easily-accessible mini-metro concourses as described and all that that implies. This should be planned as an integral part of corridor Melbourne. It cannot possibly be allowed to rest on the chancey adoption by way of compromise with a local planning authority (whose ideas to start with are often a compromise with local speculators and commercial interests) as part of an "outline development plan" machinery proposed.

The "age-sex-mix" problem exists, to one degree or another, irrespective of "occupation, income and ethnic structure" to use the words of the M.M.B.W. report. Now consider the associated problem of "social-mix" of different occupations, incomes, ethnic groups and age groups.

We have deliberately deferred the issue of "social mix" because we regard its solution to be partly found in the solution of the "age-sex-mix" problem.

Groupings of the rich, or the poor or the Italians or Turks or Englishmen, or of professional people, industrial workers, or white collar workers, or of young people or elderly people often occur by choice and are not only harmless but healthy when based on a small group of like-minded souls with similar life-styles who regard it as an "amenity" of life to locate near each other so, they can "pop in" to see each other without "getting in each others hair" as they might if they lived in the same household.

But if such small and natural groupings begin to grow big and exclusive as a defence mechanism in what is felt to be an alien and hostile world, then this is unhealthy both for those inside the ghetto and those outside. What is to be done to overcome or circumvent such developments?

Stretton describes how Canberra planners tackled one aspect of such a problem. Early Canberra had its early suburb "Red Hill" (like the "Toorak" of Canberra) and its "Narabindah" where the poor lived.

What happens now however, is that there is a carefully continued release of subdivisional leasehold sites for auction. The highest bidder is tied by a covenant attached to the leasehold to build a house to a certain value within a certain time. Some of the best land is cut into bigger blocks on which a house of a higher value must be built. There are other good sites on which moderately priced houses must be built and other blocks for lower-priced houses. Naturally the better blocks tend to go to the richer

people and the blocks with the covenant for lower priced houses go to the poorer, so inequality in this sense is built into the system.

Nevertheless the system does mean that a mixed range from rich to poor settle down together on one estate development, the children share the same schools, the housewives the same shops. Commercial and social facilities which the rich expect to bestow upon themselves are accordingly organised and financed disproportionately by them and are enjoyed by the poorer and middle income groups.

Stretton in a forthright attack on the snobbishness inherent in the philosophy of segregationists, comes out strongly against either segregated suburbs or segregated schools (pp. 103-104). In all of it, he emerges strongly as a humanist, and he is certainly not biased against the values of the poorer workers. More than once he mentions the values industrial workers can give to the more well-to-do.

For example, he writes, "From poorer neighbours, affluent children may pick up better politics, mechanical skills, and social capacities than their snobbish schools offer them" (p. 106).

In his own Australian-suburban style Stretton is as impassioned a diversificationist as is Jane Jacobs for her sky-high densities in New York in "Death and Life of Great American Cities".

Both regard the capable and successful citizen with means as one of the chief ingredients, Stretton refers to them as "obstinate succeeders" . . . "the same sprinkling of affluence", he writes, "can make a critical difference to the quality and variety of service and social activity that the district can support communally or attract commercially" (p. 117).

"Cities grow the middle class" writes Jane Jacobs. "But to keep it as a stabilising force in the form of self-diversified population, means considering the city's people valuable and worth retaining, right where they are, before they become middle class" (p. 296). She is no snob either, Jane Jacobs. She likes the working class. But she sees their value rather as potential home-grown middle-class, who according to her, should be encouraged to stay where they "made good". The neighbourhood can benefit by their initiatives in "unslumming the slums" instead of losing them to the so called "better" suburbs.

Now we are as strong for "social mix" as Stretton or Jacobs, we are as keen on diversification and are as opposed to segregation (see Plan for Melbourne Part 2, pp. 101-105). But we see it rather differently from either Stretton or Jacobs.

Jacobs quite definitely regards initiative as a characteristic to be found uniquely in what she calls "the middle class", a concept that emerges very strongly indeed in her book "The Economy of Cities". Stretton nearly falls into a similar position. When speaking of an improved range in paperback books stocked by newsagents in "mixed catchment" areas he writes "A majority of working class customers may scarcely notice the difference, but some of their bright members and youngsters and quiet wives, will find enlightenment which wouldn't be worth stocking in the shops of a working class ghetto." He apparently cannot mentally equate the "affluent" with the "working class" (p. 117).

In Melbourne, in our view, "the working class" has been gradually changing in structure until now it clearly consists of three components (i) the industrial workers, (ii) white collar workers and (iii) professional workers. True, a minority of the white collar people and may be a bigger proportion of the tertiary-trained professional people, do not form part of the working class because, despite the fact most are "employees" by an extension of the division of labor of the functions of employers or the "establishment" they operate in part the decision-making functions of the employers or governments. Other structural changes are taking place with each sub-group, for example, within the industrial working class are emerging those with higher and more diversified skills than previously.

Without trying here to quantify the proportions or prove them, we will stick by our figure in the preface that at least 80% of Melbourne's breadwinners are industrial, white collar or professional workers forming part of Melbourne's working class.

Within the working class so defined are to be found skills, initiatives, and culture that equal anything to be discovered in the other 20%, many of whom, these days, are not even distinguished by "education", but only by position.

The significance of this way of looking at the problem is that, within the 80% almost all sections have something to learn from all other sections. Embracing also the small and middling-sized industrial, commercial and services enterprises, so prized by Jane Jacobs (which would consist of say another 15%) the resulting 95% are quite capable of running their own suburb, or indeed, for that matter, are capable of "running affairs" generally.

With many notable exceptions, it is from amongst the remaining 5% that is to be found the source of snobbery, status symbols, class distinctions, swanking it and exclusiveness that lies at the basis of the conscious or unconscious immoral segregationalist policies so loathed by us and by Stretton and Jacobs. Those of the middle class who most ape the 5% are the "organisation men" and their wives, and the middle class cogs in the corporation "chain" stores and the like.

This rotten outlived philosophy of privilege and authoritarianism is not so obvious and visual as in the days when it was represented by outward ostentatious pomp and ceremony, but is now more subtle and to be found in attitudes such as "it's not what you know, but who you know that counts". And, of course, to get to know the "right" people, well, how better than to ape them, smoke the same brand, take an overseas trip, drive the "right" car?

Here is to be found the source of consumerism which is the core trouble both ecologically and sociologically, and this life-style penetrates deep into all sections of the 80% whom we regard as the working class and the mass media has a multiplier effect in accentuating it.

The anti-dote to "consumerism" is the "collective" around some purpose or other where the different ones involved, each contributing in their own style and at their own level carry out some commonly desired purpose. The "social mix" of all sections of the workers, and of the innovative entrepreneurs, can assist this process. Those professional workers who have had the opportunities for higher training and qualifications certainly should contribute stimulation and imagination both teaching and learning from those who have opportunities for manual, administrative and machine skills involving a no-fuss ability to get things done who have to both teach and learn from the professionals.

The mini-metro concourses, and for more specialised or advanced activities, the city-metro concourses are intended for just this. *Moreover, we have quite intentionally coupled "ecological and sociological" in our heading because they need to be treated as complementary facets of the same problem from now on.*

Whilst many collectives in the concourses of corridor Melbourne could no doubt be formed from the traditional type of citizen spare-time activity around sport, "hobbies", craft, education, culture of one sort or another, special "ecological — sociological collectives" are desperately needed. Many of them are needed involving people at every level from organising their neighbours in the humblest personal examples to the highest professional expertise.

If it is survival that confronts our grandchildren, is there anything more pressing than such a task? If some sociologists or those who say they stand for complete freedom of the individual remonstrate with us and say "an outrageous idea! It is imposing your elitist ideas on other people" or "it will just be another bureaucracy", we will rejoin "Fine! Yes . .! It's an elitist bureaucracy that involves *everyone's* participation that we are after!" and leave it at that, until we get to "Plan for Melbourne Part 4 where we will deal with participation in planning more extensively.

Think, for example, of the problem of establishment of big new industries in corridor Melbourne — and every industry *there*, would be a new one. Searching questions should be asked, and answered, and the questions should not come only from the shareholders, the Government or the Environment Protection Authority. What product is to be made? Is it really necessary at all? What parts of it are superfluous, gimmicky fashion rather than utility? Is there obsolescence "built-in" to the product, or could its design or materials be improved to last twice as long? What are the by-products? If they are useful, are they to be used or wasted? If they are harmful, how are they to be treated, or could the very technique of production be modified to solve the problem?

If we hear a horrified exclamation from a big shareholder or senior public servant "That's nothing to you!" our retort is "Ah, yes it is! It has to do with our grandchildren! If that's your attitude you

are not responsible enough to be in charge of such an undertaking."

And if a more thoughtful sociologist objects; "Maybe, but why call it 'sociological'?", we can observe that the common emergency of World War 2 turned out to be a great "social mixer". Australians fraternised with New Guinea natives and Indonesians, as well as Americans and French. Married women went to work to "win the war" while other married women grouped together to look after their children. Older people started up Red Cross activities, collecting and sending parcels. The ecological emergency, as soon as it grips people, as it will have to inevitably can have the same transcending effect and the sooner the better!

For those who think the factory-scrutiny proposed too tough an exercise except for the workers who work there, the consumers who use its products and professional and technical people with a knowledge of technology and ecology, then we recommend the booklet "What Can I Do?" being "Guidelines for Citizen Action on Environmental Problems" producted by the Australian Conservation Foundation.

This is packful of simple personal ecological-type rules and tips for acting which could well be studied by housewives and househusbands and made the basis for organising their friends and neighbours to decide how best to carry out the suggestions. There is enough in this booklet to give common sense ingenuity a good "take-off" point in a dozen directions.

Of course the Gippsland corridor does not depend on ideas like this, because "ecological-sociological collectives" could be formed anywhere in Melbourne, right now, and whatever the growth patterns.

However, we agree with Chermayeff's concept of "concourse" and his further concept that humans have to "get to grips with themselves", as it were, before they can become aware quickly enough of the devastating damage they are forcing on the eco-system in time to take the corrective measures, and that "concourse" is the only way he can see this happening, (see Appendix No. 6 for quotations from Chermayeff in this).

In our view, the Gippsland corridor is fully justified, ecologically, by the immense saving of energy, and fully justified sociologically (creating opportunities both as to "age-sex-mix" and "social-mix") within the mini-metro concourse the conditions for which would be optimised by the elongated corridor.

As a bonus, however, it happens, that such a future organisation of the city on the basis of concourse could create the best imaginable conditions for a revival movement mobilising all people of good will around ecological goals and in the process hasten the transformation of "opportunities" for "age-sex-mix" and "social-mix" into realities.

However, we believe that Melbourne's problems of "social mix" for example as regards non-English speaking migrants and as regards the iconoclastic section of youth are far more intractable problems than Canberra's more homogeneous population on the one hand or Jane Jacob's cosmopolitan Greenwich Village within New York, on the other hand. So we turn to a special subject: the segregation of the north and west from east and south.

THE DEPRIVED WEST

Quite apart from small voluntary ghettos of migrants in many suburbs, and apart from the more systematic and larger Government-made ghetto on Housing Commission estates, ghetto formation is, in fact, taking place in Melbourne and on a large scale at that.

Unskilled and semi-skilled migrant workers, for example, are filling up the new suburbs to the west of Melbourne.

"Suburban West" sector in 1966 had 36.1% migrants as against 10.9% in 1947. The 1971 census figures will no doubt show a still higher percentage (1971 M.M.B.W. "Regional Policies", p. 105).

Taking the composition of industry in the "west suburban sector", "manufacturing" predominates with 62.1% in 1966 (the highest percentage compared to other industries in the sector than any other

sector in Melbourne) and other "industries" and services (except "building and construction" and "defence") show the *lowest* in Melbourne, including "transport and stores" (1.4%) "communication" (.4%), "finance and property" (.7%), "commerce" (9.2%), "community and business services" (2.8%), "amusements and hotels" (2.7%) [p. 108].

The sector called "inner west" is a similar pattern but not so pronounced. The west as a whole is heavily manufacturing and therefore industrial working class, of which something like $^1/3$ at least are migrants.

And so the west, like a ready-made object-lesson from Stretton or Jacobs is "deprived" of all manner of social services compared to the rest of Melbourne. It is not only us who have been saying so for years.

The "west" itself, now says so. It ran a seminar in May 1972 organised by the Lion's Club and a local newspaper (the "Sunshine Advocate"), but sponsored and addressed by several prominent local Labor Party spokesmen. It called the seminar "The Deprived West". For public interest we include in an appendix a few brief points taken from the many excellent papers delivered to the seminar to give some indication of the character and extent of the deprivation (see appendix No. 7).

So, there is a whole range of "deprivation" from which "the West" suffers and, at last, the West is stirring, not before time, to demand a place in the sun and absolutely right! But why did this deprivation arise?

If you accept Jane Jacob's analysis, she would no doubt say it was because there were not enough "middle class" people with initiative to organise the community to raise its standards. Stretton might say there were not enough affluent "succeeders", i.e. people who succeed, meaning by implication that there were too many "non-affluent" workers.

But we do not see it this way. Many people loosely talk about the "middle class" when what they really mean is "middle income groups". If they stopped to think about it they would appreciate that most of the people in the middle-income groups they have in mind are actually higher paid workers of hand or brain. That is, they are part of the working class.

As we see it then, the West is deprived because it has not had the advantage of a reasonably balanced cross section of working class people.

We reject the concept that the working class, taken as a whole, has insufficient initiative and imagination to organise its community services without the help of the "middle class".

In fact young teachers, journalists, and welfare officers, the very type of working class forces that the industrial workers of the west have lacked were involved in helping to stir up the movement which resulted in "the deprived west" seminar, which has left behind it continuing activity committees to raise the standard of services in these suburbs, which goes to prove our point.

Looked at, from the point of view of class structure which is one aspect of "social mix", therefore, the west and north, compared to the east and south has been "deprived" of a reasonable quota of more highly-educated sections of the white-collar and professional workers, whereas the east and south, and especially the middle suburbs have suffered their own deprivations from the imbalance in the other direction, lacking their complement of industry and industrial workers.

This is being corrected now somewhat from the Nunawading — Oakleigh — Moorabbin axis outward. For example, factory statistics show that for "industrial metals, machine and conveyances", that is "heavy industry", the southern sector from 1961 to 1966 shows a percentage employment change of an increase of 8.6% in those five years which is the highest change for any industrial group in any sector (1971 M.M.B.W. "Regional Policies, p. 110).

The fact is that of the 80% of the working people, it is not only the white collar workers and professional workers, it is also industrial workers who prefer to live east and south.

Why should industrial workers be forced to live in the west just because this is cheap land for industry? The rich choose to live in what all authorities acknowledge is by far the most desirable residential areas to the south-east. Why should not also the poor? Why not encourage industry of all types to develop towards the south-east where people want to live?

This argument, which is our argument, and which is *one* of the reasons we propose that the linear growth corridor be towards Gippsland rather than north or west, was precisely the argument of the M.M.B.W. in the 1954 report!

Having made a special survey it said . . ."*The strong preference for the southern suburbs, the increasing popularity of the eastern suburbs and the small proportions who chose to live in the western suburbs are noteworthy.* "(M.M.B.W. Planning Scheme, "Surveys and Analysis", p. 49), and they set out the reasons, already quoted by us. The M.M.B.W. Planning Scheme "Report", 1954, in explaining that 86% of all industrial employment was then located in the central western and northern districts coupled this fact with increasing popularity of eastern and south-eastern suburbs and drew the conclusion that this has "resulted in the worker being compelled to do much unnecessary travelling to and from work" and went on: *"The Planning scheme endeavours to rectify, as far as is practical, this adverse feature of metropolitan development by distributing new industrial areas throughout the outer suburbs"* (p. 47), and proceeded to make provision for industrial zones in Moorabbin, Oakleigh, Noble Park, Dandenong, Nunawading and Ringwood.

The 1967 Town and Country Planning Board's "Strategic Planning" report supports the same basic analysis . . . *"The early establishment of the port and adjacent major railway yards encouraged industrial development to concentrate in the central and western areas of Melbourne. Some residential growth, having mainly industrial workers, accompanied industry to the west of the City, but the bulk of it was attracted to the more climatically equable, undulating areas to the east, and bayside areas to the south of the city . . ."* ("Strategic Planning", p. 7) and went on to report that industrial growth in the south-eastern and southern areas, including that outside the Board of Works planning area, "absorbed over 75% of the metropolitan increase in the 1961-1966 period" (p. 8).

This concept, in fact, of the more pleasant country-side and, manufacturing following "labour, services and other linked industries to the eastern and south-eastern areas" lies at the basis of the Fraser concept of the Gippsland corridor.

Stretton, in his own inimitable, stylish penetration which pulls no punches goes a long way further than the 1954 M.M.B.W. report and the 1967 T.C.P.B. report, but in the same direction. *"The price of an exclusive suburb is a slum somewhere else, and all planners know it,"* he says.

Throwing scorn on Melbourne's so called "tough sophisticated realists "who defend the inevitability of segregation he writes: *"Their old city was centred where forty miles of basalt and delta plain met forty miles of valleyed hills and sandy beaches. As the poor spread thickly over the plain and the rich thinly over the hills and coast, neither love nor justice had much chance. Realism won without trying. To its topography Melbourne may owe a good deal of its past and present unkindness to its poor . . ."* (pp. 123-124).

Nor is this all: support for the same line of thinking comes from a most unexpected source, and in two ways. It comes from the M.M.B.W. itself!

We mentioned earlier that the 1971 M.M.B.W. "Regional Policies" report displayed a curious misgiving about the Evans "go west" philosophy despite the fact that this is the main substance of the planning scheme amendments now recommended! In Plan 9 on p. 69 the report depicts two alternatives. Alternative 1 which the Board of course dutifully "favours" shows schematically possible growth concentrations *within* the seven corridors with equal "concentration" whether to north, south, east or west. Alternative 2 which "involves the encouragement of selective growth" speaks of "concentrating public resources" and it says "the south east corridor would be an obvious choice for this". But it hastens to add, mindful as usual of Evans and the Government that this would only involve a "larger allocation of public funds for a period of time". The West apparently would wait its turn in the queue! (See diagram on next page for "Plan 9".)

Figure 4 — Plans taken from 1971 M.M.B.W. "Regional Policies".

Alternative 1

Alternative 2

Urban Structure

PLAN 9

3. Possible Long Term Urban Pattern
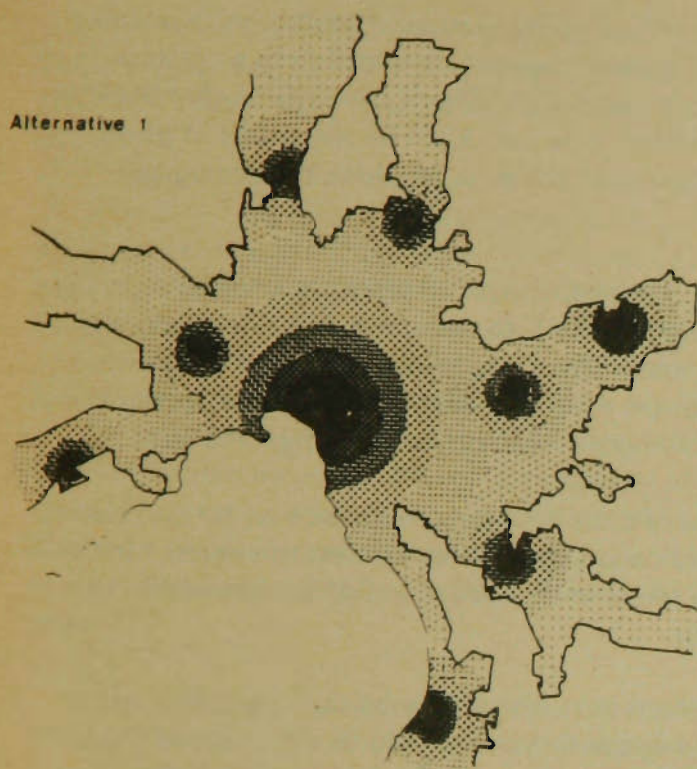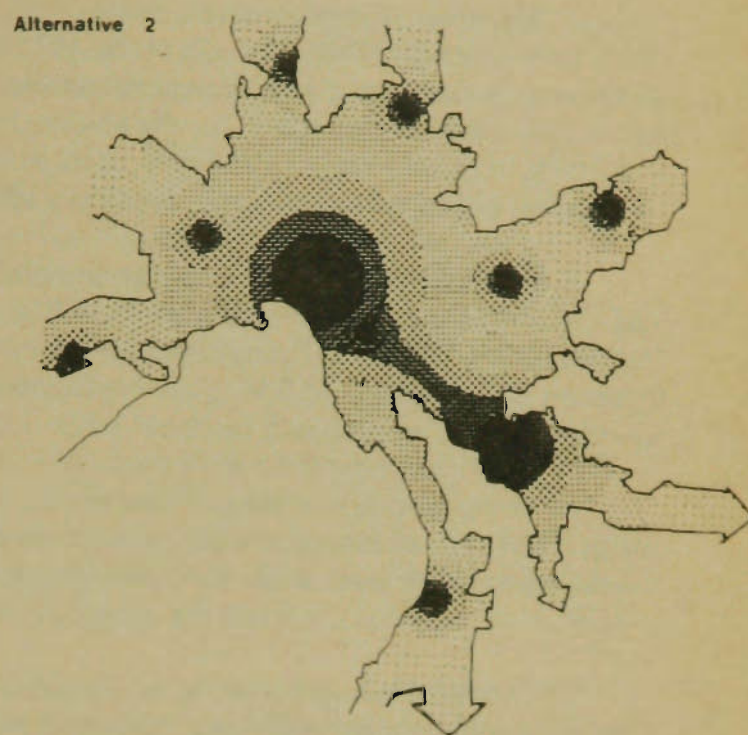
The Long Term Future — Plan 10

Figure 4 — Plans taken from 1971 M.M.B.W. "Regional Policies".

As Prof. F. Ledgar remarked to the M.M.B.W. February seminar: "I got the impression throughout that in every case where alternatives are proposed, alternative one is the course that it is feared will be taken and that Alternative Two is that which is desirable but which may not be capable of achievement. It is as if those technically responsible for the proposals have said to themselves 'this is what our masters will expect and accept but this is what in our hearts we believe should be: therefore let us put it in so that we, too, keep our options open and hope for the future alive'!" (Seminar Proceedings, p. 18.)

The other strange misgiving comes from the M.M.B.W.'s prognostication of Melbourne's possible "long term future" in Plan 10 p. 73 of the 1971 "Regional Policies" showing, in addition to a corridor all the way to Geelong, a great elongated corridor into the Latrobe Valley. One is immediately tempted to ask: if this is the right direction for the abiding long-term pattern, how can there be any profit in going short-term in other directions at higher costs even by the traditional critiques let alone the ecological-sociological critiques? (See diagram for "Plan 10".)

With all this weight of evidence and planning sense, some of which still seems to emanate, albeit in muted tones, from within the M.M.B.W. planning section itself, the question is not so much how the 1967-1971 M.M.B.W.-Evans radial corridor plan to west and north came to overthrow the whole direction of the 1954 M.M.B.W. planning (we have suggested it is a compromise bowing to the pressure of speculators), but what should be done? What is the right sociological solution for "the deprived west"?

From the point of view of "social mix" in the sense of class structure and basically, for us, from the point of view of mixing the 80% of workers in reasonable proportions, it is hopeless to suggest further development to the west or north. Doing so would not even result in an equitable distribution within the industrial working class, still less the working class as a whole.

The reasons might seem to have been established clearly enough already by our argument, but as there were some undertones in the "Deprived West" Seminar suggesting this should be done, especially as they came from some who are earnestly and courageously doing their best to rectify the wrongs done to the west, some further analysis is called for.

What sections stand to gain, for example, by an intensive subsidised drive to develop an urban corridor due west to Melton or satellites at Melton or Sunbury?

Firstly, and obviously, developers and would-be developers who own land in this direction and who expect to profit from the plan.

We do not regard the capitalist profit-making system as a whole a defensible one, but as profit-making ventures, this practice ranks as quite obnoxious from a planning point of view because it inflates the price of land, which in the conditions of Melbourne, also means the price of workers homes.

Secondly, there is a specialised need by established manufacturers or would-be manufacturers in the west to attract top executives and technical staff to work in their plants.
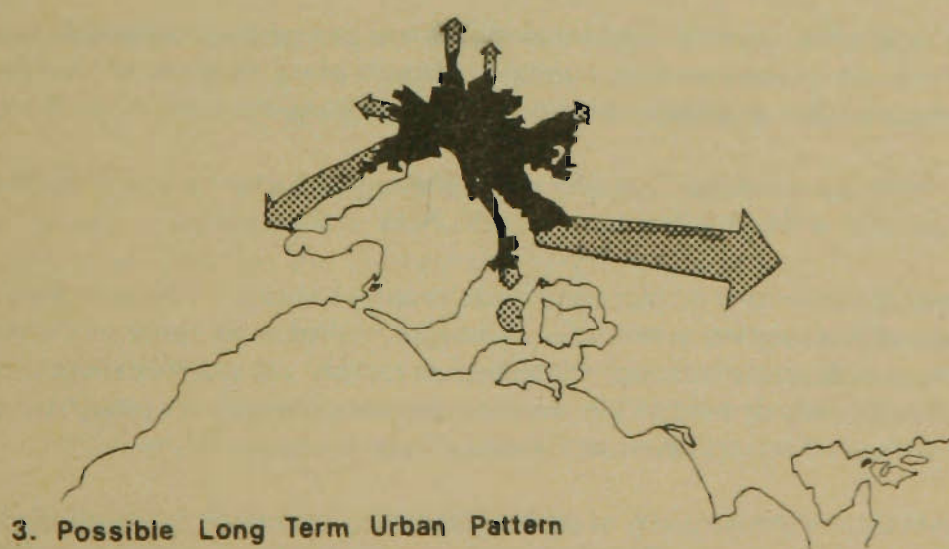
Ever-increasing commuting distance and deteriorating transport, however, have meant a relative drying up of the flow of this migratory executive and higher-skilled work force to the west. Remedies advanced by the school of Stretton's "tough sophisticated realists", as can be expected, do not contemplate such elite actually coming to live amongst the low-paid migrant industrial workers on a flat barren windy plain with poor soil and even worse educational institutions.

Relief is seen by the industrialists as coming from two directions . . . from the Westgate bridge, or possibly from some little separated "Tooraks" or "Red Hills" at Hoppers Crossing, Werribee, Melton or Sunbury.

As Mr. C.A. Wilson, General Manager of the Lower Yarra Crossing Authority explained to the "Deprived West" seminar: "Industry in the west will be far more accessible from the south-east. This can be expected to provide a much greater potential labour force pool, with a wider range of skills. This will encourage a more diverse range of industry in the west, and accelerate industrial development which, despite cheaper land prices, has been deterred by the unattractive labour force situation (Paper "Industry Employment and Transport" at p. 3).

So too, in the 1971 M.M.B.W. "Regional Policies" statement already quoted "the establishment of satellite cities would seem to offer one means of achieving" the "greater diversity of population" which they say is desirable for the north and west (p. 70). As no other means are even hinted at, it would seem the M.M.B.W. is *really* concerned not so much with desegregation as with supplying the needs of industry in the west to make the Evans plan a feasibility.

In an otherwise "soft, sympathetic" though sophisticated analysis the design team on the "Sunbury Study", prepared for the 1972 Australian Architectural Convention struggle with the problem of attracting higher socio-economic groups even to a satellite and come down with a "hard realistic" solution.

"... whereas a blue-collar family may move into an area of middle income residents, the reverse is almost never true . . . therefore considered essential that initially, Sunbury develop an image based around development for higher and middle income groups . . . in the expanding industrial area around Broadmeadows and Tullamarine, where there is a concentration of highly skilled technical, professional and managerial work, which includes the airport, Fords, Ericssons and Nabisco . . . there are few suitable residential suburbs in this area to cater for the executive labour pool."*

"Sunbury could provide just such an area. However it has been shown that amongst the middle classes, there is a cultural prejudice against the flat dull areas of 'industrial' north and for many people Sunbury is vaguely included in this area. Therefore it would be necessary to conceive and project Sunbury as a development, completely separated physically and psychologically, from these northern industrial areas."*

"Maintaining an undeveloped green belt between Bulla and Tullamarine would probable make this possible. Sunbury could then be projected as a dormitory suburb for the higher and middle income groups commuting to work in the northern suburbs"* ("A Study Case for An Australian New Town", pp. 73-77).

In the light of this line of reasoning, it is instructive to note that the 1971 M.M.B.W. "Regional Policies" in Plan 6 at p. 54 advance "development alternatives" for the Melton Corridor. In the Second Alternative there is a Melton satellite cut off by a Green Belt from the rest of the corridors which is no doubt contempalted to separate it "physically and psychologically" from the deprived west and make it the "executive labour pool" as at Sunbury.

Interesting and all as it may be to big industry in the west and north to build the Westgate Bridge and create a "swinging set" in Hoppers Creek, Melton or Sunbury to attract an executive pool, this has no bearing, as can be seen, on the existing segregation in the western and northern suburbs.

Sociologically, as we see it, it is only compounding the deprivation to "develop" corridors to the west and north. The "social mix" taken all over Melbourne as a whole will grow more pronounced, the east and south becoming more exclusive and the west and north more deprived.

We ask our friends in the west and north a few of whom talk enviously about getting "their" share of "development" how on earth can industrial and commercial development, that is, development of capital benefit the working people? A development of "social mix" of the working class can, but a development of capital simply does not achieve that. Rather it accentuates the "social un-mix".

Capital and population development will not desegregate their suburbs which will not only continue to be lop-sided but will become a bigger conglomeration still of lop-sidedness making it still more difficult to overcome the deprivations. What benefits will satellites, lower Yarra bridges and freeways bestow on them by connecting the factories of west and north with pools of executives and highly skilled workers from dormitory satellites or the south-eastern suburbs?

The deprived workers of Fitzroy and Collingwood were no better off when Melbourne developed eastwards to Ringwood, nor did the deprived workers of Richmond benefit because Melbourne sprouted beyond them to Dandenong or Frankston. The workers of Sunshine and Altona will not benefit by a dormitory satellite at Melton for a pool of executives, any more than Richmond benefitted from Toorak.

To demand a Melton corridor, or dormitory satellites will do actual damage to the cause of overcoming the deprivation of the west and north, it will make the efforts to attain "social mix" more and more illusory.

HOW TO SOCIAL MIX THE WEST AND EAST

If it is not possible to overcome the segregation of the north and west by simply adding corridors to them, it is fair that we should answer the question. Then what should be done to overcome the deprivation?

Further, if it is true that the sociologists and planners of the Sunbury "design team" study found such subtleties associated with forming a "social mix" even for a brand new and geographically separated town, how can we expect to achieve such results within the continuity which would be the Gippsland corridor proposed by us?

We shall deal with each of these questions in order.

1. Desegregation of the West

Taking the three components of the working class (i) industrial workers, (ii) white-collar workers and (iii) professional workers (as defined above), the basic problem of "social mix" for us is this.

How to attract a greater proportion of higher skilled industrial workers, and white-collar and professional workers to reside in the west, not in suburban "enclaves", but integrated with the community that now tends more and more to consist of lower-paid non-English speaking migrant industrial workers?

It should be understood, before we start the answer, that when we say there should be no corridor growth to the north or west, we are not saying that absolutely no more homes should be built as from now on. Subdivided serviced land ready now for the builders, whether residential or industrial or land for which the preparation for sub-division and servicing is so far advanced that it would be wasted effort to contemplate cancellation of planned growth, would still be available.

But, the zoning of land, even in the present planning scheme for which there has been, as yet, no such preparations, and unlikely to be required for the purposes outlined below, should be reviewed with a view to re-zoning for some non-urban purpose.

There would be therefore, according to our proposals, room for some limited further growth to the west and north to "round off" present developed areas, and room therefore, for a certain amount of flexibility; which is an entirely different concept to adding 300,000 people in the north and west to the 300,000 or so already residing there within the next generation.

Now the question is: is the Jane Jacobs recipe for evolving from within a neighbourhood a home-spun "middle-class" who then "make good" and drag the neighbourhood up with them, or the Stretton recipe for judicious mix of all income groups within each primary school catchment area, the *only* methods of overcoming deprivation?

We suggest not. Our recipe is as follows:-

1.   Innovative community-controlled health welfare cultural and educational services.

2.   Innovative community-controlled "open university" with special training in service industries.

1. Innovative Services

What is to be done?

As a result of the "Deprived West" seminar a number of new vital organisations are taking action to improve the situation. Action groups have been formed for Health and Welfare; Education; Water and

Sewerage; Environment; Industry Employment and Transport. If we could pin point a possible weakness in scope here (a weakness, incidentally, which sometimes creeps into our own formulations), there is no specific group for "art" or "culture", using these words in their widest and best meanings, although there could no doubt be an overlap both with "education" and with "employment".

Councillors, teachers, social workers and leaders of service clubs are sharing the responsibilities of leadership in these action groups. This is a welcome new feature in the politics of the west.

In addition to this, another welcome new feature has appeared in the Sunshine area in the shape of new types of social welfare organisation which are now being co-ordinated in the Community Service Board which is a representative organisation of Councillors and citizens.

The Sunshine Council made a submission, thanks to the work of this Board, to the Consultative Council on Preschool Child Development (appointed late in 1971 by the Victorian Health Department to enquire into the health, welfare and education of preschool children). The document states: *"The Sister-in-Charge of the Baby Health Centre recommends that she have seven more sisters so that each Centre could be open more often; also, so that it could provide the following services — toddlers group (where mothers and toddlers can meet with trained staff), marriage guidance, lectures on preparation for parent-hood, ante-natal course, family planning and a referral scheme where Sisters may refer cases to the appropriate department." "The Committee recommends that Infant Welfare Centre be changed to Family Guidance Centre (they do not like the connations associated with 'welfare')."*

In another section of the same report it is stated *"That day care facilities be available in centres providing full-day care, occasional care, kindergarten care, before and after-school care and holiday care close to the Family Guidance Centre, with child development principles incorporated in all aspects of planning."* And a very significant statement, indeed, from the same submission: *"That voluntary and other organisations be encouraged and co-ordinated in working to meet the needs of the community and that these organisations be NON-FUND-RAISING as this detracts from the real interest in a project".* (pp. 2—7).

It can be seen from such a report, prepared by a group of local citizens in the west that the actively interested people are not thinking only of "more-of-the-same" type of facility. Rather they want facilities dovetailed into the real needs of the people in the 1970s. On the other hand, a very positive feature of this type of report is that professional workers and local committee members are emphasising the need to use existing services, but extending the hours they are open and adding new types of services.

Thus a spark is beginning to kindle in the west. It has been lit partly by the white-collar and professional workers, some of whom such as teachers and social workers have deliberately chosen not only to work in the west but also to set up their own home in that area. Such people play a vital part in kindling the spark. But only by the creative efforts of the local people will the spark burst into a flame which can make any significant improvement.

No doubt some gains will be won to improve the worst anomalies. "More-of-the same" is needed and can be won. But, as shown by the example of the Preschool submission, an improvement of the existing services, even positive discrimination to ensure that the west has health, education and welfare services as adequate as the east, will not provide for the west the facilities which are wanted not only to overcome the obvious deprivation, but to make a qualitatively more appropriate contribution to life of the citizen. For example, the Sunshine Child Care Committee want not only more Infant Welfare Sisters, who work in the traditional way of the past, but a different type of service so that the Infant Welfare Centre is much better integrated into the community.

The attention that has recently been focussed on the west should also result in increased support for improvements from people and organisations in south, south east and other parts of Melbourne. Over the past years organisations such as the Victorian Council of School Organisations, the Victorian Federation of Mothers Clubs, teachers organisations and students organisations have campaigned for more equality for educational opportunity. Also notable for pioneering specifically in the West have been the efforts by the Butchers Union to establish a health clinic and to run art festivals. All such support is indeed helpful and may serve to fan the spark, but, as stated above, the problem is to keep the flame burning, not only through

achieving some amelioration, but through the active participation by the people who live in the west in the planning and provision of their own services.

Even "more-of-the-same" improvements cannot be sustained by "external caretakers" (See appendix No. 8), nor by a general Victorian-wide altruistic campaign shouldered by state or national organisations. Still less can innovations be so sustained!

The point is that if there is "positive discrimination" in the treatment afforded the West, that involves genuinely innovative services of a character that are custom-built to engage the active support and involvement in their control of the people for whom they are intended, it will attract to the West many of the finest "service" and "professional" workers who understand that further advances in their own field lie precisely in this direction.

This could **begin** the process of correcting the deprivation caused by too big and unrelieved a concentration of lower-paid industrial workers, by giving an accelerated impetus to creating a more typical cross-section of workers.

However, such an amalgam within the working class can only happen successfully if the "new" workers from "foreign" southern and eastern parts "mix it" in the crucible of common purpose, which can only be done if emphasis is always laid, and practised, on community activity to support and control their own services.

To clinch this process of correction so that it begins to derive its **source** from the West itself, and does not rely on imported "labor" from outside, we propose a second measure, namely:

2. Innovative Service Training

To match the innovative-type services organised as outlined above, we propose an innovative community-controlled "open university" with special training in service industries.

At the outset it should be stated that the West is deprived in that there are no tertiary educational institutions except the technical schools. For many years there have been requests for a teachers college, a kindergarten college and a university; also there has been a continual campaign for another hospital, (which is in effect also a tertiary educational institution). Mr. Keith Kosky, a member of Sunshine Lions and one of the active sponsors of the "Deprived West" seminar says that there is a 500 acre site in South Sunshine "where there is a natural lake that can be enlarged and made into a beautiful setting for a modern university". (Footscray Mail, May 24th 1972) and Mr. Col Thorpe (Convener of the West Education Action Group) pointed out in the same article "that land has been set aside for a teachers college near St. Albans, but so far all that existed was bare land".

Dr. Jenkins said in his paper to the seminar: "Historically land has been held in Sunshine for a new hospital since 1961". So here at least are three sites which may be suitable for tertiary training institutions . . .

The fact that to date, the west has been deprived of tertiary educational facilities can be turned to an advantage. Completely new types of educational centres can be provided. There is need for innovation, not only in the training of school teachers, and kindergarten teachers, but also in the training provided for the maintenance of the health of the community.

There is need not only for changes in the curriculum, but changes in the type of student to be attracted. We are entering a period when there will be many more people who regard education as a continuing process all through life: the provision for the education of mature age men and women is now on the agenda.

In addition new fields of employment are opening up. There is the shift to the service industries. To date the main emphasis of the shift has been to provide individualised services for the most affluent; tourism, for example. What is needed is all sorts of services for ordinary people, and to provide the basic facilities trained and educated people are needed.

Thus the new teachers college, university, kindergarten teachers college, or hospital would need to provide for these new skills.

For example in the booklet "Centres for Young Children" published by the Victorian Branch of the Australian Communist Party in June 1972 (the C.P.A. submission to the State Government Consultative Council on Preschool child Development) recommendations are made such as : *"More facilities for training a variety of staff for preschool centres. The first of these centres to be established in the north-west, west or north of Melbourne"* . . . *"Migrants, both youthful and mature age should be trained to work in the pre-school centres and must be paid reasonable salaries during training and when in employment". "The provision of preschool educational opportunities in the changing circumstances of today require much more flexibility and therefore much more diversity in the courses of training staff. Such training should be available to men and women, both youthful and mature age. Training should ba a continuous process and qualifications for training at a lower level should give entrance qualification for training at more advanced level".*

Such thinking turns the direction right away from education for "bright young people only" idea and of course when we consider school education today, we not only want classroom teachers, but also librarians, library assistants, laboratory technicians, camp organisers, musicians, dramatists, projectionists and film makers and many others. In the western suburbs there are many mature age people, both Australian born and migrants who could undertake such courses and in the process the west would begin to grow its own "home spun" better educated, more highly skilled section of the population right in its very heart.

Similarly with the hospital that is already proposed. Professor Hetzel, Professor of social and preventative medicine, Monash University, has often drawn attention to the lack of proper facilities to train doctors and nurses. At the first World Congress on Domiciliary Care which was held in Melbourne early in 1970, he advocated that *"Nursing education needs to be lifted into the community".*

At the same Congress Miss Pat Slater (Director of Australian College of Nursing) said *"We need to establish truly family-centred community health centres so that patients are treated as part of the family and as part of the community."* And a final quote from Dr. J. Christie (Prince Henry's Hospital, Melbourne) *"For good health we need urban planning on a human scale."*

These few quotations indicate a whole new concept on health and the need not only for community involvement but for a much greater variety of skills to be learnt in caring for the health of the people. Thus any plans for using the hospital site in Sunshine should be concerned not only with constructing a building, but in the provision of the varied services, linked very closely to the homes of the people. Such a "health-centre-hospital" could become a very different type of training centre from the traditional training hospitals.

In addition to completely new types of tertiary training centres, there is also an opportunity to update the education provided in the primary and secondary schools and to help integrate the schools more closely to the community. This is not a straight forward matter of opening up school facilities after school hours (although this is already done in some areas and could be extended where appropriate). It is also the reverse process of the schools using community facilities to a much greater extent than at present.

The experimental community schools at Moreland Annex and Swinburne Annex are demonstrating how this can be done. Such programs need much better staffing ratios if they are to be at all successful. All we can point out here is that in providing these new types of tertiary centres, whether they are huge buildings or several smaller, scattered centres, that some of the amenities should be planned to be used not only by the official students of such centres but also by groups of school children and adults (not necessarily enrolled students). For example theatres, laboratories, libraries, and the landscape surroundings.

The integration of the school and tertiary learning centre with the community can be assisted if some of the school staff live in the area. Maybe, it will take some period of time to overcome the present trend for most teachers to spend only a short time teaching at schools in the west, but the attractiveness of the innovations will make this more possible in the future if the plans suggested become a reality.

In the meantime however, there is a more readily available way of connecting the local families with the schools. In "Plan for Melbourne, Part 2" we advocated that *"School Aides, recruited from local*

housewives, could be a new force which could generate a new enthusiasm for the participation of local people in school activities" . . . *"special courses to train school aides and leisure-time leaders could well open up a field of work for mature age women, although of course not exclusively for them".* (page 15). (Note: by "field of work" we meant employment — part-time or full-time).

These ideas are not utopian. They are now advocated by a very wide cross-section of people. (See appendix No. 9). They are quite practical, and in fact in embryo they are all being put into practice. What we advocate is that in providing services so that the west can "catch up" with the rest of Melbourne, the type of new facilities provided should shape the changes for the future, rather than proliferate services which are already outmoded.

Thus, to gather together, re-state and round-off our social objectives and recipes for desegregation of the West:

The social objectives

(i)   To set out to attract, not the "middle class", not an "executive labor pool", not "developers" and the manufacturers for whom they would develop, but a range of higher-skilled workers, white-collar workers and professional workers, not merely to work in the area, but also to reside in it, to use its shops, kindergartens, schools, health centres, playing fields, cultural facilities, hotels, halls, swimming pools, and to meet formally and informally with others in the area, both on the job and in leisure hours.

(ii) Complementing this, to create educational and social opportunities for families already living in the West by providing a greater range of employment including "tertiary industry", especially that branch of it which supplies community services, and a complete range of voluntary effort and control in such services.

The recipe

(iii) To initiate on a scale so decisive that it favours the West by "positive discrimination", pioneering forms of service tailored to fit the people for whom they are intended, both in the sense that it supplies to them a need formerly deprived, and in the sense that it is capable of involving them in running such services in order to attract to employment and residence in the West all those who teach, train, lecture, demonstrate, explain, tutor, coach, conduct, promote, compere, host or in some other way help all to learn or perform.

(iv) To establish innovating tertiary educational institutions with a form of community-control to provide a range of training for such purposes with special emphasis on mature-age and migrant enrolments.

Thus, just as the deprivation of the west is a cycle that seems to have no beginning and no end and no solution, so the desegregation of the west can also be cyclical if sufficient finance, properly coupled with creative initiative both from the West and the state generally, are simultaneously released to take hold of the enthusiasm which has recently been generated. This could overcome the dead-centre of inertia of entrenched, finance-starved administrative practices and the narrowing requirements of local vested interests and hopeful developers and speculators.

Less decisive but helpful measures, which, in conjunction with the above items all assist in the general direction outlined, we, of course support. Without trying to enumerate all of them, we add a fifth item to deal with some:

(v)   To the extent that there may be a need in the West for classes of "light" industry or commerce specifically catering for women employment to make up a more balanced range of industries, in addition to the new "tertiary" industries, we are not opposed to such relatively limited land development as may be required for this purpose.

To the extent also, that further residential land development may be required to cater for those special classes of "service-industry" white-collar and professional workers we have

mentioned, or for the relatives and friends of migrants and other workers whose deliberate choice it is to reside in the West, we are not opposed, either, to such limited growth that this may entail.

In this regard housewives who take employment do not require more residential land, and there is already a trend towards higher residential densities. We would suspect that there would be sufficient already existing urban-zoned land, if not land actually subdivided and serviced (or readily serviceable) to supply such extra "raw land" necessary for such purposes.

It is quite a different matter to deliberately plan Melbourne as a whole to force several hundred thousand people to settle on the western plains by subsidising heavy industry manufacturers to use the cheaper land there and therefore forcing industrial workers (and in the main, the lower paid migrant industrial workers) to live in the west in order to get their jobs.

To do so is to deliberately plan a consolidation and accentuation of the deprived section of Melbourne's working class who live in the west. If we can borrow from Stretton and formulate a converse to one of his shrewd observations already quoted, localising it for Melbourne at the same time:

"The price of creating a lower-income suburb in the west, is an exclusive suburb somewhere else in the east, or an exclusive satellite, and all planners know it" (with apologies to Stretton).

One would have thought that all sociologists would have known it too. Apparently not so. The Victorian Council of Social Service (VCOSS) has also submitted an "objection" to the regional plan. We subscribe wholeheartedly to most of the positive recommendations in this report. But there is a strange preface that supports "balanced growth" in the Evans-MMBW meaning of corridors to west and north, and which is said to be one of the "guidelines upon which VCOSS based its submissions to the MMBW".

It is baldly stated that this would *"lead to a more balanced metropolitan structure in socio-economic terms"*. How this is to come about is nowhere argued in the text, nowhere explained just how this connects with the excellent line of recommendations which follow and which could be carried out so much more effectively in a Gippsland corridor, and nowhere is it explained how this concept became a "guiding principle" for the organisation and where one should turn to find why expenditure of capital in manufacturing industry can alter the situation, or alternatively how expenditure of capital in tertiary industry is going to attract its labor force, in such quantities as to justify a Melton corridor, or a Werribbee corridor.

To be charitable, maybe this errant and patently wrong concept sprang from the hasty necessity by VCOSS to connect long-researched and excellent sociological aims with the current "terms of reference" presented to it in the shape of the MMBW regional plan as a basis for its "objections". We have added an appendix to show that what VCOSS really aims at is quite consistent with anti-deprivation and anti-segregationist proposals which we have just outlined, although it is inconsistent with forced massive heavy industrial growth which is an inevitable concomitant of the MMBW's northern and western corridors, that is, if they are to function at all to provide the territorial balancing act intended by them (See appendix No. 10).

"SOCIAL MIX" IN THE GIPPSLAND CORRIDOR

We hold with the Sunbury study in one of their many worthy generalisations: *"if it is not possible to create a town that is other than a ghetto for a particular socio-economic group, development is not worth proceeding with"* (p. 73).

The same worthy criteria, of course, should apply to growth in Melbourne as a whole but "socio-economic" ghetto formation to one degree or another proceeds apace also in the south and east, and now that industry, including heavy industry is migrating in the direction of Dandenong and beyond, the possibility of deprivation by segregation of lower-paid industrial workers rears its ugly head, in this direction as well as west.

At time of writing, according to figures released by the Housing Industry Association in 1971 the price range of a block of land in Knox ($3,850 to $4,750) or Springvale ($4,000 to $5,750) compared to Waverley ($6,000 to $10,000) or Doncaster-Templestowe ($7,000 to $8,000) ("Herald" 30/6/'72).

As if the "natural" trend of the market were not enough to automatically effect a rough-hewn desegregation, the trend is heightened on the one hand by big estate developers who advertise "homes big enough to lose yourself in" or "country club estates", and on the other hand by Housing Commission estates, such as Doveton where you cannot choose to live unless your economic and housing position is quite desperate.

Echoing the Sunbury sentiment: This sort of socio-economic ghetto-formation is not worth proceeding with. Nor do we have to. It is intolerable that private developers have, in effect, planning initiatives arising from their "right" to subdivide, and their right to build what class of house they will on their subdivision. The greater sophistication of the proposed residential planning standards will be powerless to constrain ghetto formation.

It is even more intolerable that a Government instrumentality, the Housing Commission, abets the segregation as a matter of policy.

We strongly hold as a principle with the two "lessons" drawn from Canberra experience by Stretton.

"First, the nature and mixture of residential land (not merely its quantity and economy) should be very important considerations in the choice of city sites. Second, the general policy of mixture can take this particular form: however the people mix or don't from street to street, public policy should try to get the city's average of personal income into every primary school catchment. Land that will not permit this should be with-held from residential use" (p. 123).

To implement just this, in our opinion, it is inescapable that Canberra-type land acquisition and planning controls are adopted. And it is useless "pussy-footing" the issue as does the M.M.B.W. Regional Planning Proposals:

". . . the public purchase of land to be used for urban purposes, well in advance of development, the provision of full servicing and its release at the appropriate time for development is the only single course of action which meets most of the principles set out" (p. 98).

So far so good. The report then immediately proceeds to demolish its own recommended principles on the basis, of course, of philistine "realism" instead of fighting to win acceptance for them.

"Such a radical measure is unlikely to be favoured by the community and in any case would require the initial provision of substantial capital which is unlikely to be available", "The benefits of such a system would be long term rather than short term. To be effective such a measure would probably need initiation at the Federal level with Federal financial assistance. Even though such a measure may not be possible on a large scale there may be considerable advantages, where other measures fail, in the planning authority acquiring selected parcels of land, providing services, and making them available for development in competition with private industry."

These sorts of half-measures, conceived as "gingering" the situation and keeping private industry "on its toes" always seem to fizzle out into ineffectiveness, accommodating the public industry to private interests rather than vice versa. The Commonwealth Bank does not compete with private banks on interest, nor T.A.A. with Ansetts on air fares . . . In any case, as applied to land development the Housing Commission has already done just this and the Minister for Housing is recommending more of it, and all it has resulted in, as indicated, apart from marginally lower prices for a small minority, is a heightening of segregation nearly as much as on the Commission's own estates.

To meet our standards of social planning for "social mix" nothing short of buying up the whole corridor would do (with lease back arrangements to the present owners until particular sections of the corridor are required for release).

A planning authority would then be responsible for sub-division either directly or indirectly through design competitions, and the same authority, as in Canberra, would either build or sell subject to conditions that, upon particular parcels of land, buildings of a certain mixture of types, size and class would have to be erected, the mixture being calculated to accommodate a "social mix".

It should be anticipated that this type of social-planning cum town-planning involved for corridor Melbourne would require far more sophistication than in Canberra, and on two scores (1) Because Melbourne has a broader spectrum of types to be mixed than Canberra, more industrial workers and more migrant groupings, for example. Also because a more sensitive "ear" for more recent demands for styles of living would need to be heeded. For example, groupings of the younger generation who desire to experiment with more "commune"-type building arrangements (where young marrieds, for example, each with private quarters, but sharing common young-child playing space indoor and outdoor, and possibly laundry or even catering facilities). (2) Because of the principles underlying a new-type emphasis on collectives for the mini-metro centres in corridor Melbourne.

(1) The Melbourne Spectrum

No easy "rule of thumb" blanket by-laws will ever be evolved to accommodate such judicious "mix", but it will involve a continuing creative effort, based always on feed-back and sensitivity to change. Apart from the impact on communities of the very achievement of such "mix" itself, other factors, such as politics, morals, education, the mass media and employment patterns and all sorts of other social factors will play a part in making it certain that how people are fitted to live together tomorrow will be something different from yesterday, or at least, the proportion desiring differing styles of living will be ever-changing.

At this stage, we suggest, whilst eschewing suburban or big-estate segregation like the plague, any attempted enforcement of a too-close proximity, such as door to door "mix" would partly defeat its purpose by creating other problems, because groups of families or groups of individuals have to be given consideration as well as individuals or single families.

We propose here that the following principle (with infinite variations as to combinations or permutations of the type of dwelling, the size or internal organisation of the people within them, or the grouping of dwellings and attendant facilities) should be valuable:

". . . the groupings could be big enough to give each nationality, income group, age group or marital group the feeling of privacy and identity within their own group. At the same time it could be small enough to enable the sharing of certain community features . . ." ("Plan for Melbourne, Part 2", p. 104).

Within a mini-metro suburb in "corridor Melbourne" therefore would need to be "woven" a residential mixture consisting of a cross-section of housing types, styles and prices so judiciously mixed a la Canberra, that no one any longer would have "the right address" or "the wrong address"; and although there would be tracks (both electric and transit) no-one would live "the wrong side of the tracks."

In a mini-metro suburb it should be remembered, the "heart" would be high to medium density with general gradations of density outwards to low density at the fringe, although by this it is not intended to imply that there could be no assortments of "mixed densities" in the low and medium density zones, that might be called for to implement social mix, in the best fashion possible.

For example, the old rigidity imposed by the twin pressures of present suburban Melbourne: one-family houses, plus house-ownership, tends to impose an immobility which gives rise to ridiculously inappropriate living units which are supposed to perform uniformly well for young couples without children, a full family, unmarried young people and the elderly without a family.

For instance, sensible accommodation for grandparents that is neither 20 miles away nor a bungalow in the back yard, could call for medium density, child-free units for older people and others among the low density homes. Or, for example, some migrants may prefer to live in higher density "extended family" accommodation and yet close-by to others of their kind who opt for low density "nuclear family" homes, and commune-type groups of young couples may prefer a medium density complex in a general low density area.

Concerning the other rigidity, namely, home ownership and the natural inertia it tends to impose (especially when the choice in the *same* area is of the same type of one-family house) we will be advancing ideas in a later publication as to a new system of ownership that will guarantee the security without the rigidities of the present system.

Embracing the flexibilities mentioned of housing densities as well as types, styles and classes of home accommodation and an improved mobility to pass from one type to another as age, family position and circumstances and/or experimental preference might dictate, we consider *it is a sociological imperative to achieve a Canberra-type residential "social mix" beyond Dandenong in a Gippsland corridor, because all classes and all strata are prepared to live in this direction, and because no amount of social engineering could be expected to succeed in a similar corridor to north or west.*

(2)   "Age-Sex Mix" in the Concourse.

It will be recalled that Stretton, in addition to being a forthright supporter of "social-mix" as against any form of segregationist policy, in his novel examination of his theme "Who is my neighbour?" also came out as champion of the cause of the young and the housewife.

Stretton is against a car-dominated suburban design that abandons them and drives them into their houses. He sees the therapeutic value of a convenience shopping centre, school and playground designed for easy pedestrian access for wives and children.

Now casual acquaintanceship of children with children or housewives with housewives, is quite an important aspect of "age-sex mix", as we have defined it, namely mixing the real needs of the old, the wives and the young on the one hand, with those of the breadwinners, dominatingly male, on the other.

At this level it is an important aspect, yet only an elementary aspect of over-coming this yawning gap in social opportunity.

The tremendous advantage for "age-sex-mix" objectives a corridor Melbourne could offer would be the *opportunity* of collective participation, by optimising the conditions for sharing relatively local community facilities that could be more varied, richer, more continuous and popular than anything remotely conceived in the local suburban centre of convenience shops, plus primary school and playground contemplated by Stretton.

Now it should not be read into this remark, either that we advocate any form of "urging" people into some type of activity for which they feel disinclined, nor that we believe that it is the nature of the human individual that he requires continuous "fulfilment" in highly-organised "collectives" of one description or another.

Value judgements on this were made abundantly clear in "Plan for Melbourne" Part 1, and are maybe worth spelling out to avoid misunderstanding:—

"To reach his full stature man needs a measure of privacy, a measure of casual informal association with relatives, workmates, friends and neighbours, a measure of enjoyment where he is one of an audience, and at the highest level, and on occasions, full participation in some type of organised social activity."

"This last and highest level, being the most difficult to achieve will be the problem mainly kept in mind, because such experiences at their peak stimulate all other features of every-day life."

"The peculiarity of any high-class social life is not only that it is based on a group of people voluntarily co-operating with the same interests or aims, but to operate at its highest, or often to operate at all, each such group requires skilled persons to give instruction, guidance, inspiration and organisation." (p. 4.)

After citing typical examples, the text concludes: *"In a word, services of people with special skills and in great numbers are needed, not to replace the efforts of the participants, but to complement them."* Nor is this to say that the people with "special skills" haven't a wealth to learn from the participants either; on the contrary the essence of the truly great includes a humility sufficiently genuine

to treasure and learn from the values of the apprentice, whose particular combination of virtues and skills will inevitably result in a different style, which potentially at least, given stimulation to blossom, is just as great.

A collective as we have said, is a team around some common purpose to which all contribute as they can and which comes, in time, to be a group that not only enriches its participants with the mutual respect flowing from common effort, but enriches the community as a whole. Aspects of our definition of "collective" as can be appreciated, may apply to industrial production, commercial supply of services, or intellectual supply of ideas, i.e. to "work". In a capitalist industrial society the potentially creative and satisfying collective aspects of work tend to be over-laid by a non-creative and dulling division of labor, perpetuated either by monotonous machine-tending jobs or by an organisation of labor based unnecessarily on a hierarchy of "authority" or both.

Automation on the one hand and democratic control of industry commerce and the mass media on the other hand, are destined to sweep away these already historically outdated non-creative and authoritarian elements of "work" to the point where people would voluntarily work to fulfil themselves by expressing themselves in collective effort. "Work" that becomes creative tends to become compulsive rather than compulsory!

Now despite the distortion of the collective element of work by oppressive machinery or superfluous authority, it is precisely this collective element that the breadwinner, male or female "enjoys", it is precisely this that is denied to the housewives who "miss out" on this mainstream of day-to-day life overlaid as it may be with distaste.

So we are acutely conscious that it is right inside the factories, offices, laboratories and colleges that the future will present most of the *voluntary* collectives. Concepts of women's liberation and de-schooling and even "disurbanisation" are groping after such perspectives to one degree or another and rightly so. But they tend to pose the problem one-sidedly as overthrow of all discipline as if man was not a social animal, and as if society consisted only of human atoms confined to "freely" re-acting one atom with another and never coalescing freely or otherwise into collectives.

Many of these ideas confuse authoritarianism, which is an historic anachronism destined to vanish with capitalism, with "discipline" which is self-imposed. Every collective has its "discipline" or "rules of the game" arising objectively out of the very nature of the common purpose around which the collective was formed.

Every person of whatever age craves the fulfilment of the two contradictory demands of his inner nature, arising from the fact that man is a social animal: privacy and freedom at times from all discipline and at times respect from those other humans who are respected, based on participation with them. But respect does not arise from people in repose, but some aspect of their activity, and mutual activities generate voluntarily-recognised disciplines. "Freedom" as Engels wrote, "is the recognition of necessity", and discipline (meaning in the sense we have used the word "the recognition of necessity") arises whether the "necessity" in question is a "law of nature" or an imperative of human behaviour.

What really upsets those who are "on" about husbands, bosses or teachers, is not really the domestic discipline, work discipline or study discipline because discipline is inescapable from any relationship whatsoever, but the assumption of an authoritarianism that in fact, by failing to observe the discipline of the particular relationship, passes over into a breach of that very discipline displacing it (in the name of reinforcing it) by a system of bullying and being bullied.

It is the assumption of power where none is called for, "authority" where no authority is needed that attaches automatically to a capitalist system of production and administration and "spills over" into domestic and educational areas, that really hurts.

The resentment of those who are bullied as a consequence, cannot be exorcised by the "Establishment" proposing tame "participatory" processes within a disguised system of bullying which evaporates man's creative urge altogether. Just so, there is no liberation or escape from a disguised system of "superiority" of the husband where a wife permits him to go to work but cannot organise a meaningful "collective" for herself, and this holds even if she can manage to organise absolutely equal "participation" in all domestic chores.

We will deal here not with the future of work place collectives, basic changes to which await the change from a capitalist system of production to a socialist one, but with non-workplace collectives many of which already exist or have existed or could come into existence within the framework of capitalism right now. It should be born in mind, however, that both types . . . workplace and non-workplace collectives . . . should be interconnected, and what is absolutely right about women's liberation and deschooling alike is that the barriers between life in the factory and office on one hand, and the home and school on the other, lead to an artificial cloistering of the wives and the children and the elderly unknown to more primitive systems of political economy.

The remedy, however, is not to run away from the challenge of these barriers into the bush with the disurbanists and romantic decentralists, trying thus to come to more human terms with production on a more elementary level, but to help push down the barriers. We say that because, historically speaking, the interconnection of workplace and non-workplace collectives is no longer impossible by reason of the impossibility of design or the non-feasibility of technology or organisation, but awaits only the historic transformation of the great corporations into social property.

It should be observed, however, that included in what we propose, is that all high labour-intensive factories should be sited within the heart of the mini-metro or city metro. It is in labour-intensive factories that the more creative skills of hand and mind tend to be concentrated. In the great sprawling modern plants run on a "line" system or with "tanks and pipes systems" automation should come first and would do so more rapidly if there were not very cheap unskilled migrant labour off the ships to carry on in the old fashioned production methods. These giant plants should be sited right outside the heart and the residential areas of the corridor altogether.

How then can the "age-sex" mix aimed to begin overcoming the week-day suburban isolation of the non-workers be organised in a metro-suburb?

We propose focussing every aspect possible of a social character into the mini-metro heart. We would plan as suggested by Chermayeff a series of "Concourses" being places left undifferentiated (as one lets a modern office building with undifferentiated internal spaces), both in the high density core around the electric stations and throughout the heart.

Just as we now provide 5% of any subdivided land for parks, a percentage of buildings, and floors or spaces within buildings and open spaces between them, would be set aside for concourse. You will note that we do not see "Concourse spaces" as necessarily separate buildings, still less as a complex of separate buildings, as so many "Community Centres" are conceived in traditional planning terms.

The point about such community centres separated spatially from other activities of members of the community, is that a deliberate decision to go there must be made. The indifferent, the shy, the self-centred ones and the transport deprived . . . all of those who need to be "brought out of themselves", are the ones least likely to get there.

Rather the design exercise would be to so site "concourses" (in which voluntary activities of collectives take place) in relation to places where people have to go, that the maximum number of people would become aware of, or passively enjoy, the activities of the collectives, even before joining one.

Thus a housewife in the course of shopping or going to the post-office or child centre, may "find herself" listening to a singing group practising, watching school children dance or debate or other housewives playing basket ball, passing through an art gallery or bowling alley, or going past doors or through courts where the most various of man's arts and crafts and knowledge and recreations are proceeding or advertised to be proceeding.

The secondary school students walking from the school sited in the heart, into the core shopping-concourse to go to the library, "window shop" or to meet mother or a friend, would be subjected to the same social-orientated environment; as would the industrial worker or office worker. walking "down town" to the core concourses during lunch time (as office workers walk down Bourke Street now) or as would the electric or transit commuters, or other travellers, on the way home.

Nor should the impact of the same influences on the preschool child, brought to one of the many child centres in the heart by his parents (either regularly, or occasionally made possible by flexible

and casual care arrangements as advocated in Plan for Melbourne Part 2.) be overlooked. A preview of the exciting scope of adult activity would help lay the basis for the early rejection of the passivity which tends to be induced by the T.V. screen as a substitute for personal participation.

We advance for consideration a basic design principle for all high-density core-centres of any "heart" either a mini-metro suburban core or a city-metro district core. The same, actually could be an objective gradually worked towards for Melbourne's central business district.

(1)   The whole of the pedestrian level (i.e. in the main the ground floor) of all multi-storey buildings should be open to the public connected with walkways into adjoining buildings and set aside for purposes which are most calculated to attract citizens.

(2)   There should be a mixture on this pedestrian level of different types of major attractions within the core, rather than clustering of the same type of attractions all together.

(3)   The pedestrian level of the entire high-density core area should be completely weather-proofed and vehicle-free. This could be achieved, for example, by an enclosed podium from which other buildings would rise, or even by an entirely comprehensive air-conditioned structure doing away with separate buildings along with their diverse facades and heights, and with the roads between them.

The reason and value judgements behind these design ideas are that this would be the most socially precious land clustered around the electric and/or transit system and the ground level or pedestrian-level part of this area is more socially precious still.

Shops, for example, are a legitimate use of such areas because they display ranges of commodities which attract citizens, but storage sections of shops should not be at this level. A bank teller is legitimately sited on this level, but not the foreign exchange or securities section of a bank which is a specialist function of little concern to the average citizen. The entrance to a theatre or cinema could well be at this level, but there is no need for the theatre or cinema to take up valuable room because it is at the entrance that one decides whether to buy a ticket or not, by their very nature once the show starts, no-one is expected to disturb people by "dropping in" casually.

Some halls and auditoriums, on the other hand, should have not only their entrances at pedestrian level, but should themselves be on a pedestrian level precisely to encourage the casual passer-by to "drop in" to listen to pop music or a promenade concert, or a forum, and "drop out" again either when he or she has to, or when the performance ceases to hold attention.

There is no good reason for any office at all to be on pedestrian level, except perhaps for the busier "public counter" section of a few of them, such as the Post Office or claims office, pension office or social service agency or health clinic, but any long period of interviewing arising out of such counter enquiries does not have to be at pedestrian level.

The clearing away onto other levels of roads for trucks, or cars, stored goods, and specialist offices or non-public sections of "public" offices, would create an immense amount of extra space precisely where it is needed. The entire area of the central core would be a pedestrian mall. Pedestrian ways would then pass through all buildings in all directions, minimising the length of walk from any one point to any other.

Scattered through this giant pedestrian mall would be the public concourses interspersed with all the traditional functions which bring a citizen "to the centre" and these functions themselves should not be clustered, in the main, like with like, but scattered according to that aspect of Jane Jacob's ideas which argue the advantage of "mixed primary uses" of such land, with which we agree.

To illustrate, in Melbourne's "core" now there are tens of thousands of clerks and typists in offices up the Queen Street, William Street end of Bourke Street. At the other end of Bourke Street, near Exhibition Street, are clustered cinemas, and theatres. The cafes, restaurants, bistros and hotels could "double up" and be patronised by twice the number if this "tight" territorial division was broken down or give twice the variety and selection of eating places and drinking places. Just as William Street

starts to become "dead" after work, Exhibition Street starts to become "alive" for the night, but it would be better for all concerned, including the shop-keepers in between if both were "alive" both day and night.

Again, inside Melbourne's heart, but just outside its "core" or "central business district" are two superb community assets . . . the new Cultural Centre and the old Exhibition Building. Both of these however, are just too far away for it to be practical for the tens of thousands of city workers to become lunchtime patrons.

How many tens of thousands have missed out on promenade concerts and art shows and a variety of exhibitions who would readily have gone, (incidentally helping to make such shows cheaper) if only they had been near the town hall or in the middle of Bourke Street?

Now, of course, no city metro let alone mini-metro is ever going to have a core the size of present Melbourne. Their reduced size may indeed make the design problems somewhat easier, but we have cited illustrations from present Melbourne's central business district to make more real some of the principles we are propounding.

To give credit where it is due, and by way of further concrete illustration, some of the big car-based shopping emporium-complexes such as Chadstone, Northland or Southland incorporate *some* of the design aspects just mentioned, and even incorporate, too, some minor aspects of what we mean by collectives based on concourse. For example in school holidays there are drama clubs and creative art groups. There have been book displays and art exhibitions. There are useful, many-purpose auditoriums.

But, of course, the car basis of these projects rings them around with many restrictions. Ironically the husbands and other workers who travel by car to outer-suburban factories or offices, tend to be deprived of these centres. So do school children. So do many housewives themselves who are poorly served by public transport and who do not have a second car. There are no big concentrations of office workers or factory workers near at hand who can stroll around at lunch time or after work. Even if it is designed later to have a big work place around the fringe of such car based shopping centres as at present exist, there would be the daunting prospect of a walk to and from over the enormous parking lot. If and when parts of such centres are left open for social events at night, there is the isolation and danger of the huge, car park which would be practically empty, leaving it like a hall in the middle of a paddock.

Some of the existing centres are nowhere near a railway station. They are district-serving centres rather than the more intimate suburb-serving centre we contemplate with mini-metro-hearts. They do not lie at the heart of the whole suburb, concentrating into one complex all of the local social activity.

Even regarded as "district hearts" the car-based shopping emporiums are poor things, drawing off enough commerce and voluntary community effort to make it difficult to establish a more fully-planned centre elsewhere in the district. The M.M.B.W. 1954 Report with proposals for five restructured car-served, but also rail-based, district centres at Footscray, Preston, Box Hill, Moorabbin and Dandenong, if heeded and implemented in good time, could have supplied a far healthier basis. (See M.M.B.W. Planning Scheme Report 1954, pp. 53 to 59).

We propose that the over-riding social purpose of places of concourse for the formation of collectives in the metro-hearts, would be the dominant one in the matter of design. Commerce and industry would be subordinated to such over-riding purpose and would not be permitted either to "crowd out" concourse spaces nor to themselves, scatter over the metro-city so as to make the collective formation impossible or difficult and deprive their own workers of the opportunity of ready participation in the collectives. In a word, the shortcomings of the older-typed urban centre, such as Melbourne's heart, and the newer-type Chadstone style urban centres measured against the urgent sociological needs of the present time, would be designed out of the metro centres.

This does not mean that industry and commerce would not be catered for. On the contrary, initially, it would be industry, commerce, educational institutions and the electric-transit stations that would serve as a magnet to draw people into the heart providing human raw material at one time and place giving thus the best chance for collectives to be built.

Moreover, industry and commerce would also reap the long-term benefit of this social-planning

mounted on a much higher level of endeavour. Potentially there would be more female and elderly workers, less wealth spent on travelling, more potential customers. True some of the higher forms of collectives (if our line of ideas on this aspect can have any influence) would be concerned with ecology committees, independently vetting the pollution levels of local industry and scrutinising its techniques, investigating the energy-wasting aspects of the consumer goods sold in the local shops, demanding eradication of built-in obsolescence, useless fashion or even the cessation of manufacture of useless goods entirely.

The housewife as consumer, the local industrial worker as producer, the local professional worker as scientist, the local scholar as general activist and the local shop-keeper and commercial worker as marketers would have here a common human survival purpose each drawing on the different experiences and activities important to solve this all-sided problem and in the process beginning to break through the barriers between industry-commerce, and home-school.

The concourses in the mini-metro hearts, of course, could not all be filled with such high-purpose collectives . . . nor would they ever need to be. Social planning which certainly should encompass such high-purpose aims, would need in any case, to start with what was more familiar for most people and proceed gradually through the less familiar to the unknown territory of "survival committees."

Reverting to the analysis of what man requires to "reach his full stature":

1.   Privacy
2.   Casual informal associations
3.   Enjoyment as one of an audience
4.   Participation in activity.

He can find privacy at home or in the country a few miles away. Although there should be places where a person could find privacy in the metro-heart, too, e.g. in reading libraries, rest rooms for browsing, small parks or roof-top places for enjoying the air. The next three functions: "casual acquaintance," "audience enjoyment" and "participation" overlap at many points and the detailed design of particular concourse would need to take this into account.

Chermayeff and Tzonis observe: *"Places designed for unsepcified events in fact soon develop their own identity and become naturally special, thus being quite different as environments from stereotyped, staple places which characterise the single-purpose target areas presented by mass-culture."* ("Shape of Community" p. 157). Yes, that is important, but *within* each *speciality* there would certainly be room for thought by the "social engineer" consulting with the collective to so lay-out the spaces that a casual passer-by could loiter and stare at an activity proceeding without feeling she was intruding or likely to be accosted or involved against his or her inclination.

The experiences of the Peckham experiment in England as long ago as the 1930's found, for example, that rooms with doors made entry too deliberate for a stranger; undifferentiated big spaces on the other hand, made the stranger feel close and involved, but arches and openings without doors or glass partitions permitted a feeling of safe observation without interfering too much with those who were participating.

And a basic concept of all collectives would need to be to prevent themselves rapidly becoming a small and exclusive clique but devise organisational means of inducting new members into the collective or form new collectives or sub-collectives to cope with anyone at all prepared to interest himself in the particular purpose. The utilisation of concourse-spaces would need to take all these considerations into account.

There are dozens of other sociological problems, and dozens of possible solutions that arise from mini-metro suburbs organised as we suggest. We have not the answer to all, not even some of the most important. For example, we are somewhat uncertain about the siting of primary schools and child centres. In "Plan for Melbourne Part 2" and in traditional planning concepts, both of them should be within pedestrian distance of home.

In a mini-metro suburb, some primary schools and pre-school centres would need to be in the heart anyway, to cater for parents who chose to live there. But where are the schools and the pre-school

centres to be sited to serve the outer low-density residential zones? Maybe the primary school should be sited within the zone, but as near as possible to the metro heart, rather than on the edge near the bush? Then if mother wanted to take the children on to the heart after school, it would be "on the way". Maybe some pre-school centres could be located near the primary school, others provided right in the heart, or in the high density core, allocated according to demand, so that if mothers preferred to take on work or engage in the activity of a collective within the heart, there would be convenient and familiar places to leave her young children.

Complicating the location of both primary and secondary schools is the habit Australians have developed of expecting a full-sized football ground to be an adjunct of every school. We suggest tentatively on this issue, that in mini-metro suburbs, since the country would be so close, since compactness in the heart is so important for all concerned, and since local public transport is deliberately planned to be so efficient, it would be better to site all sporting arenas just outside the corridor and have the children taken there by public transport. This would incidentally, enable multi-use of sporting facilities and such sitings would enable appropriate landscaping to avoid the barren windswept aspect of many school grounds or municipal cricket ovals.

Much thought also would need to be devoted to open-air concourse places. Here, we would observe that rooftops in the metro-core, and special places tailored to purposes in the nearby countryside, could be complementary to indoor concourses for any particular purpose.

Maybe some of the problems of relative isolation of the low residential zone (still many times less isolated than present Melbourne's outer suburbs and never more than 2 or 3 miles from the heart) could be overcome by technological developments in localised public transport foreshadowed by Chermayeff and Tzonis.

"In low density areas" they write, *"road vehicles may well be separated from pedestrians at ground level. New short haul, frequent stop, relatively slow mini-trains may be usefully raised to the flowering tree level allowing the pedestrians to pass below while remaining within easy reach . . . sharing the actual pedestrian paths, there may be motorised "rickshaws" "bubbles" and mini-buses, gentle and clean mechanical aids for the elderly, the tired and the laden."* ("Shape of Community" p.166).

Indeed for the reader who has not yet done so, we recommend reading "Shape of Community" especially on these sort of sociological problems pp. 136 to 186.

The authors regard modern man, in effect, as a "third ecology" related to the other ecological systems of nature: ecology on the land and marine ecological systems. We will not relate here the reasons for the breakdown of what they call the crisis of the "urban eco-system and particularly the problems of its sociological symbiosis," (p. 139), except to say that remarks about New York apply to most urban places in Melbourne. Apart from a few exceptions, they write "in almost all the other places, the moment anyone wants to talk or rest or eat or drink, he must leave the pseudo-place with its aimless milling and vanish into some facility which is, of course, always on private property and has a price tag attached." (.141).

After outlining suggested remedies which mesh in with our own concepts of metro-city organisation within the Gippsland corridor (which corridor accentuates and consolidates the direction of Chermayeff-type remedies), the authors finish a section of their work on this note:—

"But time is running out and mankind may be running the risk of losing its humanity before it reaches its highest potential. From this point of view it seems reasonable to tackle the problem of readjustment at both ends . . . not only the conservation of the natural, but also the restructuring of our collective selves, thereby satisfying simultaneously an ecological adjustment and a sociological evolution" (p. 169).

Precisely! We agree and applaud! A Gippsland corridor structured "social mix" a la Stretton would be a small step in the right direction. With a Gippsland corridor organised both for "social mix" and "age-sex mix" with deliberate design socially, physically, and with every other possible inducement, for collectives in concourse in metro hearts connected with rapid transit, we could take giant strides.

The third possibility, the Evans plan with radial corridors in every direction, with consequent perpetuation of segregation to west and north, with consequent accentuation of the reliance on the motor

vehicle and randomness of location and "pseudo places" further destroying social cohesion is too horrible to contemplate!

Instead of going in the wrong direction with Evans' plan, or timidly in the right direction but with small steps as with the Fraser-Stretton recipes, we propose the giant stride plan.

There will, inevitably, be objections to our proposals, some of which it is easy to anticipate right now. To save time (because time is precious in this race to save "nature") and to save "human nature" before our mounting inhuman way of life puts an end to both, we will deal now with a few objections.

6. OBJECTIONS TO THE "OBJECTION"

1. DECENTRALISATION AND REGIONALISATION

Decentralisation

"Stop Melbourne's Growth!" is a popular catchcry. *The proposed Gippsland corridor IS decentralisation. Moreover: it could be the decentralisationist's dream!*

Assume it already exists. If Mr. Rip Van Winkle stood with his back to Dandenong and looked eastward through a powerful enough telescope, but with blinkers on, he would discern suburb after suburb stretching away right beyond Warragul through into the Latrobe Valley.

Now if Mr. Rip Van Winkle had been reared in the first half of this century when car became king, his first shuddering reaction would certainly be: "What a horrible prospect: a literally endless belt of Melbourne suburbia! Escape from Melbourne city is now impossible!"

But our be-blinkered Mr. Winkle would only have to proceed a few miles eastward out of Dandenong and along the corridor, and simply turn 90 degrees to face either north or south, and his powerful telescope would show him beyond the last house only a few miles away, paddocks or bush indefinitely. If he repeated this process, no matter how often, and continued eastward for the next 80 miles, there would be some rural vista to north and south.

He would not know how to adjust to this. He would seem to be in a small country town, but every time he turned 90 degrees he would seem to be again in an endless suburban megalopolis. If he managed to avoid a severe bout of schizophrenia and took his blinkers off, and cast away his telescope, he would be in for more surprises . . .

Getting off at any electric station or transit station, he would find himself in a very busy mixed up sort of place, and if he investigated the core and the heart around it, he would find a tremendous variety of activity. This would be quite unlike the present suburban shopping centre because it would have factories and offices and schools and voluntary activities, many of which would seem to embrace, moreover, a collective of workers, students, professionals, retired people, and housewives, all of whom had ready access to all manner of boardrooms, workshops, halls, and theatres to which they flocked at lunch time, after work, or after tea, as keenly as if they were a football or theatre crowd aiming to arrive before the bounce of the ball or the raising of the curtain; except that they turned out to be players and the actors themselves!

Enquiries would convince him that though there was opportunity for someone who wished to get a job in another mini-metro or city metro, and that though there were quite a few whose aptitude or desire for specialisation could not be met locally, and who did this, the majority took advantage of a wide range of local employment whether industrial, professional, commercial or educational or other "service" industries and either walked to work or had a 15 minute maximum home-to-work bus ride.

Mr. Winkle would find all factories and other workplaces open to public inspection (like model kindergartens, or big city building excavations used to be in Melbourne with observation points) and, he likewise would find that he could also wander by and observe the various activities in the places where the suburbanites gathered for their spare time hobbies, sport, arts and crafts. Actually with the shorter working week, it was rather difficult to tell which activity was "work" and which was "spare-time" both because there seemed to be equal enthusiasm for both and because opinions of anybody involved were taken as much notice of "on the job" as in any of the activities "off the job". Similarly he would find it difficult to know when a person was being taught or was teaching. Mr. Winkle, fortunately, before suffering a breakdown pondering what had happened to people that they had come both to enjoy work and work at enjoyment, and how they managed to take orders from the people they gave them to, turned his attention to what happened to the citizens of the mini-metro who travelled outside their local suburb.

Being brought up when car was king, he expected to find flocks of cars heading outward into the country in the weekend. Indeed there were a few anglers and bushwalkers and families and holiday makers and ecology excursionists in cars or buses, but instead of a great exodus, the bulk of the population either headed back into the heart again (where they had been going all the week) or went to another mini-metro or city metro-heart by electric train or transit.

He found that what attracted people to the heart in the weekend was entertainment by some of the groups who put on their final polished performances or made exhibitions or demonstrations or presented papers and conducted forums for the public at large. Each mini-metro or city-metro-heart had developed its own special character and was renowned for different arts, sports or sciences than those to be found in other centres, so that there was a staggering selection of variety for relaxation to be had by travelling up and down the electric/transit in the weekends as many did ; the youth of course, being the most venturesome in this respect often cramming the most diverse activities into one weekend.

Winkle was overcome by this life-style so urban, so participatory, so un-Melbournian, and so different from the life to which he had been used when the car was king and the city in the weekend was so dreary that everybody flocked to the country or the beaches, that he felt a strong fit of depression seizing him until he discovered something he had not realised about the countryside.

He found that many people had picnic teas during the week in the bush, (it being so close) in carefully conserved picnic areas. Other activities groups in these areas, had complementary facilities to those in the heart at carefully selected spots; small auditoriums, and workshops were available, as well as sporting tracks, and equipment, so that in good weather many groups enjoyed their activities or entertained others, in the open. Families or other groupings going on holidays, he found, travelled the main part of the journey by transit and electric and went outwards to guest houses or holiday flats by bus or hire car.

A sociological group had estimated that the average citizen in corridor Melbourne in the 21st. Century spent twice as much time *in* the bush (as distinct from travelling through it in an air-tight container) as he did in the mid-20th. Century when car was king and Winkle didn't doubt this and was about to take a trip, out of curiosity down to Wilson's Promintory to see if it had changed, when he awoke from his dream. He was being shaken by his friend, an ardent 1960-brand decentralist, with whom, on Winkle's behalf, we will continue this polemic.

Now Winkle's dream was not about a Gippsland corridor as it could be, say, in 1975 in a capitalist Melbourne. There is no accounting for dreams and Winkle is not responsible for them and neither are the authors responsible for Winkle. So leaving aside what seemed like socialist aspects of his dream (such as the "boss" taking orders from the people he gave them to, and the factories open to public inspection, and people learning from work processes), what can a traditional decentralised separate city offer that is not just as well or potentially far better supplied by a Gippsland corridor? Consider . . .

(i)   Nearness to greenness.

In a mini-metro suburb of 10,000 – 20,000 or so, most people would be much nearer "the bush" than they would be in a city of a comparable population. This would be due to the high and medium density in a mini-metro. A car-based country town has never any reason for the medium density, let alone high density, so only those living near the edge are really in walking distance of the bush.

(ii)   Nearness to local centre.

For the same reason the furthest resident in a mini-metro would be closer to the metro-heart than the furthest resident of a country town could be from the town centre.

In fact, country towns which have recently grown on the basis of 50 foot frontages, have a sprawl that reproduces a "suburb" which isolates many women and children as effectively from life in the "main street" as if they lived in a suburb of present Melbourne.

(iii)   "New Town" independence.

The mini-metro town of 10,000 – 20,000 or so and the city metro of 100,000 or so could be far

more viably structured with a range of industrial and commercial enterprises than could any comparable "new town" concept.

"A genuine decentralised city with its own independent industry, and not simply a dormitory satellite" is frequently advanced as a hallmark of "true" decentralisation, as if "rugged independence" had a sort of virtue of its own and what was contemplated was a subsistence farm. Economic independence in today's conditions is a highly relative concept. All modern countries are interdependent as are their cities and townships, and in Australia even the farms.

On being pressed, the traditional decentralist would probably have to shift ground and say what he *really* meant was that there was a sufficient range of employment opportunity to attract and hold a labour force, and the decentralised city is independent in the sense that whilst its commodities may be exported from, and imported into it, its labour force was not of this character, i.e. neither supplying "commuters" for other parts or relying upon them.

Now it is precisely this condition that makes it so difficult to get a decentralised city!

Complexity and acute interdependence of modern economies mean acute specialisation of labour, which invades nearly every family, the "upward mobility" of occupations is spurred on, in Melbourne by a continuous influx of relatively unskilled migrant labour. The cumulative result is that the son no longer typically works in the same trade, factory or office as his father, and the daughter no longer follows in her mother's trade or occupational footsteps.

A "newtown" therefore, tailored to the occupational needs of supplying employment for young men is not enough. In modern life their wives too need employment. In fifteen years or so their children will be looking for specialised education and in twenty years or so for a myriad of specialised jobs over-reaching anything known to their parents.

So traditional decentralists adapting to mid-twentieth century reality now specify cities at least 100 miles or so apart with populations of 100,000 which is supposed to be a magic "take-off" point, after which the city will "grow of its own accord" i.e. without special subsidies to induce people to settle there.

Towns like the Latrobe Valley towns lack enough industry for women or education and occupational opportunities for young people. They lose their young people to Melbourne. Even cities of several hundreds of thousands, in our opinion, which do not have a university, are going to lose many of their youth to the cities which do.

Decentralisation is often presented one-sidedly as a problem of giving sufficient "inducement" to management of industry and commerce. When management fails to respond, the desperate decentralisers then often demand that Government Departments decentralise, because, whereas the Government cannot or dare not, order private enterprise here, there and everywhere, it can force its own public servants to locate wherever it decides!

All this overlooks the other side of the problem: it is the working class who have to be persuaded to decentralise not just their bosses, unless the argument is that the working class should be *forced* to decentralise.

During the second world war, there was "organisation of industry" and there were "manpower" measures which restricted the right of an employee to change his job at will. Because it was a popular war against fascism, these measures of state control were tolerated. As soon as the war finished, the workers were as keen to abolish "manpower" as the bosses were to abolish control over their enterprises.

It is our view that workers should not be directed to work in any particular enterprise, industry or city but should be given a choice. Still less should one section be so directed. For example the trade unions should not lend themselves to a demand that families of public servants should be decentralised against their will, any more than professional workers should lend themselves to a demand that the families of industrial workers should shift location for no other reason than that they offer some economic or technical advantage to the employer.

We would wager that few decentralists are game to argue that people should be forced by a

peacetime "manpower" where they should live and work.

The traditional decentralist's last argument, then, is to say not that there should be decentralised cities because people are demanding to go and live in such places (because this is patently not the case), but to say that there should be decentralised cities because they are good although people do not realise it and so they will have to be subsidised to go there.

We fully appreciate that aspect of this argument which says that people do not necessarily know what they really need when they have had no real opportunity to conceive it or experience it. We would not have published Winkle's dream if we believed otherwise. We, too, argue against the highly conservative non-planning of so called "demand" planning which turns out to be always the uninspired advertisement-induced market demand of the individual consumer of goods and services, and never the community's demand for a non-marketable deliberately-designed improved style of life.

Nor are we opposed to subsidising efforts to give people a choice to live in some superior style, or at least give them a choice of style. The subsidies and concessions in one form or another, to primary, secondary and tertiary industry are legion, so, if decentralisation is worth it, why not subsidise it, unless there are over-riding long-term ecological reasons which there may well be (and we deal with this soon).

But what really troubles us about the argument of subsidies to decentralise, is a simplistic approach to the problem which overlooks some of the aspects we have already mentioned. In an earlier stage of capitalism, when children worked at the same job as their parents and when the overwhelming bulk of the work force were unskilled industrial workers, higher wages or cheaper houses (i.e. economic subsidies) might have been sufficient to induce a shift and might not have disadvantaged those who shifted either, compared to those who did not.

As we have mentioned however, there is a changed structure of the working class arising from a further diversification of the division of labour requiring higher levels of technical skills and of education and this means precisely that "money will not buy everything".

In any growing country town, even one with forced subsidised growth, money does not supply established, cultural, sporting and intellectual centres which provide opportunities for children and young people to acquire the finest of man's heritage. Nor can money hope to supply a very great diversity of activity in a small population.

Although all these "services", of course, can be subsidised, too, they cannot by their very nature, attain the maturity needed for top quality in a short span of time. Their very nature is such that they "brew" slowly. To induce workers by subsidy therefore, into a situation where their children suffer a relative cultural deprivation compared to the children in Melbourne, may not, in our view, be really catering for the best interests of the worker's family anyway. It is not that every child is destined to attain the heights, but some do and all should have the opportunity.

The traditional decentralist, therefore, is confronted with this prospect; to establish an "independent" workforce in a decentralised town it must be a cross-section of the whole working class. But (1) the working class do not want to go there, the trend being all the other way, and (2) it is unconscienable that some of them should be directed to go there and so, (3) they must be induced to go there by subsidies but (4) economic subsidies alone may attract relatively unskilled workers but cannot attract a cross-section of workers and (5) non-economic "subsidies" in the form of all-sided cultural opportunities cannot be given an "accelerated development" as can physical growth factors, so (6) the consequent lop-sidedness of the work force attracted hinders industries and commercial enterprises already established and deters others from establishing so, (7) the growth rate is retarded instead of accelerated by the character of the work force so that the city never attains the magic "take-off" point of genuine independence, when it grows "without even trying".

Contrast with this our Gippsland corridor. Structured, as we propose, with metro-cities of 100,000 or so, it is, actually a string of decentralised cities end to end! Be honest, reader! Did you conceive of it, when you first read the idea, as Winkle initially saw it: an endless metropolitan urbanisation? Or did you conceive it as a form of decentralisation?

Our betting is you saw it as an extension of Melbourne rather than decentralisation, because it "grew out of" Melbourne. If the same corridor had grown westward towards Melbourne from the Latrobe Valley towns and joined up with Melbourne, you would probably have conceived of it as decentralisation.

Actually, of course, it is both: it is part of Melbourne (given rapid transit, of course) and it is decentralisation (given "structuring" of course). Or it is neither. A new word is needed. Maybe Doxiadis has made up a word.

Without bothering to make new words, the important thing is, in our opinion, that the factors which would prevent a decentralised city (in the traditional sense) to easily become "independent" (in the sense of a balanced work force that would enable it eventually to establish as a viable unsubsidised city) do *not* apply to the proposed metro-cities!

To the extent that it is necessary to "induce" a selection of industrial and commercial undertakings to locate in a decentralised town and "subsidise" labour to follow, the same inducements and subsidies would have a greater attraction in a metro-city because both commodity supply and labor supply can be more readily supplemented from outside by reason of the rapid transit.

Conversely, to the extent that the metro-city fails to supply the diversification or degree of culture to the level of present Melbourne, it can be supplemented either in any other one of the adjoining (decentralised) metro-cities, or if necessary, by facilities in present Melbourne, again, by means of the rapid transit.

In a word, a metro city in the Gippsland corridor has a far higher chance of "independence" because the adolescents, and adults for that matter, can continue to live in the "home town" whether they find all opportunities they need right there, or whether they have to travel a short trip (in terms of time) to find it.

And the "opportunities" they would find on the line of the rapid-transit would be both employment opportunities and cultural opportunities. Is that not a better and newer form of "new" town and one which could guarantee its "independence", instead of "independence" being a risky gamble?

(iv)   The Identity of a Cohesive Community

It is supposed to be a self-evident and paramount virtue of the traditional decentralisation of a separate city that the whole community is given a chance to be restored to manageable human proportions, unlike the formlessness of a megalopolis where a person can live and die almost unknown to his nearest neighbours.

Now, of course, it is true that the car has de-structured and dispersed many former local centres of activity in Melbourne where a person assumed a neighbourhood identity, and, in new suburbs has hindered or prevented the formation of such local human-scale associations.

But in a car-based decentralised city the same trends exist. The pub on the corner, and the "corner shop" have as little chance of survival in the newer suburbs of a decentralised town as they do in the newer suburbs of Melbourne.

True there would be a much greater chance of the "identities" of the decentralised town being known to all and sundry. The local councillors and politicians, the prominent sports men and women, charity workers and businessmen would likely be read about much more in the local press and commented upon on the local radio much more than their equal numbers in Melbourne suburbs.

But all this does not constitute cohesion or egalitarianism or humanism or even manageability if is meant by this a transcending community spirit that absorbs or uplifts the individual and makes him feel he really "belongs".

In fact, if there is any evidence at all it seems to run in the opposite direction, namely, that in a country town there are to be found far more nasty castes, cliques, and exclusive groupings and what goes with such conditions far more oppressive taboos and hide bound rituals than are found in the profile of behaviour of Melbourne's citizenry ugly as part of that may be.

A "Frontier" study of Young, a town of about 10,000 or so in New South Wales, painstakingly records some evidence of this (paralleling for today's country-town conditions what novelists like Kylie Tennant portrayed several decades ago).

What we might call "the rustic mystique", that envisages a dear little healthy community, sweetened by the country air, where all the different classes mix amiably because everyone knows everyone else, is a fiction born of man's yearning for better human relationships rather than a picture corresponding to the real conditions prevailing in any actual small capitalist city.

A "metro town" in the corridor seen through the eyes of Fraser or Stretton, would no doubt be like another group of outer suburbs although Stretton would certainly hope they could be like Canberra suburbs. But, because they are "structured" into metro-towns, conditions would also approximate to those of country towns, so far as cohesiveness or manageability is concerned.

Left at that, a "metro-town" would be no better or no worse perhaps than a country town. If Stretton's Canberra-type "social mix" techniques applied to the suburbs something a bit better than an average country town community might emerge.

The "metro-city" of our prescription would, we believe, be a great deal more cohesive and many more people would "belong" in a way which meant that they were really wanted, because our whole concept is that not only design, but all other measures possible would be taken to encourage "collectives" as we have described. A genuine collective tends to cut right across the barriers of occupation, sex, age, nationality, and this is the only prescription that can overcome the combination of suburban indifference and small town stratification and parochialism.

It might be objected that the provision of a rapid-transit could encourage commuting and tend to break-down the cohesiveness of the metro-city, reducing it to the status of a present Melbourne suburb rather than a country town.

In the "Decentralisation Report" of the Victorian Chamber of Manufacturs (May 1972) one of the "social benefits" of decentralisation is listed as: *"Successful decentralisation would further help to preserve family ties since it would provide a community environment in which school leavers could find gainful employment and not have to migrate to capital cities to find jobs"*. (p. 11).

This of course, begs the whole question. It dodges the very issue that makes "success" so difficult. Throughout the period of "growing pains" of a decentralised city, that is precisely how families suffer: they lose their sons and daughters to Melbourne because there is just not the educational or employment scope available. The community suffers from their absence just as much as the family.

To be more honest, the "Decentralisation Report" should have listed this as a social disadvantage that would continue right through the formation period until the city got as big as, say Geelong, and even beyond that to some extent, because Geelong loses some of its youth to Melbourne.

But our metro-city form of decentralisation allows a gradual increase of mixed employments and educational facilities to grow during the formative period without disrupting family ties and community ties. With rapid transit, as we have pointed out, the daughters or sons who seek specialised tertiary education, or job opportunities can find them, either in the heart of another metro-city or in Melbourne's heart itself without "leaving home".

Losing no more time in commuting than the average present Melbourne commuter, the youth who set out and return to their own metro-city would have as much time for home-town community activities as do the average youth in present Melbourne and a great deal more opportunity for such activity finding much of it located hard by the transit-station through which they pass daily.

That is why we say our Gippsland corridor form of decentralisation is far more realistic than traditional decentralisation proposals. It does not subject the families and communities involved in a desperate and agonising formative period that jeopardises the whole project during which all those endowed with or hankering after specialised education or occupation have to emigrate to Melbourne to find it.

Our proposals are therefore, not only a form of decentralisation that is for this very reason, guaranteed success, they are also humane. And so, from every point of view, whatever meaning you give to the concept of "community cohesion" our proposals supply the degree of flexibility needed to maximise such cohesion and bestow on the individual an identity and continuity with his home and friends without sacrificing any adventurous opportunities.

Taking the four criteria already dealt with:

(i) Nearness to Greeness
(ii) Nearness to local centre
(iii) "New Town" independence
(iv) The identity of a cohesive community.

the Gippsland corridor form of decentralisation gives a far superior solution to the traditional form of decentralisation. A strong advocate of decentralisation does not give away his principles by supporting a Gippsland corridor. On the contrary, he finds a sure-fire way of doing it. This is not a mere play on words on our part. Just as refrigeration and steam train speeds enabled cities to suddenly expand to some millions because there were no longer the older restrictions arising from keeping food fresh, so now another leap in technology enables a new qualitatively different city to emerge.

Rapid-transit technology not only makes a linear design possible, it makes it a crying necessity, because a radial-designed car-based city of some millions is both ecologically and sociologically unthinkable. The modern technology as well as the ecological and sociological understanding have all only recently arrived on the agenda. Just as the doctrine of decentralisation experienced no difficulty in advancing from Ebenezer Howard's little "garden cities" to the modern version of decentralised cities of 100,000 or even 500,000, so there is no shame for a decentralist rethinking his principles in the light of new knowledge and making the transition from "cities of several hundred thousand, 100 miles apart" to decentralisation in the form of linear cities.

Nor is it a play on words to say that *if* population growth continues, the only way of "containing" present Melbourne's population at any given ceiling figure is to substitute a linear growth for what would otherwise be the expanding concentricity of radiality of the megalopolis. Indeed the use of the word "Melbourne" in the phrases we have coined "Gippsland Melbourne" or "corridor Melbourne" are perhaps misleading in this respect, because such a long corridor would in one sense, be "Melbourne" but in another sense would be quite unlike anything Melbourne has ever been.

In fact, whilst containing all the advantages of a very big city which we believe to be unique, a Gippsland Melbourne, even whilst remaining a capitalist city, would shed such of the horrible disadvantages of big cities as derive from the unstructuring dispersing, collective-destroying propensities of the motor vehicle that is allowed to "take over" the city, instead of being confined to a machine to give a fine degree of personal mobility for leisure time purposes.

It often happens that people identify symptoms but ascribe wrong causes for them. We believe that the view which holds that big cities in themselves are bad, or that high densities in big cities in themselves are bad, (views which have a very high currency at the moment) are cases in point.

We have yet to be convinced that cities like Peking (7.2 million) or Moscow (7.1 million) suffer the same sort of ills that are notorious in say Los Angeles (7.0 million) or Chicago (6.9 million).

But unlike Peking or Moscow, Melbourne is as firmly based on cars as are Los Angeles or Chicago. For it to grow, so car based, to anywhere near the size of Peking or Moscow would be an extravagent agony, and, for those with ecological understanding, a criminal agony at that.

If Melbourne is to break down the syndrome, it can do it only one way . . . linear corridor with every possible design advantage thrown in the direction of making public transport paramount for work purposes and more attractive for as many other purposes as possible.

There remains another major criteria we have not dealt with; the cost and resource-conservation.

The economic merits or demerits of traditional decentralisation as against the Gippsland corridor we would find more convenient to discuss under the next section on "economic considerations",

because we have also to deal with the comparison with the M.M.B.W. — Evans plan on the grounds of cost.

Regionalisation

Just as the Gippsland Corridor Melbourne is decentralisation and yet not decentralisation, so too it is regionalisation and yet not regionalisation.

One of the casualties of early post-war "reconstruction" planning was the regional concept which had been adopted in 1944 by Commonwealth and State Governments.

Thirteen regions were accordingly recommended to the Victorian Government by a committee set up for the purpose "to facilitate the investigation of the resources and the planning of future development". For an example, a "Resources Survey" for the West Gippsland region published in 1968 by the little-known Government organisation called the "Central Planning Authority" in collaboration with the "West Gippsland Regional Committee" is one of the most recent of its kind. It is a compendium of statistics and maps, but no recommendations.

The idea of Tennessy Valley Authority (T.V.A.) type regional development never evenutated. Generalised assistance to country centres with road building, Housing Commission estates, freight concessions and electric supply did not help. No regional centres were planned or emerged.

The concept was superseded in 1967 with the Report of the Decentralisation Advisory Committee on the Selection of Places Outside the Metropolis of Melbourne for Accelerated Development issued by the Minister of State Development. Five separate decentralised cities were to receive incentives, rather than spread them over 13 regions.

The current prevalent thinking is to further "water down" the concept by selecting *one* instead of five cities to concentrate on.

This shift from the idea of assistance to each and every one of thirteen regions, all the way down to one particular city has taken place during a long reign of Liberal Governments, both Federal and State. There is a natural tendency for labor thinking therefore, to blame the Government for lack of trying and to hanker back to the early regional development ideas.

There is something right and something wrong in this approach.

What is right about it is that much more Government assistance, much more attention to potential resource-development (especially, from here on, re-assessed with ecological as well as economic considerations in view) and more conscious planning on a regional basis, can and should be done.

What is wrong about it is that it cannot supply an answer to redistributing several million people from Melbourne, for reasons we have already argued that separate decentralised cities cannot do so. What the country cities cannot do on their own cannot be remedied by supposing that if each had the backing of a "region" created around it can do it. This is not the nature of the problem which is to provide a full range of opportunities especially for youth.

We subscribe to the position well expressed by Dr. John Paterson (quoted more fully in our next section on costs): *"Selected inland centres should be regarded as the capitals of Regional Planning Regions and should look forward to well planned elegant orderly and civilised growth but of a fairly low order of magnitude . . . policy towards the inland should be aimed more at conservation and qualitative improvement rather than at crude numerical growth"* (Quoted from Chamber of Manufactures "Decentralisation Report" May '72, at p. 33).

It is sad to find the Victorian Labor Party still talking about "balanced development" for all regions in Victoria, much as the Evans plan supporters talk about "balanced development" within Melbourne itself.

This idea occurs strongly as an objective in the most recent publication "Regional Development" which is sub-titled "From high rise flat to country town" and describes itself as "Labor's program to

reverse the drift to the cities." This program sets itself confused, romantic, old fashioned, unrealistic objectives.

"Ideally, the regions would include the same range of resources, levels of industrial development and social amenities, but this does not represent the current position and it is therefore necessary to work towards this ideal." (p. 25).

This is sheer rubbish! How can they include the same "range of resources" . . . resources of water, power, raw materials, ports, rainfall, soil and so forth cannot be equalised by planning! Why should they include the same "level of industrial development" when, on the face of it, this would obviously be uneconomic, not to mention ecologically unwise? Even the "same level of social amenity" which might seem the easiest to equalise and certainly the most laudable aim, is unrealistic, as we hope we have demonstrated in relation to separate decentralised cities.

"As a basis for regional planning" we are told, "it is worth examining the work of Colin Clark comparing and analysing regional data from the United States, Great Britain, Canada and Australia". We are told that his findings correspond with views of many other physical social and economic planners as to the appropriate size for full economic and social functioning, namely 100,000 to 200,000 for service-industry type cities and 200,000 to 500,000 for manufacturing-industry type cities. He contemplates decentralised cities of 200,000 in a region of 250,000 (p. 28).

We reject Colin Clark's whole pseudo-scientific trend-examining "predictive" methodology for reasons we explain in appendix No. II, but apart from that it is simply not instructive to compare, say, Britain with Australia, any more than the authors of the A.L.P. booklet are instructive in quoting European experiences that a population of 40,000 is sufficient *"to attract market-orientated industries and stimulate the growth of regional city centres".* If this was so Ballarat, Bendigo, Geelong and even the Latrobe Valley would already be booming places.

Incidentally the riddle as to how a policy that concentrates on city building in the country is supposed to constitute "Labor's program to reverse the drift to the cities" remains unanswered. The trouble with this booklet stems no doubt from the compulsion for seeking electoral support from all electorates so there must be promises of "development" all over Victoria.

But just as it is unforgivable for a Labor supporter to wave a flag for "our developers" in the deprived western suburbs (failing to observe that doubling the population and quantity of industry does not uplift the deprived), so those who wave a flag for simultaneous growth of rural regions run the danger of backing business interests whose expansion may or may not have a connection with overcoming deprivation of people living in the country town or who emigrate to it from Melbourne.

Sociologists would surely shudder at such approach.

Moreover, although the western corridors are (unfortunately) at least feasible in our opinion ideas such as Colin Clark's are simply unrealisable. He has advocated, for example, ten new industrial cities in Victoria each with at least 250,000 people and at least one new city started every two years with complementary industries. He did this when criticising the Town and Country Planning Board's Gippsland corridor concept, i.e. the one we have called the "Fraser" plan, saying it would create a deplorable drift in the current urban sprawl (see "Cross-Section" No. 182 1/12/67 at p. 3).

In our opinion, this is astounding nonsense to have come from a person who had been no less than the economic adviser to the Gair Queensland Government, because of the 5 million then thought to be Melbourne's likely 2000 A.D. population, it amounted to a simplistic belief in sealing off Melbourne's population at 2,500,000 and dividing the extra 2,500,000 by 10 and proposing *all* future growth be so accommodated! How this massive simultaneous miracle was to be achieved in a private enterprise society system (impossible of contemplation even if we had a socialist Australia) we leave the reader to puzzle!

By contrast to this childishness Fraser's Gippsland corridor concept would in time become a sure-fire realistic *regional* development of the West Gippsland Region. The corridor as conceived by us would

be better still for those who want to see a regional development that really works because it would go further and faster into Gippsland than the Fraser plan.

There is no more point in dividing Victoria into 10 squares and trying to provide each with equal measure of industry and population than it would be to to do the same for Australia as a whole where the very idea of populating the "dead heart" let alone servicing it with cities is clearly ridiculous.

The whole concept of "balanced" development for equalised regions everywhere is out-moded romance with no connection whatever with ecological, sociological or economic realities. It doesn't even make electoral political sense. If it ever won votes from the unthinking it would mighty soon lose them again as soon as the unfulfilled promises piled up!

It would be departing too much from our purpose to deal here with other potentially fruitful ideas of new administrative structures proposed in the A.L.P. booklet "Regional Development" which suggest not only integrated rural regional administrations, but also Melbourne urban "regional" administration in the forms of groups of suburbs.

Nor shall we comment on a suggestion made in the Communist Party of Australia's 1970 "Statement of Aims" which proposes for "discussion" that "State governments might be replaced where suitable and in accordance with the decision of the people, by regional government of socio-economic areas."

It is significant, perhaps, that both the A.L.P's and the C.P.A's administrative proposals are coupled with ideas respectively of "citizen participation" and "better control of representatives."

The Gippsland corridor, would, like any new form of urban organisation doubtless need new administrative machinery, but apart from that, the demands of ecology and sociology require a thorough re-think of the composition and integration of all our existing decision-making institutions in any case.

We would only warn: let us not start with an abstract scheme of organisation first, and try to cram life into it! Let us hammer out agreement first on what has to be done. Then organisation appropriate to the aim can be devised, including inbuilt forms of citizen participation and workers' control.

It is fatally easy to get hold of a new mental administrative kit, being a size different to anything we now have (in this case a region) and invest the ideal with magic for working economic wonders, administrative efficiency and democratic potentialities. There are no such short cut solutions that can substitute for a real analysis of economic, ecological and sociological realities.

The administrative requirements of a Gippsland corridor might not fit a classical scheme of regional government, which might have been pre-determined before the new type of mini-metro structured urban-corridor form of decentralisation was ever heard of. That should not make the Gippsland corridor wrong, and any argument so twisted would be putting the cart before the horse.

The form of urban growth we propose, that is, its shape, direction and structure follow the function of collective-formation, and ecology-control we propose and it would be meaningless to try to reverse the relationship. In like manner, the form of administrative planning and democratic control should follow the functions of the Gippsland corridor whose fate should not, for example, be necessarily placed in the hands of the present West Gippsland Regional Committee, a majority of whose members are described as farmers or graziers.

For all that, all those who are really earnest about decentralisation or about an experiment in regionalisation, and all those who think Melbourne-as-is, should not grow bigger, should give serious consideration to the Gippsland corridor proposition. They will find a realistic answer.

2. COST

"The cost of rapid transit would be prohibitive!" will no doubt be a popular objection to our "objection". "It would cost more than decentralisation!" maybe another. Would it? First: What cost?

There are costs, we suggest, measurable in two dimensions:

(i)   the traditional economic cost-benefit type of book-keeping.

(ii)   the ecological-sociological book-keeping.

We shall deal with these separately. But before doing so we must elucidate the problem whether they *are* two dimensions, or only one; and if two, how they are related.

Two ledgers or one

Now we are aware that cost-benefit theorists will say that cost benefit theory is so elastic that any value at all, including ecological-sociological values whether positive or negative can be brought into the equation and weighed up. On this basis, no doubt, we will be told that there is no need for a second set of book-keeping, and that if a course of action is shown to be the most economically desirable, it will therefore be the most ecological and sociologically desirable. For example, from the point of view of saving energy (as one ecological factor) the cheapest solution will turn out to be the one that also conserves the most energy.

And we will be asked: what do you mean by "ecological-sociological book-keeping" anyway?

We have coupled "ecological-sociological" values together as a reminder that we embrace the Chermayeff-Tzonis concept mentioned, namely, that, since the society of mankind can be usefully regarded now as constituting a third system of ecology it is only by setting his own human house in order . . . . . which is tantamount to a conscious sociological evolution . . . . . can he save himself by becoming "human enough to tackle the total natural-human ecological crisis.

Now we believe that to try to "contain" such objectives within the "cost benefit" notions runs the danger of diluting what should be the transcending weight of ecological-sociological considerations with concepts of allocating economic resources according a price-cost criteria seen as increasing the *total national output.*

This process of maximising growth is fundamentally a different process with different aims to that of global ecological equlibrium, and although growth must be hastened in some parts of the world economy (for example in the under-developed countries and in the case of the under-privileged in developed countries) it must nevertheless be a process seen as an integral part of a more over-riding principle of long term equilibrium, else the whole world will finish up both chronically "undevelopable" and under-privileged.

If the authors of "Limits to Growth" deem it prudent to warn that "the vast majority of policy-makers seem to be actively pursuing goals that are inconsistent "with measures that have to be taken for equilibrium, surely the policy of these policy-makers cannot be changed on the basis of an economic theory that had its origins in the doctrine of economic growth, or which gives paramount sway to the "consumer's dollar"!

In fact plans based on the traditional "cost" and "benefit" of the economists must be transferred, in the new context, into plans based on a combination of highly ethical and highly scientific considerations that are at the opposite pole to the so called "demand plans" fashioned for the individual consumer seeking "satisfaction" in the modern market place of the giant corporations which spend a sizeable portion of their surplus convincing the consumer what "trends" his artifically-stimulated demand should follow!

There is a form of predictive-type, so called planning which is a fascinating game conducted within the framework of this play of forces on the "free" market. The object of the game is to analyse what effects the car will have in shaping and reshaping the city.

Some fo Melbourne's transport engineers and economists seem to be in the addictive grip of this fascination. It is a real game with real purpose, and it has truth and value too, within the limits of the exercise. Its value lies in that it observes, examines and formulates the objective laws governing the changes in relationships between transport, land-use, residential densities, access to employment, land values and so

forth, and what freeway networks best serve such changes, given that the car becomes the almost universal mode of transport for all purposes and the corner-stone (as it then has to be) for all planning.

Just so there is value in physicians diagnosing the untrammelled course of a dread disease when left untreated, to better understand its nature. Such medical experiments, however, are not permitted on humans, and the object is treatment and, if possible, cure.

But the class of engineer-economist city-planner we refer to, unlike the physicians, prescribe a "treatment" that permits the unobstructed raging of the disease. The car-allowed-to-run-wild becomes the king of society. Cure is not the purpose of the treatment. It is really non-planning. Such, in a mildly diluted form, was the 1969 Metropolitan Transportation Plan (See "Plan for Melbourne" Part 2). Such, in a pure form (excepting only a few papers) was the 1970 three-day Tewksbury Symposium on the subject "Analysis of Urban Development", organised by Mr. Nicholas Clark, head of the Transport Section, University of Melbourne.

We give as a sample, an analysis of the "keynote address" to the symposium by Dr. Colin Clark who cunningly contrived to turn the relationship of car to city-formation upside down, describing trends within cities throughout the world as if they were God-given unchallengeable "laws" without cause. Having accepted these laws, the car (a word he managed to avoid throughout the address!) finds itself in a city which gives to it the best possible conditions to proliferate (see appendix No. 11). We turn however from those in the grip of this addiction which is rather extreme to an example of economists who have a thoughtful attitude to their own methodology, although, just the same, we cannot concede that it is good enough for ecological-sociological accounting.

In 1968, before over-riding ecological considerations came fairly onto the agenda, H. M. Kolsen, Professor of Economics in the University of Queensland and P. J. Forsyth, lecturer in economics at Macquarie University produced an interesting paper which illustrates the point we are making well.

In an article "Public Investment in Transport", they warned about the naiveté of many planners in approaching economic problems. They say: *"For example, planners sometimes regard cost minimisation of public utilities as a major objective in urban (and other) planning and give the impression that this is, in its crude form, an acceptable and operational planning objective." "It is the economists job to point out that there are many other important factors which must be taken into consideration and to draw attention to implied value judgements in the proposed solution to any specific planning problem"* (Australian Planning Institute Journal Oct. 1968 p. 124).

They develop the familiar idea that no one really knows what people want until they have been given a chance to show by their effective demand that they do in fact want it. Then they go on to contend that urban planners cannot simply plan solely by reference to what people have wanted in the past although they can give them choice between say, high, medium and low density housing. Then they add:

"The oft-mentioned objective of cost minimisation really means then that for any type of development costs must be minimised. It does not mean that public transport must be developed because it is the cheapest way of transporting masses of commuters, or that people must live in high density housing because the per household costs of electricity, gas, water connections are lowest. Planners must provide for differences in user preferences, and be guided, at least to some extent, by the consumer's dollar." (p. 127).

So here we have a tricky double-barrelled proposition! We have the proposition that public transport should not be developed just "because it is the cheapest way of transporting masses of commuters"!

This, of course, is the very opposite to the type of ecological-sociological book-keeping required! A minimisation of transport-energy here must be a prime objective and the spirit must now be: to hell with the "consumer's dollar"! The consumer's life is more important than his dollar! So we say; how can global equilibrium and a higher, finer, more social, more satisfying yet less energy-consuming style of life which is demanded, be entrusted to theories whose principles are so grounded?

In saying this we do not single out for attack Kolsen and Forsyth. In fact, if they have read "Limits to Growth" they might today think and write quite differently. Beyond that, there is also truth in what they write. As we said: our quotation is a tricky double-barrelled proposition.

The truth emerges more clearly, perhaps, in their illustration of housing. If the brave new ecologically-balanced world had to mean high-rise for everyone to save reticulation costs, there would no doubt be many whose reactions would be: let's eat, drink and be merry for tomorrow we might as well die! We too believe firmly in choice of housing, and even choice of transport, but now we contend *the range of choice must lie firmly within the overall objective of energy-minimisation and social opportunity maximisation.*

Dr. S. M. Breuning, a transport expert from Massachusetts called in by the South Australian Government to examine the Metropolitan Adelaide Transport Study (M.A.T.S.) Plan (which was of a similar character to the Wilbur Smith and M.T.C. Melbourne Study) had this to say, not about "economy" versus "ecology" (which is not the question), but on how to make the transition from individual consumer "demand" to the community-oriented "demand".

"Today's conflicting systems are public transport whether rail or bus, and the automobile. Transit is uncomfortable, inconvenient, inflexible (with respect to both place and time) slow, hard to use when carrying things, and lacks privacy. As for the automobile, one almost apologises in 1970 for dragging out the same old litany of air pollution, congestion, safety, excessive use of urban land, etc. Its success individually is balanced by its shortcomings in the aggregate. So while transit is considered socially desirable but individually unpalatable, the automobile proves individually desirable but socially unacceptable."

"Nor does any reconciliation seem to be in the offing. In fact, society grows increasingly intolerant of automobiles, while the individual, having grown accustomed to a certain standard of personalized transportation, resists fiercely any attempts towards retrenchment of that standard. If anything, his expectations, in all fields, are geared to an increasing level of comfort, convenience and material well being, including mobility."

"Under these circumstances it becomes evident that merely extending the scope of present inadequacies is no real solution. What is called for is the progressive modification of both transportation systems so that each modification of both erodes one or more objectionable characteristics of the effected system". (Adelaide Transportation 1970 Report p. 8).

Exactly! As a matter of "transport tactics" we agree! But to set out to "erode the objectionable characteristics" of each mode of transport with Breuning is not the same objective as allowing the "consumer's dollar" to have the decisive say as with Kolsen and Forsyth! The "consumer's dollar" at the moment, quite inexorably dictates the accelerating emphasis on the most objectionable characteristics of both systems! And the Wilbur Smith Study and Melbourne Transportation Committee Plan coupled with the MMBW Regional Plan would merely crystallize such a situation for Melbourne as M.A.T.S. would have done for Adelaide (see appendix No. 12 for references to M.T.C. Plan).

In our belief, the Gippsland corridor concept is just such an attempted "reconciliation" which makes a palatable transition period possible. True Dr. Breuning goes on to say: *"The strength of such an approach lies precisely in not committing itself to massive, irretrievable developments which future technologies may conveniently bypass . . . we must be suspicious of developments and plans which prematurely limit our options".* (p. 9).

Dr. Breuning cites an illustration the history of turbo-prop aircraft upon which staggering economic losses were made because they were utterly superseded by jets, despite the fact that "profit orientated" executives made the decisions.

And it could be argued that the rapid transit rail system in the Gippsland corridor limits our options. We think not. To start with, the M.M.B.W.-Evans radial corridor plan which embraces (and in fact has to embrace) a massive freeway network does not merely limit options. It goes further and makes the option of viable public transit for mass conveyance to work or recreation virtually impossible. It sets the stage for the treadmill freeway-congestion-more freeways-more congestion syndrome while public transport runs further and further down hill no matter how much is spent on it.

Kolsen and Forsyth advance a similar logic on options as does Breuning! *"The road can be used by cars and buses in varying proportions, so that a mistake in planning will mean only that there is a little too*

much, or not quite enough road space. This is clearly not the case with investment in urban rail facilities . . ." (p. 127).

Our Gippsland rapid transit proposition however is something quite different. The transit here does not come in as a belated last mode of transport competing with travel patterns and alternative modes already cast in the mould of habit. On the contrary, the whole design of the corridor is precisely to give outstanding advantage to the rapid transit and design of the metro-hearts themselves and the feeder transport to them would be similarly so weighted.

The Gippsland corridor with rapid transit does in fact leave maximum options open. The proportion between car and rail can at least be varied, but with radial corridor plus freeway network it cannot, for no system of rails can cope with the outer cross-suburban trips. The rapid rail, of course, would not be built right through to Traralgon or Sale or even Warragul at the outset. And we leave it to Dr. Breuning or other experts to *pick out the appropriate technology* for the best form of rapid transit, but naturally there must always come a point *where we must pick some technology*.

With the urgency of the ecological-sociological imperatives upon us it is better, in our view, to risk a mistake and pick a second-hand transit technology (but one that is as far in advance of any present rail speeds we know in Melbourne as possible) rather than wait a few decades in the hope of getting a better one, only to find that by then, it is too late, and the Gippsland corridor bid to break the dominance of the car has falied for lack of decisively superior public transit speeds.

Let us return to Kolsen and Forsyth, the economists concerned with the correct allocation of transport resources. They say:

"In valuing benefits there are two broad approaches . . . by reference to the individuals affected, or by using the community's valuation. In some areas, e.g. education, we accept that the community has precedence over the individual in determining the amount of goods or service to be consumed. So too, with reduction in probability of accidents . . . often individuals cannot know the benefits" (p. 127).

That's it! That's why the "consumer's dollar" conceived as the individual let loose on the capitalist market *cannot* be allowed to be the arbiter of mankind's fate! If it is fair enough that relatively minor issues, such as public education and personal accidents be taken beyond the realm of consumer preference as expressed in the market, so much more is the supreme objective of rejuvenating human society as a whole to cope with the permanent totalitarian world war on behalf of the preservation of humankind and the ecology!

Kolsen and Forsyth finish their article with a living example showing how ill-advised is the Sydney Eastern Suburbs Railway on cost/benefit criteria, just as in Melbourne there are the transport economists who assail the underground loop on the same basis, which, given a $2221 million freeway scheme could quite well be correct.

But that is precisely what we do not "give". We shall borrow one last useful thought from Kolsen and Forsyth before concluding our approach on this subject.

In discussing the myriad complications of "costing" the cost/benefit of transport alternatives (and we recommend the article for anyone who thinks cost/benefit studies are in the realm of "exact" sciences!) They say:

"In considering the benefit over time, the economist has no set approach. There are so many aspects which enter this question that there is simply no objective answer possible . . . the question is bound up with that of income distribution, which is in the province of ethics, not economics. A choice involving time means that we redistribute income between different people living at different times". (p. 12).

So right! But not merely income distribution is affected. A whole style of life is involved. Unwittingly the generation of the 1940's in Melbourne imposed on the generation now growing up, a dependence on the car and being chauffered around and a paucity of social contact unbelievable when these decisions were being made. The changes come so gradually that only the older ones discern the difference!

Now, however, even higher stakes are at the mercy of our ethics, namely, the survival of our grand-children. It will be at our peril if we permit such grave ethical issues to proceed camouflaged under the cost/benefit banner of the economists!

It's not that economics is needed less. Citizen-ethics and conservation-science are needed more!

We therefore justify the separation of ecology-sociology accounting, which must constitute the framework of planning policy, from cost-benefit economic accounting which remains a useful technique for assessing alternatives within this framework.

The Ecological-Sociological Cost

We believe the metro-hearted, rapid transit, Gippsland-corridor as structured and described would constitute a long-term immense saving of fossil-fuel and energy and an immense enhancement of social consciousness with a consequent potential saving of still more energy by the new generations as against the Evans-MMBW radial corridor plan coupled, as it must be, with the MTC freeway network.

We cannot prove it. But it could be proved. We propose that a multi-disciplinary team of appropriately qualified scientists who are acknowledged as outstanding in the matter of their attitudes of social responsibility in their own field be given this task. They may need to draw on economists, engineers, planners, sociologists, geographers and many other disciplines but it is for scientists, we suggest to be given the primary task of evaluating the "ecology benefit" and "ecology cost" of planning decisions of the dimensions of a regional plan for several million people.

We propose the examination might concentrate on total energy-expenditure of alternative designs for Melbourne: . . .

(A)	Gippsland Corridor	v.	Seven Radial Corridors
	+ (rapid transit)		+ (car for cross transport)
	+ ("structure" less commuting)		+ ("unstructured" by car)
(B)	Gippsland Corridor form of decentralisation	v.	Five Separated Decentralised Cities 100 miles apart
	+ (rail supplemented by trucks)		+ (trucks and rail)

We are not suggesting that this is the only issue the scientists would need to weigh ecologically. We know there would be others. For example respective pollution levels as affecting Port Phillip Bay and Westernport Bay as mentioned; or for example, respective air pollution generated by the number of automobiles required for each alternative.

We have read "Limits to Growth" too recently to have forgotten that the inter-connection between the main growth factors are such that an all-sided simultaneous understanding and decision must be made involving a re-appraisal of industrial processes, agricultural techniques and family planning.

Still surely deliberate dispersal as a consciously adopted design principle is bound to use, in total, far more energy and non-renewable resources, and a design that aims in the opposite direction cannot be wrong? Certainly, the *rate* of resource-use in Gippsland corridor would still have to be examined, and might indeed be far too high per head. But, at least it would be lower per head than either radial corridor development, or decentralised 100-mile apart separate cities?

Similarly, we suggest that another multi-disciplinary team simultaneously explore the relative sociological merits of the two pairs of alternatives, taking specifically as its criteria which is the most calculated to facilitate, rapidly, the formation of creative "social mix" and "age-sex mix" to advance ecological-sociological performance standards for the whole community.

Of course this cannot be a form of accounting with the precision of scientists "costing" consumption of energy used by alternative schemes, yet these sort of social factors are now beginning to

enter economists cost/benefit theory and practice, and if it is possible for the M.M.B.W. to "cost" relative conservation values as it has in the 1971 "Regional Policies" report, it should be possible for sociologists to grade the merits of different schemes according to the *opportunity* each affords for the formation of collectives.

The personnel of such investigating teams would not need to have, of course, the class of economists who embrace the concept that what people really need can only be measured by the "consumer's dollar" (because it is the *voluntary* non-consumer-based socio-ecological objectives that are called for) nor those who are their equivalent in the field of sociology who base themselves on surveys of what people say they want (because it is a *new* dimension of social responsibility and mutual respect and enjoyment of other people breaking with consumer-constricting habits that are needed).

Some of the issues to which such a committee should address itself, we suggest are:

(A)   Concourses in concentrated public transport served mini-metro hearts in Gippsland corridor.

v.   Random car-facilitated locations in low density suburban radial corridors.

(B)   Structured social mix area favoured by all in south east with special measures to overcome existing deprivation in other areas.

v.   Extension of "deprived west" and "exclusive" parts of south and east.

(C)   A range of employment, education and culture (either local or by transit) enabling an all age mix in Gippsland corridor type of decentralisation.

v.   An acute shortage of youth who have to migrate to Melbourne for jobs, education, culture in formation stage of all separate decentralised cities.

So, for those who object to the Gippsland corridor on the grounds of "cost" of rapid transit, our first answer is: the ecological and sociological cost is the crucial factor from here on. We believe that our proposals meet these criteria and that either a radial corridor Melbourne, or separate decentralised cities policy would not meet it.

The Traditional Economic Cost/Benefit

What of the more traditional economic accounting of cost benefits of the two schemes? This too, of course, would need quantification by those more qualified and experienced than we are. We venture to assert, however, that on the face of it, the Gippsland corridor type of decentralisation would appear to have overwhelming cost advantage over either radial corridor Melbourne or separate decentralised cities.

What follows is discursive and itemised rather than analysed and argued, but we believe it may provide sufficient food for some second thoughts even by those who cannot follow or who do not agree with our concepts of new-style ecological-sociological costing.

General Considerations

Alex Hunter, Professor of Economics, University of New South Wales, was the editor of a book of studies by various economists entitled "The Economics of Australian Industry" published in 1963.

In a statement which embraces conclusions of studies on location of industry and on transport he summarises as follows:

"What reasons suggest themselves from the various studies in this volume to account for inadequate performance in manufacturing? The picture is a complex one. Nevertheless, there are a number of factors working to the disadvantage of Australian manufacture which do stand out and deserve comment."

"The distances which manufacturing industry must contend with are great. Together with the distance *problem, a part of it indeed, there is also the* fragmentation *of the Australian economy* over the six states. Despite the very large proportion of manufacturing industry which is located either in

Melbourne or Sydney, this fragmentation seriously reduces many economies of industrial concentration. The disadvantage in terms of distribution and marketing costs is even greater: the margin between manufacturing price and retail price in Australia is about the highest in the world. It is worth noting that the high-growth countries in Table I are all much smaller and have well-established interior lines of road and rail communication to integrate industry and markets. Holland and Japan are particularly fortunate in respect of their low internal transport costs. The importance of the distance factor is borne out by the analyses of chapters 1 and 2. The proportion of the national product which is accounted for by transport might well seem astonishing to most people, although indeed some part of it is due to high standards of personal transport. It follows that almost any policy which can lower transport costs by eliminating expensive transport media deserves careful consideration and political action; and that investment in new transport facilities, or the subsidization of existing underemployed facilities with high fixed costs, is of peculiarly great importance to the Australian economy at large."

In order to relate this general argument to Victoria and Melbourne, we quote Dr. John Paterson who suggested that few of the five centres proposed by the Decentralisation Advisory Committee in 1969 (Ballarat, Bendigo, Latrobe Valley, Portland and Wodonga) are favourably sited for development. He argues:

"* Given the very small stream flows of the interior, urban pollution would be significantly more troublesome inland than on the coast. .

* Only Melbourne and some other centres south of the Divide have a strong economic base.

* Selected inland centres should be regarded as the capitals of Regional Planning Regions and should look forward to well planned, elegant, orderly and civilised growth but of a fairly low order of magnitude.

* The growth of large centres of population should be confined to the coastal strip linking Geelong and Melbourne, through Dandenong with LaTrobe Valley.

* High speed transport by road and by rail, together with short haul air-commuting could make this a viable growth corridor in which economic development in Geelong and in the LaTrobe Valley could be supported by the strength of the Melbourne market."

We have no disagreement with this formulation at all with the possible qualification that if the first item means that the oceans are capable of taking indefinite quantities of pollution, it is not true, although Paterson may not have meant that.

Dr. Paterson concludes: "A policy of this sort combines the economic wisdom of following the logic of the market with the social and political objectives of reduced metropolitan growth. Policy towards the inland should be aimed more at conservation and qualitative improvement rather than at crude numerical growth." (Quoted from the "Decentralisation Report" of the Victorian Chamber of Manufactures, May 1972 at p. 33).

We show below the sketch of the location of proposed economic growth in Southern Victoria accompanying Dr. Paterson's argument quoted (See figure No. 5).
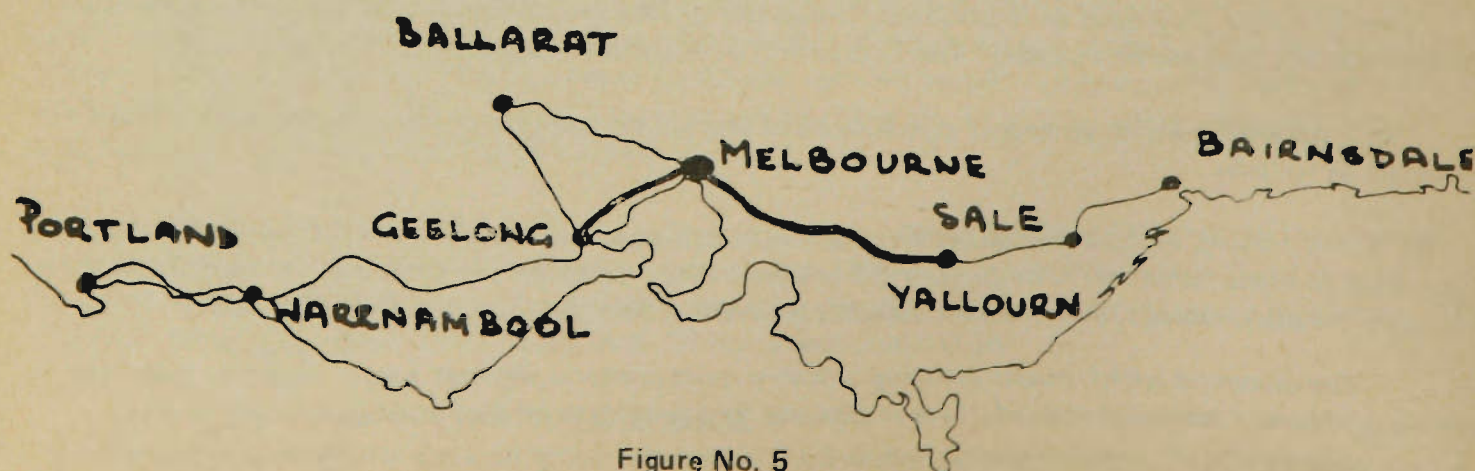
Figure No. 5

For the rest we will list some of the major items of traditional economic cost advantage which we can perceive:

Debit

Very heavy cost of rapid-rail transit especially bearing in mind initial light usage.

Credit . . . short term

(1) The longer the corridor grew the more the rapid transit/electric would pay.

(2) Much of the cost of $2221 million freeways (1969 prices) would not be required.

(3) A heavy saving in cost of excess petrol, oil, cars due (i) to less length of trips needed, (ii) less trips needed at all (because of structured mini-metro suburbs).

(4) A big saving in price of land for all purposes (if Government acquired corridor which is in direction and at a distance few speculators would have anticipated).

(5) Cheaper freight for industry which would progressively use it more and more.

(6) Cheaper reticulation of water, electricity and natural gas because corridor would be advancing towards sources of these supplies; instead of retreating westward further from them.

(7) Less uneconomic and forced premature "redevelopment" required for inner areas, freeways and C.B.D. parking.

Credit . . . long term

(8) When time approached for exhaustion of petrol and natural gas, the coal resources of the Latrobe Valley may again acquire a great significance as a source of power and the closer industry was to such source the better.

(9) A big city, somewhere in the Latrobe Valley could be an ultimate focal point for "back-loading" by the rapid transit and electric rail giving marked transport advantages.

Can the Evans's radial corridor plan, or the separate 100 mile apart city concept really match anything like these traditional economic arguments?

The cost of rapid transit, the heaviest and seemingly disproportionate element in our proposals is surely heavily outweighed by the accumulated advantages on the other side of the ledger!

Even if the costs merely "broke even" or thereabouts (and we find it hard to credit such a result), it is about time anyway, that society began to get some of its priorities right. If it is possible to spend $2,000 million just to "research and develop" public transport for top executives of a super-rapid variety (we refer to the Concorde) it is time that money of this dimension was used for the more humble, but vastly more human aspiration of applying modern transport techniques to saving our cities and ourselves.

3. THE CENTRAL BUSINESS DISTRICT

"If the Gippsland corridor and city-metro centres are planned it will retard growth of Melbourne's central business district (C.B.D.) and undermine its relative strength", will no doubt be one of the objections to our "objection".

Whether this proposition is true or not depends on what we understand by "growth" and what by "strength" of the C.B.D.

Growth

We distinguish three elements of "growth" to make our point: staple growth, exclusive growth, diversified growth.

By "staple growth" we mean growth of facilities for handling staple retail goods that are to be found in suburbs and supermarkets anywhere, staple commercial services such as insurance and finance companies or information, staple administrative services such as gas, electricity, postal, employment and pensions, or staple entertainment such as film circuits. We can see no virtue at all in growth of the quantity of such functions in the C.B.D.

On the contrary, the more they can be kept out of the C.B.D. the better, for such already suburbanised services only clutter up with unexciting humdrum daily chore-type functions what should be, as much as possible, a unique and selective range of functions.

By "exclusive growth" we mean growth of a very limited class of highly-priced functions, or the class of functions which are required only by those of wealth and power. For example those whose business in the C.B.D. is to do, say with head offices of big companies, with exclusive shops for "high fashion" or say with luxury hotels, night clubs and the more expensive entertainment. Naturally such a class of persons simply cannot conceive of any other way of travelling than by car.

Such functions are inevitable to capitalism and we have no objection to their location in the C.B.D., but we share with Jane Jacobs a most strong objection to them being allowed to crowd out of the C.B.D. other more "lowly" functions by being allowed to indescriminately tear down old buildings and replace them with whole blocks of enormous towers with enormous rents to match.

Which brings us to our third definition, "diversified growth" by which we mean a continually expanding diversification of services, and an ever more selective range of functions for the C.B.D. Part of the diversification and improved range comes from the natural differentiation due to further divisions of labor, or development of craft, skill or concept, but partly also from the increasing excellence of that craft, skill or concept.

We shall embrace also in the term "diversified growth" the Jane Jacobs value judgments on mixed primary uses of land (as instanced by us already in relation to Melbourne's C.B.D. in our discussion of design principles for all "hearts" in the section "age-sex mix in the concourse"). We include in the term also, as we suppose Jacobs would, the fullest range of opportunity for voluntary participation in some collective activity, as already described.

Access

There are also degrees of "access" to the C.B.D. which have a bearing on growth and strength. By "car access" we shall mean a system of freeways and C.B.D. parking and/or inner area parking designed to meet the "demand" of all full-day commuters who can afford to drive to work in the city. Such a system gives the lowest potential number of people who can be contained in the C.B.D. By the term "electric access" we shall mean a system of public transport for almost all C.B.D. commuters but of car transport for most of the customers and visitors which gives a high potential level of people which the C.B.D. can contain.

And, finally, by "transit access" we shall mean a system placing maximum emphasis on public transport whereby (i) people from about half of Melbourne, in a generation or so (living in the Gippsland corridor) and whether all-day commuters or part-time visitors arrive in the C.B.D. by transit rail, whereas (ii) the balance (living in present Melbourne) if they are commuters come almost all by train, tram, or bus, and if they are customers or visitors come partly by public transport and partly by car.

"Transit Access" would permit the maximum number of people to be contained by the C.B.D.

Now let us expand our value judgements. *We regard as a "strong" and highly desirable C.B.D. one which exhibits the maximum amount of "diversified growth", and which is serviced by "transit access" which makes this maximum range available to a maximum number of citizens. This judgment is based on*

our belief that all citizens and not just a minority should have the widest range of choice, especially as participants in the attractions which in scope and speciality can be generated in a big city, as nowhere else.

Conversely we regard as "weak" a C.B.D. based on "car access" or even "electric access" which is based on "staple growth" or "exclusive growth" or any combination or permutation of such growth or such access.

Naturally, those whose value judgment is that the more exclusive the C.B.D. grows and proportionately the more the rather "common" people are excluded the better, or who are indifferent to attracting such people, are entitled to their judgments and will regard such a C.B.D. as strong and not weak, equating strength with an exclusive tone.

So too, those whose values are that the C.B.D. should be a super-market of staples, gradually excluding the "small-man" specialities both commercial and voluntary or who are indifferent to such specialities are entitled to such values and to them "strength" of the C.B.D. will be reflected in the number of retail emporiums and big offices supplying standardised goods and services.

But for us, we can only repeat what we wrote in Plan for Melbourne Part II on the C.B.D.: "Value judgments deriving from sectional interests should not be permitted to hinder the further flowering of the various centralised activities which help sustain and rejuvenate the whole metropolis" (p. 78).

There we also disposed of a myth about the C.B.D., which like most myths, had its origin in truth, but, with a change in situation (which the observer fails to note) has ceased to be any longer the truth or the full truth, namely the myth that "big" city interests want high-density and public transport to bring plenty of people to the "Golden Mile". "The newer policy", we wrote, "backed by the very biggest corporations supports freeways right into the city, jumbo-jets of rich tourists, parking in the Golden Mile and redevelopment at low densities in the inner areas", and we gave reasons why the Housing Commission and massive redevelopment schemes corresponding to the older policies, were losing ground (pp. 78-80).

Events, we suggest, have proved this analysis correct. Apart from the Town and Country Planning Association and the Committee for Urban Action (see Appendix 12) there has been only a minor stream of feeble criticism either of the 1969 M.T.C. Metropolitan Transportation Plan and the associated 1971 M.M.B.W. "Regional Policies".

A Minor Pole of C.B.D. Controversy

The reason such criticisms give the appearance of feebleness and are, in fact, feeble is that they fluctuate around a minor pole of tactical difference on the C.B.D. between the exclusive-growth car-access camp on the one side, and the staple-growth electric-access camp on the other, both representing sectional interests and which are both served in a compromise sort of way by the M.T.C. Plan and the M.M.B.W. regional policies. The new officialise for such compromise is "balance".

So we have "balanced transport", and we have "balanced growth patterns" which strike a balance, sure enough, between some of the newer and some of the older big sectional interests, but as each camp has half-won, each camp only half-fights, anyway in public, for "improvements" to the M.T.C. or the M.M.B.W. plans although there may be for all we know, infighting behind the scenes.

Mr. N. Lobley, Chairman of the Civic Affairs Division of the Melbourne Chamber of Commerce is a thoughtful, lucid, reasonably human exponent of the staple-electric camp.

"Today's C.B.D." he said *"is the sophisticated evolutionary development of the market place of old. The market place was not only the market place where one carried out one's business, but also the place for one's social relaxation"* ("Report on Proceedings" M.M.B.W. Regional Planning Seminar 26/2/'72 at p. 25).

Whilst acknowledging that there is need for strong "secondary and tertiary centres of trade commerce and entertainment" he opposes an accelerated and strongly-capitalised south-eastern corridor (i.e. the M.M.B.W. "Alternative No. 2 — see our diagram No. 3), and he strongly supports public transport

improvements including new rolling stock and underground loop, on the grounds that duplication or proliferation of C.B.D. functions elsewhere than in the C.B.D. simply means a great loss of convenience to business and the community.

He accordingly attacks the predictive methodology. He said:

"It is not sufficient to say that the trend of C.B.D. development or of total metropolitan development between 1961 and 1966 was in a certain direction and therefore we must 'plan' for its continuance. This is not planning. It merely accelerates trends whether these trends are desirable or not. Planning implies deliberate change or modification of trends. The M.M.B.W. report is deficient in this regard" (p. 26).

Now in this last passage he was clearly attacking (and in our view correctly attacking) the methodology of his opponents at the opposite minor pole of the "exclusive-car" camp. Nor did he leave it at that but assailed the correctness of their predictions that C.B.D. growth had virtually stopped.

Unfortunately for him, Lobley has a flaw in his argument. Although supporting public transport he does not attack the massive freeways planned nor even the inner-ring freeway still less C.B.D. parking.

Although supporting the C.B.D. also on the grounds that it is a "principal cultural and entertainment centre" there is nothing to indicate that he does not conceive these as typically commercial and big-time. He has no concept of the crucial importance of voluntary activity or small-man commercial activity as the providers and well springs of attraction to the C.B.D. for the multitude he would *like* to see there. Nor does he understand nor attack the further invasion of the C.B.D. by freeways and the car which will force the pace of demolition of older buildings wherein such functions can hope to survive.

So Lobley leaves the staple-electric position wide open for attack by those at the opposite minor role of difference.

The Tewksbury Symposium "predictive" team of urban-transport engineers, planners and economists such as C. Clark, N. Clark, J. Paterson, I.D. Richards have been the most theoretically cogent team representing what we have called the "exclusive,car" C.B.D. opposition to the M.T.C. and M.M.B.W. plans.

In truth, however, it does appear that in Melbourne, at all events, the current dominant ideology of transport engineers, both those in Government highway departments such as the Country Roads Board or the M.M.B.W. or those few firms of private planning consultants who specialise in freeway design tend to follow predictive type, pseudo-planning and tend, therefore, to fall victim to the academics of the same persuasion, in method if not in detail.

Nevertheless, the Tewksbury team produce arguments that the staple-electric camp find it impossible to rebut.

The sprawling car-based metropolis, cannot, they argue, fail but to trend further in the south easterly direction that people favour, dragging with it much of the functions of the C.B.D. which as a consequence of distance becomes more and more inaccessible time-wise. They predict relatively stable or even declining C.B.D. and inner-area densities, strengthening nodes of industrial-commercial centres to serve the sprawling suburban empire. They support strong freeway networks to speed the process further and faster and oppose the underground loop as a waste of money pointing out that the area of fastest growth of transport over the recent period has been the Moorabbin-Oakleigh-Nunawading cross-suburban car traffic and not C.B.D. bound traffic, which is, relatively declining.

As there is a bitter element of truth in the aphorism "a man will never go anywhere he can't go by car" they can chastise Mr. Lobley for being quite unrealistic in just hoping to bring more people to the C.B.D. from ever-receding outer-suburban centres by persuading them to switch to public transport.

The terrifying ultimate alternative to Mr. Lobley's ideal C.B.D. which mixes the market with social relaxation, is a C.B.D. like Dallas in Texas described by Dr. Colin Clark (see appendix No. 11):

prestigious most highly valued office towers housing functions that pay astronomical rents that only the wealthy can afford.

The attack on the M.T.C. and the M.M.B.W. from the opposite minor pole to that of Mr. Lobley was cogently expressed by Mr. Nicholas Clark at the M.M.B.W. "Regional Policies" seminar. He predicted:

"There is, in particular, considerable evidence that two main elements of the new plan will fail. These are the proposal for growth and continued domination of the central business district and the establishment of residential corridors to the west and north west of the city. Neither of these two elements is likely to occur as a result of natural processes of urban growth and development. Artificial intervention to bring them about must firstly be shown to be effective, and I doubt whether it would be effective, and secondly it must be shown to be economically preferable to other possible uses of resources, and this is also doubtful" (p. 20).

Now in this formulation of approach to major matters such as the radial corridors and the C.B.D., N. Clark is quite typical of the detached, at times nearly pontificial, pronouncements of the Tewksbury school, yet Clark finished his address with a most lofty and incontrovertible human sentiment.

"A completely new view of the functions and scope of urban planning is required. The emphasis should be on improving the quality of human existence in cities, which is quite different from improving the quality of the physical environment" (p. 21).

Quite so! Worth a clap! But Clark himself nowhere as much as mentions the "quality of human existence" either in the deprived west, or in the C.B.D.! It is, as usual for him, economic considerations with value judgements unstated and therefore trend economics that are to determine matters.

Yet, to the extent that Lobley is not fully aware of the full importance of little-man human activity as the life-blood of the C.B.D. of a great city, nor aware of the stupendous effort that would be required to set the trend back to public transport, we agree with Clark's criticism.

Agony

Granted that the car, already dominant, is permitted to become more so by planning default, we fully agree with Clark's statement both on the west and the C.B.D.

We do not grant this, of course, but if it is granted, then continuous C.B.D. expansion by way of staple growth and exclusive growth and M.M.B.W. radial corridors in every direction including north and west would indeed require "artificial intervention".

Moreover, we would go further and say it would be an agonising intervention, involving massive inner-area and C.B.D. redevelopment, the mass expulsion of "small-man" and voluntary public-spirited activities from the C.B.D. and the expulsion and despoilation of the inner areas for freeways and off-street parking, all aggravated by a radiality that maximises the pace of automobile utilisation.

There is another statement in which we half agree with Clark. After attacking the underground loop which is a position consistent with his whole attitude to the C.B.D. he says :

". . . a change in the transport system will induce a change in urban development patterns and this change may well be one that is desired. But it also may be a change that is not desired. On the other hand it is not at all easy and probably impossible to devise strategy of transport improvements to achieve a particular pattern of urban growth . . ." (p. 21).

In other words, Mr. Clark is saying that mere improvements to public transport are not going to guarantee a "particular pattern" of urban development (such as the C.B.D. growth). Although if you run freeways and railways outwards beyond the suburbs you can "change general urban development patterns". Employment and housing, in effect, will just follow the road. We do not believe it is as one-sided as that as we have dealt with earlier in discussing Mr. Fraser's concept that land-use should be paramount and transport regarded as a utility. We believe that it is an interacting relationship. No road, for example, is going to generate trucks if there are not factories somewhere along it, because there is no land zoned there for factories.

Nevertheless both the M.M.B.W. and the M.T.C. plans and the Lobley staple-electric modifications are deficient in not planning for a sufficiently decisive improvement in public transport to achieve what they say they want to achieve for the C.B.D.

What we say to Mr. Clark is: Good! Take it on your ground: *"The chosen transport plan will be a major determinant of the eventual urban development pattern."* (p. 21).

Why not then chose a Gippsland rapid-transit system, pushing it out beyond Dandenong to create a uni-directional urban corridor pattern (as the modern electric train system did for Melbourne in an earlier era)? Such a rapid transit would stimulate growth at both ends . . . in the newer residential corridor suburbs and in the C.B.D. because it would be decisively better-quality transport than a freeway system!

Gordian Knot

The apparently insoluble quandary that seems to be presented by the M.T.C. and M.M.B.W. plans therefore, is that neither the "staple-electric" nor the "exclusive-car" camp revolving in gladiatorial opposition around the C.B.D. controversy, have been able to produce a convincing knock-out argument that defeats the case of their opponent.

Basically it boils down to value judgment issues.

If both schools interpreted "quality of C.B.D. life" to be important, and saw it as important for a genuine cross-section of all Melbourne's population, they would quickly grasp the significance of the diversification of small-man and voluntary activity as well as diversification of big business and luxuries, they would agree with a low-rent policy and oppose a too-rapid redevelopment policy forced by freeways.

Given acceptance of such values the Gippsland corridor plus rapid transit, we suggest, is the sword that can cut the Gordian knot.

It should satisfy those of the Tewksbury symposium camp and the traditionally-trained transport engineers outside it who have been offended by the lack of reality of those who imagine that an old-style mixed function type C.B.D. can be force-fed to grow bigger and more diversified just by a radial zoning plan or improvement to our existing public transport system and the equal lack of reality in the opposition to strong district centres of metro-towns obviously needed.

And it should satisfy those whose value judgment is to enable the maximum number of people to have access to the widest possible choice of C.B.D. activity for no more efficient and enticing way could be devised to efficiently convey people from such a Gippsland corridor housing half of Melbourne's population to the C.B.D., at the same time preserving as much of the older parts and buildings as are necessary for genuine mixed functions from the deprivations of a too-rapid C.B.D. redevelopment to accommodate freeway and parking imperatives.

Major Pole of Difference

The basic issue of the C.B.D. therefore is not, as it has seemed hitherto staple-electric camp versus car exclusive camp, but it is:

(Staple electric camp)
     and   versus   (diversity-transit camp)
(Car exclusive camp)

Mr. R.J. Hamer, when he was still Minister for Local Government, seems to have sensed the direction of the real issue.

In a letter to the Melbourne City Council in January 1971, Mr. Hamer, is reported to have asked the Council to set up a city planning department to make a blueprint for the central city area. (Planning

consultants incidentally have been appointed in 1972 to prepare a "strategy plan"). Mr. Hamer was reported as proposing:

> "A colorful living city, with a wide variety of activity working 24 hours a day.
> Maximum separation of pedestrian and vehicle traffic.
> A car-parking policy related to public transport into and within the city, and to circulation of pedestrians and cars.
> An overall strategy to provide for harmonised retail, commercial and office function as well as theatres, hotels and restaurants."

"The last thing we want is a city of concrete canyons hedged with monolithic office buildings and populated only in office house", he is reported to have said in his letter ("Herald" 20/1/1971).

Furthermore the news in the next day's press ("Age" 21/1/'71) that the M.C.C. was deferring any consideration of the inner ring freeway pending a report from the M.M.B.W. ordered by Mr. Hamer, made it clear that the Minister had detected the close connections between freeway policy and the character of the C.B.D.

Now, it is impossible to say whether Mr. Hamer in proposing a "colorful living city with a wide variety of activity" really contemplated this very differently from Mr. Lobley, because Hamer, like Lobley, significantly leave out any reference to the importance of voluntary activity when he comes to generalise about "harmonised retail commercial and office functions as well as theatres, hotels and restaurants."

We guess that, like Lobley, Hamer has not really thought through on this subject.

For us, of course, full participatory collectives around all manner of activities in the C.B.D. as well as in the mini-metro and city-metro hearts are the crying needs of ecology and sociology.

Whether or not Lobley and Hamer are ever likely to go as far as we do in this, we put this case to them:

If it is a strong diversified citizenry in the C.B.D. you say is desirable, that strength can be built up if it is connected by rapid transit to a whole series of city-metro hearts.

The better the mini-metro-hearts and the city-metro-hearts become for attracting people in the suburbs of corridor Melbourne, the more sources of social well-spring there will be to feed potentially higher and more selective activities still in the C.B.D., especially if the C.B.D. is close in terms of time.

The truth of this becomes apparent when you visualise present trends extrapolated; the sprawl of more and more low density suburbs which are more and more car-based and as a consequence with less and less participation in organised local actitities, and further and further removed in terms of time (despite the freeway network) from the C.B.D.

How can a flourishing C.B.D. be built upon such a basis? Given all trends continue the predictions of the Tewksbury people were, maybe, right enough.

But the real question confronting Melbourne, if it wants to enrich its C.B.D. and create strong supportive city-metros and mini-metros is this: How to outwit predictions based on the universality of the car, since the car is destined to become a comparatively slow and dangerous way of travelling moderate urban distances, and further is destined to be ecologically and sociologically outlawed? Rapid transit in the Gippsland corridor is the best answer we can see.

What better than a string of strong urban centres, readily accessible one to the other and all readily accessible to the dominant C.B.D.?

And, if eventually, somewhere in the Latrobe Valley, when the world's petrol supplies are nearing exhaustion and brown coal comes back into its own, there is planned to spring up a new C.B.D. at the end of the Gippsland corridor, how could this really weaken Melbourne's C.B.D., which would still be dominant even then?

It would, on the contrary, strengthen the "old" C.B.D., because, the whole rapid transit system would be immeasurably more efficient, with full loading each way and rich and highly endowed centres at each end, strengthened by their "corridor" cord that would bind them together by concentrations of the best and most diversified activities that could be produced in the metro-cities that lay between them.

The lasting enrichment of Melbourne's C.B.D. depends partly on rejecting the Evans-M.M.B.W. radial corridor patterns and the freeway network based on it and adopting the Gippsland corridor plan.

4. LIFE STYLE

"The life-style offered us in the mini-metro concourse is nothing really new; it is the same old rat-race of a life dressed up with a garnish of modern technology and some old fashioned manipulative social organisations" may be a line of objection to the Gippsland corridor.

(Note: (i) Before we begin; the Gippsland corridor does not stand or fall by acceptance or rejection of the ideas that follow. It is a reform of which capitalism is fully capable, and we urge the capitalists to adopt it. But, of course, the "collectives" in the "concourse", especially the participatory, thorough-going ecology committees, that may be another matter!

(ii) Further, what follows is not written for those who, like Stretton for example, currently have no cause for complaint with what they consider a pleasant life-style in Australia's suburbs. Let us remind them, however, that life in tomorrow's suburbs will not simply be a repeat of life in today's suburbs.

One aspect of the Gippsland corridor indeed is that it can means that the children and grand-children of all of Melbourne's Strettons, if they so opt, when the time comes, can live much as the present generation lives, in the outer quieter, low density residential areas of the corridor near the country.

Without the Gippsland corridor, however, the future generations will be living differently from today; more car-dependent still, more freeway frenzied, more personally mobile, but less convivial, separated from friends, or relatives, not only in space, but also in time and in consequence lonelier more nucleated around their own family, more starved of opportunity for satisfying associations with their kind, than those that exist today. If their children or grandchildren don't want to go into the concourse, but prefer the privacy of their house and garden for some private purpose; good luck to them! But, it will have to be their choice!)

No! What follows is for those who are fed up with life as they find it today, appalled at the trends and what it seems these trends will make of tomorrow, and groping for ways to throw overboard all the useless ecologically immoral and sociologically useless paraphernalia that capitalism in the age of the technological revolution imposes universally.

Superabundance and Creative Work

A century has passed since Marx and Engels proclaimed that the next stage in the evolution of human society was communism.

A system in which work ceased to be a drudge and became creative, in which each contributed according to his ability and took of the produce according to need; a system in which the coercive aspects of the State over persons, would wither away being replaced by the administration of things; a system in which the "cash-nexus" was stripped away from the family relationships thus restoring affection as the bond between men and women, and between children and their parents, a system in which worker had no need to compete with worker, keeping to oneself the secrets of craft or trade thus restoring human relationships between those with training, skill and concept and those yet to acquire experience; a system in which the distinction between manual work and brain work, and between country and city work would vanish.

A surge of ideas has recently arisen from radical intellectuals, from youth and from women in revolt, from educationalists and those being educated, from aborigines and from earnest workers at all

levels, embracing ideas and attitudes that fit into such Marxists perspectives to one degree or another, or which overlap them; not, of course, that those who advance these ideas have followed marxism or even know of marxist ideas, because the peculiarity of this upsurge is that it has come from outside the traditional left, even from outside its revolutionary wing.

Marx and Engels were not utopians and did not expect the next stage of man's evolution to be capable of springing up within the capitalist system. They were historical materialists and did not see communism as possible unless the main means of production were taken over by the people under the leadership of the working class (in their day a minority class) which they saw as the only potential class consistently revolutionary enough to be historically capable of such a task.

Even that immense responsibility accomplished, they saw the necessity for socialism as a transitional stage between capitalism and communism which could not be accomplished until the economy was capable of producing a superabundance.

Now, 100 years after Marx, the happy potentiality of "superabundance" has arrived, at least in one country. So the conditions, economically speaking in that country are ripe for communism. But not the *political* conditions! Ironically the country in which the potential superabundance abounds is no less than the United States!

The capitalist class of that country have set themselves the hopeless historic task of policing the whole world against the spread of socialism, exporting their capital to, and trying to absorb economically with their superabundance, as many former colonial countries and developed capitalist countries as they can in the process.

Even more ironically, the demand for communist ethics and life-style has welled up and found expression above all from the long suffering people of the United States, rather than from the traditional left, even its revolutionary wing.

The Australian communists, for example, had their eyes understandably rivetted on the struggles of the Soviet. Spanish, eastern European, Chinese, Korean, Vietnamese and Cuban people to establish socialism (efforts that were heroic because they started not from capitalism, as Marx had expected, but from behind "scratch", in countries that were semi-feudal with peasant majorities and backward industry).

Australian communists were quite right to do what they could to defend these pioneering socialist efforts against imperialists armed intervention, but in the process of desperate battles, including world war and cold war, understandably, the Australian communists, and even more understandably the communists in the socialist countries, themselves in the front line, tended to lose sight of the more ultimate goal of communism. Understandably too, they tended to lose sight of the significance of maturing socio-political developments in other parts of the world.

We have several times used the word "understandably" but we have not, please note, used the word "justifiably" and we make no excuses for communists overseas or in Australia. Clearly, however, an exchange of ideas and a confluence of all the parallel streams of perspectives similar to those that Marx once held concerning the next evolutionary stage of society are inevitable. Moreover, if already there is superabundance in America, more concrete ideas than were possible 100 years ago concerning a life-style to fit the more imminent historical change are to be expected.

And they have been coming, too, in some quantity from America, serving to ignite or fan similar thinking in Australia.

An early example is the book "Communitas" by Paul and Percival Goodman, subtitled "Means of Livelihood and Ways of Life" first published in 1947 and again in 1960. They said:

"Up to say sixty years ago, more than half of the productive capacity of our economy was devoted to subsistence; subsistence could be regarded as the chief end of the economy, and whatever their own motives, most enterprises served the subsistence market. Now, however, in the United States less than a tenth of the economy is concerned with subsistence goods (probably nearer a fifteenth; the exact figure would depend on what one considers an adequate minimum)." (p. 191).

After an informative "Manual of Modern Plans" which comprises Part I of their book, they give over Part II to what they call "Three Community Paradigms" which they describe as *"Three alternative models of choices with regard to technology, surplus, and the relation of means and ends, and we ask what each formula gives us in economics, politics, education, domestic standards, popular and high culture, and other functions of community life"* (p. 121).

They then develop their three entirely different models in concrete terms, although warning that they are *"not plans: they are models for thinking"* and that there is no society going to want any of these in their pure form because *"people in fact want a mixture of the three in varying proportions depending on their traditions and circumstances".*

The three models, then, epitomised by us in headline and aphoristic form, are:

(1)   A city of efficient consumption; the metropolis as a department store (with the emphasis on physical ends, and a maximum exploitation of physical means; i.e. technical efficiency).

(2)   The elimination of the difference between production and consumption; work reorganised to give satisfaction to the producer with integration of home and workshop, factory and farm (with the emphasis on interpenetration of physical and moral ends and a selection of physical means; i.e. psychological efficiency).

(3)   Planned security and minimum regulation: every young person to spend 6 or 7 years work making free subsistence goods for every one; from then on anyone can do anything, unregulated (with the emphasis on moral ends and freedom from physical means, i.e. biological efficiency).

Each of these three models have a characteristic life style, but none of these life-styles (except for an elite ruling class or off-beat minorities, or eccentric indivuals) could possibly have emerged as a feasible way of life for the whole community *until superabundance was actually possible.*

The first model of a department store city where more and more people have to work at the job of convincing everyone to consume even more commodities for the sake of producing and marketing the maximum quantity of products, is, for us, simply modern capitalism as it is today. Production for capitalism has always had as its object the market, not the utility of the product.

It is our belief that this process, the essence of the capitalist system whose ethos is determined by those who own the means of production not by those who do the producing had to be tolerated when the system for all its cruelities was in its earlier historically progressive phase of industrialising the world.

Today it has become intolerable because once it has become historically obsolete to the point of producing plenteous, permanent, superabundance, from that point on (whilst still depriving students, the sick, unemployed, aborigines and pensioners), the exercise becomes one of imposing on those who make the commodities useless and often frivolous products. As if that were not enough, it presses upon the leisure time of the producer a barren barrage of mass-media images of just such a life-style of smart living by smart purchasing which the unfortunate victims have little alternative but to try to emulate, working harder all the time to do so!

As a goal we reject this style of life. But we cannot expect the majority of workers to reject it until alternative more satisfying life-styles are available.

The mini-metro centres and city-metro centres in the Gippsland corridor, therefore, like present Melbourne's suburban centres, are organised market places. Indeed, to borrow a design concept from "Communitas" we can see no reason why consideration should not be given to organising them as very much more efficient market places than typical Melbourne shopping centres. The Chadstone-type centre shows that all goods of a big emporium can be accommodated in one air conditioned building. Carrying this idea further, all shops, offices and even light manufacturing or whatever, could be accommodated within a very big building, outlawing the car altogether, concentrating the entire area into one indoor pedestrian realm.

Economy of building costs and land would be enormous.

But whether some element of such design is favoured or not, what is *different* about our proposals for mini-metro and city-metro centres is that the suburban centre is *not exclusively a market place.*

Recall the concept that undifferentiated concourse-places are to be built-in for community purposes, just as parks and sewers have to be "built in" with residential development.

To get together around no matter what sort of collective, people cannot develop the inclination unless they have time as well as space. Maybe shorter working hours might partly take the form of extended lunch hours, but in any case, the more concentrated the core of the heart, the more practical would collective-formation become.

A proliferation of community collectives within the market — manufacturing — education core and heart of the mini-metros and the city-metros are a potential transitional stage between such centres predominately orientated to the market (as they are now, and have always been under capitalism) to centres predominently orientated to people's participation in collective activities (which they are destined to become under communism). We say this because, under communism no longer would phoney "choice" be necessary between twenty brands of soap all consisting of the same substance, so that the bulk of what is now "shopping" for week to week household staples could be handled by an efficient home-delivery order system (probably free delivery of free subsistence goods) narrowing down the function of "shopping" to choice of such as aesthetic personal items epicurean food and drink long-term durable goods such as furniture or housing and custom-made goods.

Now, we are aware that we have started at the opposite end of the problem usually thought of as "life-style". Changes in life-style are often superficially thought of as beginning and ending in a change of style of leisure time, and, at that, mainly in residential areas and recreation areas.

Well, of course, any such residential life-style or life-style for leisure-time is possible in the mini-metro suburbs, but we have deliberately started with the life-style generated *where people work or are being educated* for the same reason that we proposed to deliberately cluster these social functions. And that reason is, as we see it, that *the age-sex deprived . . . the housewives, the elderly, the students . . . have to be drawn into the life where things are done and decisions are made. The process cannot be reversed and succeed.* Every day workers of all different types whether of the hand or the brain scatter from the places of human concentration each to their own home in the suburb; but this does not overcome the yawning gap between the age-sex deprived in the suburbs who never get to "where the action is" and those that are "in the act".

As rapidly as those who work or are educated in the metro cores, begin to form collectives, and "get into the act" in earnest, including the "decision-making act" they must draw into the same collective those who do not work, for the collectives in the concourse must not only be neutral ground but must not suffer from "keep out" restrictions of "work" nor the ennui of "home" as they are now organised; it must be open ground for anyone at all interested in the particular activity. "Members Wanted" must always be on the door of the collectives.

Trade Secrets and Job Secrets

In discussing the Goodmans' first model: the city as market place, we have jumped ahead with our own ideas.

Turning to the second model (the organising of work for the satisfaction of the worker and breaking down of home-workplace and country-city distinctions) and the third model (organising so that work be done for short period of a person's life to supply universal free subsistence so that everyone, having worked their stint as a young person, could then spend the rest of their life as creatively as they wished) we regard both as possible variants of communism. As the Goodmans wisely point out: they are not mutually exclusive; they can be combined in different proportions, and we are not going to try to idealistically anticipate history and recommend a particular recipe.

What we want to point out is that the 2nd and 3rd of the Goodmans' life-style models are variants, in our opinion, of a system in which work becomes creative either because work is so organised at a pick-your-own-pace, low-key style to satisfy people's natural pleasure in making objects or achieving

things well (2nd model) or because people, having completed subsistence producing work, can for most of their mature adult life "do their own thing" entirely with "no worries" of finding a market, no complications whatever (3rd model).

Either way, (apart maybe from subsistence — service) work that becomes creative ceases to be "work" as almost all wage-workers or salary-workers now experience it, having become compulsive as distinct from compulsory.

As we see it, this is the crux of the change in life-style namely participation with a team of like-minded people doing something you want to do, as distinct from either compulsory tasks organised by some-one else, or compulsory idleness and emptyness "organised" by the prevailing circumstances.

On reflection, this proposition has profound implications for the nature of education (i.e. the status and life-style of children and youth and the nature of the family).

Before dealing with the implications in these two directions, however, let us connect our general proposition of a life-style as it can be under communism and collectives in the Gippsland corridor. *Such collectives could be a transitional stage between the present universal compulsion of selling your labor on the market (or not working at all) and universal voluntary welcomed participation of the future.* Some of this would only be restoring off-the-job voluntary efforts destroyed by a combination of the impact of the car and the mass media.

But the ecology committees, by beginning the process of stripping away the secrets of production, and imposing a control on the processes of production and the product itself, in the community interests of survival, would be running counter to capitalism's special design which is to produce profits by selling goods for the market; which means that the capitalist is, and has to be, in competition with others making the same product, and/or (if it is a monopoly) in competition with other products to capture "the consumer's dollar".

Ralph Nader's raiding campaigning, in one aspect, can be seen as a process of cleaning up the stupidest and most reprehensible abuses of the big corporations which the best statemen of capitalism will no doubt appreciate and welcome as an effort to save capitalism from itself. Nader uses the laws and framework of capitalism not to attempt a people's "take-over" bid but to chasten the big corporations, and tone down their excesses which are beginning to arouse disgust and wrath of people wh o, consumer-ridden as they are, nevertheless do not want their life-style cramped by expensive brummy ostentation or positively dangerous products.

Life, however, has its own strange logic. In Melbourne Nader called for groups of dedicated young graduates to research such abuses of the big corporations that detract from the quality of life and force the capitalists to make less detestable products, which with increasing numbers of young tertiary-trained scientifically minded workers, are coming to be seen more widely for what they are. So Nader calls for the abolition of the secrets of government departments in Australia where public servants commit a crime if they divulge departmental information (the opposite position apparently from the United States, where theoretically, anyway, the citizen is supposed to have free access to all such information).

Now let us extend the logic inherent in this situation. The Environment Protection Authority, if it is to fulfil a survival ecological function, heeding the "Limits of Growth" equilibrium recipes and not confine itself merely, like Nader, to a relatively superficial clean-up of the most obvious ecological abuses, will need to have complete records of the processes, products, and waste-products of all factories.

If that information is to be open and available, as it should be, to all citizens, then citizens might just as well also have direct access to such information from the factory, or be able openly to supplement or check the Authority from their own investigations, as we propose for the ecology-collectives. So the battle to obtain full information of production and energy-consuming distribution, for that matter, means a battle to open up the trade secrets and commercial-secrets of every factory and office to public scrutiny, and fundamentally, to rationalise, ecologically and sociologically, all productive activities, incidentally reshaping "advertising" paid and unpaid of the mass media for such goals.

This process shifts the control from those who happen to own the factories and offices to the community itself and is quite inconsistent with capitalism. To organise society to produce use-values (values which are ecologically and sociologically useful) as distinct from exchange-value (values that, irrespective of use, fetch a good return on the market) means communism, for any advanced capital country.

The disclosure of trade and commercial secrets, however, has other profound implications, than the political ones which we have temporarily had to discuss. It has a profound implication for life-styles of the workers themselves.

Just as each capitalist enterprise is in competition with its competitors, so each worker is in competition with his fellow for a job, each class of tradesman or office or laboratory worker jealous of their "know-how" which is the reason that the boss has to keep on employing them, rather than others.

Wage and salary workers come to be motivated not necessarily by a burning desire to do the job better, but rather by an instinctive urge to make themselves indispensable to the employer, to guarantee their continued employment or promotion. To achieve such indispensibility may or may not involve "doing the job better".

In many cases, in fact, it means "doing the job worse", just as it pays the capitalist to produce the cheapest worst quality product that advertising can induce the market to bear. Or it may mean "spinning the job out", just as some capitalists do when they are paid by time, or getting a "quiet little corner" of a job that no-one else including the boss knows much about just as many a little capitalist dreams of getting a "corner in the market" permanently and keeping it a close preserve.

The worker, too, has his own way of "projecting his image" to his boss which (like advertising) does not necessarily measure up with the real contribution made. The worker, in a sense, to the extent he has to sell something, namely his ability to work, becomes a "little capitalist".

This has nothing to do with deliberate deception or with intention, or with industrial or political backwardness or cowardice or with a lack of personal independence.

It is not crawling, (although there are, of course, crawlers). It is a universal reality of work-life under capitalism. A worker can be a strike leader today, but tomorrow when he goes back he cannot help but fall automatically into his accostomed role, which is a built-in part of the nature of his job.

Now these universally prevailing circumstances, which are commonly not stated or discussed, lie usually below the surface appearance of jobs. Most workers if they think about it at all would no doubt feel somewhat ashamed of the situation, especially if it is a life-long job they "hold down" which they know full well fails "to bring out the best" of their nature and forces on them a degree of toughness and inhumanity towards others that is unnatural and which they do not like to admit. In fact very many of the most human of workers instinctively try to compensate for the inherent inhumanity of the job situation with "mateship" for their fellow-workers or colleagues in other aspects of job-life (such as common industrial matters) and off the job in the pub or on the sportsfield.

The significance of tearing aside the "trade secrets" from industry and commerce and science, is that, if the process goes as far as it should to be ecologically and sociologically valuable, it will also tear aside the job-secrets that workers keep from each other or even from the employer.

Now this must be a painful operation for the worker concerned, because, apart from possibly changing the actual work he performs, it affects his status, the image he projects not only to his boss but to his family and friends, the image he projects to himself. Workers control, in effect, involves transformation of the very workers who claim a control. If the "tricks of the trade" real or pretended, are to be an open book for all, there is no expertise the worker need jealously guard, there is no reason he should not teach anyone who cares to know how to to his job.

But if this is to involve "doing himself out of a job" the situation, of course, become unthinkable and self-defeating. Investigating citizen ecology committees, workers control committees, the disclosure of trade and commercial secrets, are all-of-a-cloth, therefore, with communism.

Such processes cannot proceed with any degree of seriousness unless there is guaranteed subsistence and retraining without strings on a massive scale for the workers whose work has to be re-organised. This in turn runs counter to a system that produces commodities for sale on the market and that cannot tolerate a non-market subsistence-sustained work-force.

So therefore, political power has to pass to the workers so they can guarantee their own re-education and retraining. This in itself however elementary a development it is for the changes required, is not yet the fundamental revolution involved. The fundamental change is that since his labor-skill has ceased to be a commodity, a worker is free to teach others all he knows as rapidly as possible and is impelled in the same degree to learn from others, and only such freedoms freely exercised can fit him to participate in the "administration of things" which, in a global-wide equilibrium-orientated ecological scale of administration, incidentally, is going to be no mean feat.

And what we have written applies to all workers at all levels, whether they have primary, secondary or tertiary education, whether they work in industry, commerce, or university.

This is the transformation which, consummated, will change life-styles profoundly and on a universal basis; other life-style changes, by comparison will be shallow and fleeting.

Inevitably, in the ecological and social crisis that has begun and will sharply become more critical, attempts will be made by sections of the capitalists themselves to imitate the style, even the organization of which the end result will appear under communism. Every such attempted reformation of capitalism should be given the fullest support by workers accompanied by a demand that what has been started be carried through properly which will really mean that it will cease to be capitalist-orientated at all.

Thus "interdisciplinary teams of experts" are on the lips of the best professional people and rightly so to solve the dis-associated and disjointed planning decisions now being made by disparate parts of the administrative machinery. Even if such teams are thrown together the jealously competitive empire building habits of departmental superiors or their Ministers are apt to defeat the all-in effort, and even if it can ever be genuinely welded on a public-authority basis it will be apt to break down at the decisive point where the integration involves the experts of the private corporations or, beyond this again at the final decisive point when decision making comes to implement the final recommendations.

And, of course, a section of the Establishment are all for conservation, and all for "participation in planning", and education where students learn direct from factory excursions, and liberating women to share in running affairs . . . in fact almost any change in organisational forms in life-styles to prove that capitalism, you know, is really quite understanding and human, and allows freedoms and is not responsible for any crisis and its only the *abuse* of capitalism of course, that is the trouble.

Good! Good! Let's have plenty of all these fine reforms and push them along to solve the ecological crisis and if it turns out that the *real* abuse is not a bungling or power-addicted senior public servant, or technocrat, or even a Cabinet Minister or Government, but the corporations that invest in hundreds of millions of dollars and make decisions on the same scale, and force others to abide by their decisions or induce them to do so by image-building advertisements, are we to have a capitalism without big corporations? We guess we have reached the cut-off point in the stream of reforms of the enlightened Establishment.

Increasing sections of youth cannot bear the hypocrisy of a system masquerading under spurious moral precepts that are covering up an increasingly immoral situation, nor the hypocricy of spurious reforms that even borrow the terms of revolt coined by their older brothers and sisters in revolt, nor, by the apparent unreality of union talk of workers control (nor the efficacy of such ideas, no doubt as "ecology collectives" in the mini-metro for that matter)!

They want a really simple life, a life that rejects modern technology altogether, rejects big cities altogether (and even in extreme views) a life that rejects urban living altogether, rejects all power structures of any kind for any purpose, and rejects therefore the school or university or family as an institution and advocates disurbanisation, and free communal living. Is such a life style feasible for any but small minorities? To what extent is this style of life compatible with the Gippsland corridor?

We turn to two subjects: deschooling and women's liberation to orientate the discussion on this subject.

Deschooling

There are no sacred cows for Ivan Illich who recently was brought to Australia by the Australian Union of Students and lectured in Melbourne in June 1972. He has suddenly appeared on the Australian firmament as a beacon of revolution of an unheard of brand.

Pointing out the paradox of "development" both in the "developed" countries and those which are not, he said that *"During the late sixties it became evident that less than 10% of the human race consumes more than 50% of the world's resources, and produces 90% of the physical pollution that threatens to extinguish the biosphere"* ("Risk" published by Youth Department, World Council of Churches, Vol. 6, No. 4, 1970, p. 36).

Illich holds that "development" in western terms means social polarisation, whether in the United States with its gargantuan prosperity where "real poverty levels rise faster than the median income", or in any export of such development to the under-developed countries, and it means even worse polarisation between even minimum standards in America and those of an under-developed country.

"The goals of development are always and everywhere stated in terms of consumer value packages standardized around the North Atlantic . . . and therefore always and everywhere simply more privileges for a few" (p. 34 "Risk"), and this result, he argues, applies whether a capitalist or a socialist country tries to export such development even to anti-imperialist countries which he identifies as . . . *". . . current nationalism"* which he says, *"is merely the affirmation of the right of colonial elites to repeat history and follow the road travelled by the rich towards the universal consumption of internationally marketed packages, a road that can ultimately lead only to universal pollution and universal frustration,"* (p. 35 "Risk") apart from widening the gap between rich and poor in the country concerned.

So he concludes:

"The political revolutionary wants to impose existing institutions . . . their productivity and the quality and distribution of their products. His vision of what is desirable and possible is based on consumption habits developed during the last hundred years. The cultural revolutionary believes that these habits have radically distorted our view of what human beings can have and want. He questions the reality that others take for granted, a reality that, in his view, is the artificial by-product of contemporary institutions, created and re-inforced by them in pursuit of their short-term ends; the political revoluntary concentrates on schooling and tooling for the environment that the rich countries, socialist or capitalist, have engineered, the cultural revolutionary risks the future on the educability of man ("Risk" p. 19).

Is it to be wondered that confronted with arguments of such calibre many of the youth want to reject not only a society that has produced such values but the whole base on which it stands?

Technology used in the way it has been to produce the values of the kind produced in a society which in any case allots what is regarded as value to the wealthy and (relative) subsistence to the poor many of whom are discarded to the ghettoes of big cities is indeed to be rejected! As indeed are the institutions, including the class of education that facilitates and under-pins the whole process!

But where do communists stand? Strip the unexpected adjectives and discount the unexpected approach from the above quotations made by Illich, strip such parts of Plan for Melbourne Part 1, Part 2 and Part 3 that deal with value judgments from its own jargon, compare both the above mentioned with the perspectives of Marx, and where is the difference in the general gist?

Now Illich classifies institutions from "left" to "right" on a value spectrum, much as people have, for many years, measured party political positions.. In an essay last year ("The Institutional Spectrum" published in "Cross Sections Winter 1971" . . . to be republished as part of a book "Deschooling Society") he classifies "convivial institutions" on the left of the spectrum such as

telephones, subways, mail, public markets, sewerage systems, drinking water, parks and sidewalks "do not require hard or soft sell to induce clients to use them". (p. 90). On the right are "manipulative institutions" such as institutionally advertised goods, the Pentagon, and the F.B.I., gaols and mental institutions.

"At both extremes of the spectrum we find service institutions, but on the right the service is imposed manipulation, and the client is made the victim of advertising, aggression, indoctrinisation, imprisonment or electric shock. On the left is amplified opportunity within formally defined limits, while the client remains a free agent" . . . ". . . An individual picks up a telephone when he wants to say something to someone else, and hangs up when the desired conversation is over, the message, not the medium, counts in a true network" (pp. 90-91).

He then deals with "false public utilities". One which appears like a convivial institution of the left, namely, a highway network turns out not to be, because although the highway seems free for all, it is not really so because . . . "The highway system mainly serves as an accessory to the private automobile . . . highways, like other institutions of the right, exist for the sake of a product. Auto manufacturers, . . . produce simultaneously both cars and the demand for cars. They also produce the demand for multi-lane highways, bridges, and oilfields. The private car is the focus of a cluster of right-wing institutions. The high cost of each element is dictated by the elaboration of the basic product, and to sell the basic product is to "hook" society on the entire package" (p. 92).

On transport, also note that he classifies a "subway" as on the convivial left. He remarks elsewhere: "The actual aim of subway advertising is to console the tortured captive client with the thought that traffic — jammed drivers are even worse off than passengers crushed together below the surface of Manhatten. The New York Transit Authority must make excuses for conditions in the subways caused by our subsidizing the movement of tons of steel over super highways rather than subsidizing the expansion of subway lines" (p. 86).

So it is clear from this that Illich regards railed public transport as on the convivial left and freeway-orientated private cars as on the manipulative right. It is also clear that he is not opposed to technology as such, but to the objective effects on our social and moral values. We think it worth betting that if Illich were to study our rapid-transit, concourse-collectives serving Gippsland corridor, deliberately designed to break the destructive, addictive and manipulative grip of the car life-style, he would back it against the M.T.C.-M.M.B.W.-Evans radial corridor scheme!

"The left hand of society seems to wither", he writes, "not because technology is less capable of increasing the range of human action, and providing time for the play of individual imagination and personal creativity, but because such use of technology does not increase the power of an elite which administers it" (p. 95).

Precisely! Illich, mainly identified with his "deschooling" ideas, has exactly the same attitude to education. It is not the acquisition of knowledge to which he is opposed, it is knowledge adapted to and therefore perpetuating the expectations and demand for life-styles dictated by institutions of the right to which he is opposed.

"Demand for manufactured maturity is a far greater abnegation of self-initiated activity than the demand for manufactured goods. Schools are not only to the right of highways and cars, they belong near the extreme of the institutional spectrum occupied by total asylums. Even the producers of body counts kill only bodies, by making men abdicate the responsibility for their own growth, schools lead to a kind of spiritual suicide." (p. 94).

And so Illich's remedies . . .

"At stake in the choice between the institutional right and left is the very nature of human life. Man must choose whether to be rich in things or in the freedom to use them. He must choose between alternate styles of life and related production schedules . . . Technology provides man with discretionary time he can fill either with making or with doing . . . one way to fill available time is to stimulate increased demands for consumption of goods and simultaneously for the production of services . . . the radically alternative way to fill available time is the development of a limited range of more durable goods . . . and of institutions which can increase the opportunity and desirability of human interaction

. . . and do so at the rate that men are relieved by machines of the burden of making things" (pp. 95-96)

This, we suggest, is, in truth, the real choice of life-styles. It does not consist of abandoning the big cities and abandoning technology because "the burden of making things" is indeed a burden and its object should be to "increase the opportunity and desirability of human interaction".

All we had thought, and written about the Gippsland corridor, about the rapid transit and the collectives in the concourses had been thought and written before we read these words of Illich which line up identically in broad attitude and strategy with our approach.

On tactics we may have differences. We concede Illich's point about the schools turning out "manufactured maturity"-market-orientated like any other capitalist product. This represents in one aspect a discriminatory streaming of people into jobs according to so-called "educational" levels or "levels of drop-outs" as he whimsically expressed it in his Melbourne address. And in another aspect a robbing of a creative urge to know and its replacement by conditioning for a consumer life-style. We see the importance of tackling this problem at its own level, and indeed had already quoted Mr. D. White of Latrobe University along similar lines (See Appendix 9).

Surely, however, the same problem can be tackled from the end of the institutions of production itself, as well as from the institutions that prepare the worker for production? Surely under impact of ecological crisis the political left should be expected to get itself re-orientated, and help all workers (and not just our pedagogues) to re-orientate themselves to reject their craft and trade and academic secrets, demanding a creative work-life-style as we have suggested?

Creative work by workers at all levels is the key, as we see it to stripping away forever those artificial aspects of our education that shape people for an obsolete system of production and consumption.

The young cannot learn now directly from the older workers "on the job", partly because they cannot get access to the job, partly because, if they did, the experienced worker would not want to train them and make himself indispensable, and partly because in any case the worker is himself a victim of the same education system and has imbibed his share of ideology that inclines him to accept the manipulative institutions of the right and so could only half-teach in any case. Dispersal of the school into the community, as Illich said in Melbourne is not a solution.

And to give Illich his due, we grant that it is the young in the main that make revolutions rather than those already addicted and habitualised, but then all the young are not being educated: there are also young industrial workers, young professional workers including teachers.

It would seem to us, therefore, that in ecology committees that can combine workers at all levels with those not employed, namely young housewives and students, there can be a transitional stage.

In such a movement those who have already rejected the consumer package life-style have a chance on the basis of ecology as an over-riding purpose to convince their fellows that a convivial life-style is more satisfying as well as more moral than a manipulative life-style and that this realisation has to grip the work places as well as the schools.

The last thing that is wanted is for the enlightened youth to "go bush" or live in some urban enclave, insulating themselves from their fellows whom they may regard as all hopeless addicts of manipulative institutions.

Maybe there are tactical differences between Illich and ourselves; we see the workplace as the root of the matter and the schools as branches, and he sees the schools as the root and the workplaces as branches, but if the proposition is that we destroy the manipulative tree "root and branch" our differences disappear.

Overlooking such tactical difference, however, and concentrating on the strategic identity of aim, how similar, at bottom, on reflection, is Illich's ideas about rejection of manipulative institutions

and approval of convivial institutions with the concept of Marx and Engels that, under communism, the repressive government of people will gradually be replaced by the administration of things!

Those on the party-political left, accustomed to a life-time of support for the young Socialist countries, to whom it may seem that communism is so far off as to make Illich's or Marx's perspectives diversionary as an immediate aim, overlook that the present socialist countries have had the valiant task of industrialisation from a peasant economy not far removed from feudalism and have not until quite recently, or not even yet developed a degree of technology and abundance to make communism as Marx saw it feasible.

But an American or Australian revolution will arrive on an industrial scene when superabundance for all will be immediately feasible to organise. The socialist transitional stage, therefore of demolishing the manipulative institutions, could be a very short period and a goal therefore which, as from now, should be aimed at.

Let us look at reality, what is new is our increasing demand for a convivial life-style. We believe it deserves maximum support!

Let us quote part of our formulation of the problem again:

"The fundamental change is that since his labor-skill has ceased to be a commodity, a worker is free to teach others all he knows as rapidly as possible and is impelled in the same degree to learn from others, and only such freedom, freely exercised, can fit him to participate in the "administration of things" which in a global-wide equilibrium-orientated ecological scale of administration, incidentally, is going to be no mean feat" ". . . This is the transformation which, consummated, will change life-style profoundly and on a universal basis; other life-style changes by comparison will be shallow and fleeting" . . . "This is the crux of the change in life-style, namely, participation with a team of like-minded people doing something you want to do, as distinct from either compulsory tasks organised by someone else, or compulsory idleness and emptyness 'organised' by the prevailing circumstances."

What bearing then (as we are dealing with deschooling) would this change in life-style of the adult male and female worker have on the life-style of youth or children?

Why is it that young children, in their early years at kindergarten and school are so universally delighted to learn to spell, to number, to read, to multiply, to sing, to paint, and give such delight to their parents with their enthusiasm, even if they don't get it quite right? Surely it is because they feel they are grappling with life, learning to understand what adults do and enjoy, and enjoying it themselves?

Why is it that young people, in their first job, often display a similar enthusiasm, readily prepared to admit mistakes, are inventive in trying to circumvent their mistakes, friendly to all, and despite the agonies of adjusting to a new and strange set of associations, curious, adaptive and often, for a period, satisfied with life?

Why is it that the same earnest, joyous child who later sometimes become the earnest, satisfied young adult, in the period between primary school and the first job, often undergoes a strange transformation, seeming to older adults to be wayward, dis-interested, listless, uncreative, unfriendly, unhappy, if not outright defiant, rebellious, deceptive, addictive, violent or even vicious?

Is it because it is the nature of human character-development and learning-process that we all have to go through such a stage and therefore that is how youth must be expected to behave? Or is it because each older generation in turn, in their middle-age merely think that the youth have all become ignorant or depraved, but that they are not really anything of the sort? Is it that what is really happening is that, despite appearances, they are quite happy and "turned on" when they are in their peer groups, and in a general way contented with life, but only present a perfectly natural front of differentness to the older generation because they sense they live in a fast changing world, very different from that which formulated their parents' ideas? And is this the reason why they feel they can learn more about these entirely new conditions better from each other than someone who is always really mis-reading the signs without knowing it?

No! We do not accept that such features are the universal nature of humankind! Youth brought up in the consumer-packet orientated atmosphere of capitalism: Yes! It is true that as capitalism proceeds from ripe to rotten the middle-aged worker can understand the next generation less and less and vice-versa. But that is because, after the first flush of excitement of his first job, or an occasional burst of enthusiasm after a promotion, the older worker himself has become deadened, incurious and relatively unfriendly.

On the job, every day, he should be enthusiastically teaching the older school children and university students what he knows; he should be systematically learning from others, continuously and creatively advancing.

But all this is barred him! Adult aborigines teach the teenagers of the tribe to hunt, to cook; the adult worker under capitalism, is a sad case, nearly all of them are cut off from the youngsters.

The youngsters, under capitalism, are sadder still, empty cut-off from real life, from the adult workers. They cannot "reach across the generations" as they dearly need to do! The mutual respect that springs up naturally between human beings in any real-life effort in which they are all involved, is cut off. The retired worker is no longer the revered wise elder of the tribe; he or she is a discarded "old buffer", "pop" or "nanny" only half respected by the middle-aged and respected not at all by the youth to whom they seem only a mystery.

Occasionally, there is an unexpected breaking of the age barrier as when, for example, a boy-scout establishes a bob-a-job, "I'll help you . . . you help me" sort of respect, but characteristically this deal has to be wrapped up, in the usual misshapen cash-nexus form which has become so all-pervasive that the simplest human gestures now have to be disguised in a money form.

Equally characteristic, the real age-barrier leveller is not some form of serious real life, but sport, or rather sport becomes real life. All right, so sport is convivial, is a form of life, is a form of collective, in which people enjoy mutual activities? Granted! But capitalism cannot leave it to be organised by people for their mutual participation and enjoyment, so that people who are deprived of teaching-learning respect, on the job can re-establish it on the sportsfield. Sport, too, like art, becomes a big-time marketable product, so that less and less play a more and more deadly or perfectionist game paid for and viewed by more and more with betting as a side-industry to add a stimulus to overcome the boredom of spectatoritis.

The universal suffering due to this sheer enforced lack of mutual appreciation in this age stratifying system imposed by the capitalist mode of production which crystallises in the lack of teacher-learner relationship on-the-job but spills over into off-the-job activities, leaving the youth stranded, cannot be bridged by teachers. They themselves have gone straight from school, back into school. They, poor souls, are like tribesmen who have never hunted or cooked, learning from books how this is done and teaching the youth from revised books, by revised methods, if such can be imagined!

It is not that theories on method of hunting and cooking are not useful, but they are not the real thing unless combined with the practice of hunting and cooking. The youth sense this, are understandably rebellious and indifferent to a half-knowledge, lose interest, curiousity, imagination, creativity and along with it, humanity, in the process dragging down the poor teacher to the level of similar attitudes. This accelerates the whole crisis of youth, of education . . . nay, the crisis of the older generation, the crisis of capitalism itself!

Open up the doors of the factories, offices, laboratories to the youth! Insist that workers teach them what they know as part of their "learning". Insist that workers *learn from the youth* (and here the teachers *can* help) what is brand-new (because of a rapidly changing technological world). Insist that survival collectives be formed, reaching across all age-groups, penetrating all work processes, demanding a re-think, re-integration, re-education of every one at every age level and every educational level!

Do you mean to say there would any longer be a "youth problem", an "education crisis"? Of course not! Humans, the only species that make war on each other, are, nevertheless, potentially a lovable species. They are potentially co-operative, friendly, and considerate, and their co-operation, friendship and consideration can spread across all age-barriers, all levels of experience and training! They

are also an intelligent species! They must be intelligent enough now, to embrace communism which is the only permanent way of de-schooling in the Illich sense!

The demolition of all authoritarianism, including the special sexual forms of suppression imposed on women, children and youth as a social institution, (about which more in the next section) and its replacement by the natural discipline of the work-relationship as a basis for a genuine mateship-relationship is the key to the profound changes for which the conditions have already matured.

What a change of life-style it will be for youth! How refreshing when the youth are taken seriously and people are not only keen to teach them, but want to learn what is generation-new from them too!

The joyous motivation of the very young child, mutually satisfying to both child and adult, could be a continuous process through youth-hood, working life, adulthood and onwards! The agony of alienation from each other would be ended!

Women's Liberation

What would be the impact of the same processes of involving the teaching-learning potential of all workers on the job which we have been describing on the position of women and on the family? What would be the impact of worker-liberation on women's liberation?

The worker, as we have contended, would find the stripping of his bosses trade secrets and his own job secrets a painful process. His liberation to participate in administration of his own enterprise involves the anguish of abandoning the shelter of familiarity, acknowledging the shortcomings, inefficiencies or pretences of his own work, education or training, and sacrificing his image of himself to the world, including to his wife and family into the bargain.

The women workers on the same job would have the same painful transition to make, which if successful, would be rewarded, as with their male work-mates or colleagues by the same normalising process of sharing with the male worker the satisfying task of teaching the student youth all they know, simultaneously learning "higher" aspects of work and sharing more in administration.

But there is a difference. Except with a very few jobs (e.g. the professions, tram conducting, computer programming, teaching) women workers have a different job with an inferior status to that of the men in the same workplace. That is not the same thing as saying they have an inferior job. They may or may not. The comedy or tragedy stylised in art in the situation of secretary-typist who carries her inebriated (or, playboy, or sick, or incompetent) boss, and who really makes the decisions whilst he takes the credit is too close to many a true situation to be really funny or sad. It is cruel. In such a real-life situation it is hard to say which of the two actors suffers the deepest indignity.

Yet, in a less discernable, undramatisable form, the same generalised indignity of unfairness pervades almost all jobs involving both male and female workers, irrespective of their actual work-connections. The lowliest typist in the typing pool could well have the capacity to do precisely what the "fortunate" secretary-typist does; make half the bosses decisions. No-one may ever know because she may never have the chance to try! In the munition factories in wartime emergency, women not only took over what had hitherto been "men's machines" but made the men's "records" on those machines, look silly, far outstripping what had previously been regarded as the production capacity of the particular machine!

The Mystique of Male Job-Superiority

What then, when the male worker throws down the defences built around his qualifications, his "long-service" and his job itself? Will he then be prepared to be a work-mate in the fullest sense to the "inferior" trained women with "inferior" qualifications, doing an "inferior" job? He doesn't have lunch with her, he doesn't travel with her, he doesn't drink with her, is he going to share a new conspiracy of job-prestige among all-the-male workmates in defence against all-the-female-workers, in a brand new version of inequality? Are men as a class, when liberated from their bosses to constitute a new composite boss to bar women's liberation on the job?

The alternative is that the male workers will not only find some women workers "shoulder to shoulder" with them, they will find many forging ahead of them. Men are supposed to be "brave". It will be bravery for some men to be outstripped by women, but that is the price of liberation.

It will take courage for women too to find themselves with the possibilities of "reversed roles" so to speak. We do not use the word in the sense of usurping the authoritarian manipulative roles of the men, but in the sense they will have the daunting prospect of emerging from the shelter of a double familiarity (the familiarity of their old job . . . and its relation to the boss, and the familiarity of their subservient role in respect to their male fellow workers). Simultaneously they will need to shake off this double oppression, with double the strain on their capacity to dare to do it, and their capacity to remain human in the process.

The male worker involved in job-training of women workers to take his job would also have a struggle to do so with dignity and humanity. It would be relatively painless for him to teach girl-student trainees what he knows of his job, easier still to give lessons to the high-school boys and girls.

It is always easiest to tell the most terrible home-truth about oneself to a stranger; quite difficult and hurtful to tell them to those you know quite well. Just so, it would surely inflict the most acute embarrassment for the male worker to train a female worker who has worked in the same workplace because it involves demolishing the double pretense simultaneously . . . the pretensive defence built around the job in relation to the boss and other competitive males and the pretensive defence built around all-the-men's-jobs as a superior status to all-the-women's-jobs!

Yet the transition will have to be fronted by both male and female workers. The exhileration of revolutionary changes when men and women make rapid advances in their thinking and acting in relatively short periods of time, of course, will help the transition. But the full double change must be made. Enlightened women and men will have to struggle against those males who will flinch from the double change, refusing to carry through to completion the process of ridding the workplace of the ancient mystique of male job-superiority trying to carry the revolution on the job to a half-way mark only, with the decisive administrative processes safely in the hands of male dominated committees, with at the most, token female "representation".

But what of the all-male jobs, in the all-male industries? We do not know how equality will come to the car industry, the mines, the founderies, the wharves, on the ships, in the trucking industry, the timber industry, the power industry, or the building trades. Some of these industries are all-male because of the muscular strength required or the irregular hours demanded. Maybe technological advance will reduce this element to vanishing point, and there is no special point in a women proving her equality by doing heavy physical work or in going to sea, unless she is real crazy on the idea, and if so, then why not?

For the men in these industries, however, if communism and women's liberation arrives before they are rendered redundant by automation, it will be especially hard. They will not have suffered the temporary humiliations of their fellows on jobs where women have claimed and won liberation! And so the paradox in Australia is likely to be that the most militant sections of workers will remain the most backward in their work relations to women.

We have used the word "humiliation". It is a word corresponding to what will inevitably be a temporary resentment felt by some males in a transitory phase of a revolutionary period when a female job-equality will be established in an economy of superabundance along with the banishing of a system of production for the market.

But all the humiliation, the embarrassment, the indecisions and the agony of the transition will be tempered, we guess, by the fact that it will take place within a framework of a transformation on the job from a system of "authoritarianism" where everyone is conceived as having a superior "over" him or her, to a system where the discipline of the job, arising from the very nature of the job itself, will prevail. (With which we have already dealt in the section called "Age-Sex Mix in the Corridor".)

Moreover, as we see it, decision making will not be such an individualised matter, as it now mostly is, but will be an interdisciplinary, inter-occupational, inter-sex team responsibility. The two factors combined should remove what we called earlier a system of "bullying", or being "bullied" but which (to

be equal to both sexes in the concept) we should probably now describe as "bullying or bitching", or being "bullied or bitched".

But how can liberation come to the women at home with young children? What impact does worker's control on the job have on home life? Like the man, exiled amongst men on the job in the all-male industries, the women exiled amongst women in the homes in the all-women suburbs, would be the most handicapped in making such a personal transition.

Many of these women, to use Illich's terminology are now "addicted" or "hooked" on the consumer-packet deals coming from the institutions of the "manipulative right", around which, as consumers, much of their hopes, their imagination, their effort and their time are spent. But the shift to the control of these institutions by worker-collectives with the aim of administering these institutions to produce ecological-sociological use values, as distinct from market values, would immediately withdraw the source of the consumer-packet-choosing drug on which many housewives are hopelessly hooped.

Simultaneously many of these women would find their husbands absorbed, as they never had been before, in the challenge of their job with its changing character, one element of which would include an increasingly mutual job-respect between him and women on the job. If any of her children were yet teenage, such a housewife would find them growing quite naturally into an equally mutual study-respect and camaraderie between the sexes, unknown to her in her younger days.

All members of the family, except the preschool children, in fact, would "grow away from her" faster than now in the sense that they would not only be enjoying experiences associated in some fashion around some purpose with other people which she, as a housewife, would be denied (which is now the case) but they would be doing it in a style of equality between men and women beyond her comprehension, because she would never have had the opportunity to experience it.

With the change in the character of work from a drudge to a creative activity, what would be needed to end the cruel isolation from life experienced by such women would be part-time employment opportunities and high-class convenient child-care opportunities. But the part-time employment would not need to be, as it often is now, the lowliest type of work such as cleaning or "tea lady" or commissioned door knocker.

When we talk of ecological-sociological purpose of the work-collectives one of the sociological, as distinct from ecological use value problems to be solved would be precisely: how to organise the work so as to re-absorb part-time married women into the job at a level corresponding to their capacity, as well as how to convert the product or service produced into a durable, gimmick-free, value that would "free" the housewife and impel her to look around for creative work to replace her idle hours and impel her to seek such positions and a more companionable life.

The proposed ecology collectives in the mini-metro centres of the Gippsland corridor, of course, as we envisage it, would be a transitional stage for such developments, drawing many housewives into active associations with others in which one of the common concerns would be discussing the local factory and office problems, pressuring the factory and office capitalist managements to make changes in the correct sociological-ecological directions whatever the market difficulties.

So here is the essence of the potential life-style change for women. Even in its transitional ecology-committee stage in the Gippsland corridor, so far as the housewife at least is concerned, as well as the women workers in the local factories, offices and shops it would be, to the extent they were involved, a part-step forward if not a leap.

Now we have not yet mentioned masturbation, marriage, monogamy, copulation, child bearing, family, fornication, adultery, incest, birth-control, abortion, divorce, homo-sexuality, lesbianism, the biological role of women, the feminine mystique or even male-chauvinist pig-doggishness, so maybe we well be accused of not even dealing with the subject of womens liberation at all!

We claim the contrary! To isolate and remove the deep-down prime cause of women's oppression, rather than starting with secondary causes and symptoms has been our purpose. Get at the cause, remove it, and potentially at least, there will be an impact on every aspect of women's life-style, children's life-style, family life-style and much else!

Given all the reforms of expanded and newly created supportive "convivial" institutions of the left (e.g. child care, catering, laundering, house-cleaning, domiciliary health centres and mature age training and re-training) to enable mothers with children to work if they desire; given identical training curricula for girls and boys and youth of both sexes and identical scholarships and apprenticeships and job-choice and promotion-opportunity equal to males and supplemental to equal pay, given banishment from the market of "manipulative" products and services of the institutional right, including the "feminine mystique" of the mass media, is that sufficient to liberate women?

No, there is much more. There is overlay after overlay of tradition institutionalised and otherwise stretching back ten thousand years, that will continue to obsess and oppress women, deprive and degrade men, maladjust youth and abnormalise children until its nature is understood and the traditions and institutions consciously abolished or modified to correspond to the completely new mode of production described above. These, however, we believe to be of a secondary character, (part of what Marx and Engels called "the superstructure" of the law, administration, custom, religion, ethics, education, and culture of a society), corresponding to the "infrastructure" of a particular mode of production of that society which they considered to be primary.

Serious womens liberation literature of a theoretical type tends to concentrate on these secondary problems with little understanding of their connection with the primary problem.

We are not saying that it is enough to alter the infra-structure only (thus giving women the possibility of complete job equality and economic independence) and that all the changes in customs and traditions of other aspects of male supremacy would automatically follow. To say so would be to advance a crude, rigid, economic determinist concept of great historical changes.

In practice, there will be continuing interaction between the achievement of basic job-equality as part of the changed mode of production of communism when that comes, on the one hand, and the changing institutions and customs reflecting general male-female relationships (apart from job-equality), on the other.

Indeed there are small groups of enlightened women and men (though the numbers seem to be rapidly increasing) who are actively and deliberately changing their domestic attitudes and practices to each other and to their children (i.e. changing their wee fraction of superstructure) in advance of the changes in the infra-structure of the mode of production, which, of their very nature involve major social changes. And such models of liberation-living, difficult as they are in a general social atmosphere of values which are all the opposite way, can make a unique contribution to heightening the movement for liberation generally.

Still, without genuine male-female job equality on a mass scale in a revolutionary new mode of production based on ecologically-sound and sociologically egalitarian non-manipulative products and services, women cannot have practical economic independence on a *mass scale*. From the foundation of a changed infra structure, however, it is possible to proceed to such generalised and thorough-going changes in the sexual, psychological, cultural and moral habits of male supremacy to swing over to a super-structure where such supremacy is entirely eradicated.

So, the main direction of change, if it is to be *universal and non-reversible*, must be from infrastructure to superstructure and not vica versa.

The significance of this is that those espousing the cause of women's liberation, as we do, should not confine presentation of the secondary causes and symptoms of the superstructure only or we will tend to generate opposition from wide sections of women themselves, not to mention men. . . . a wrong theory sooner or later leads to wrong tactics. Such a frontal attack on deep-rooted habits of male supremacy which are not coupled with an explanation that women demand also to share work-responsibility, could well leave the impression that what is proposed is a war between the sexes. But this is not the essence of women's liberation at all! They are not claiming to supplement men in positions of authoritarian power *over* society. The liberation of men from the degrading position of supremacy is also involved in this issue.

Turning then to the important but secondary superstructure aspects of the liberation of men from dominance and women from subservience, and their emergence as equal sexual and cultural partners on the basis of work partnership made possible by modern technology.

Wilhelm Reich in the 1920s, studying neuroses observable on a mass basis, came to the conclusion with Freud that sexual repression was the cause. Departing from the classical psycho-analytical prescription of cure by disclosing to the patient recognition of the cause coupled with control of the sexual desire or its sublimation, Reich came to the conclusion that actual, real sexual gratification was the only sensible clinical answer.

Finding that this usually proved impractical for his patients for the same social reasons which had led to their sexual repression in the first place, he set out to discover why society seems to be so organised as to negate real sexual happiness.

Studying the observations of Malinowski who lived in a matriarchal society in Melanesia, Reich lined up the significance of his findings with his own clinical ideas and with the concepts developed much earlier by Morgan and Engels. He agreed with Engel's in "Origin of the Family"

"Compulsory monogamy" wrote Reich, *"arose out of the concentration of wealth in the hands of one person, out of desire, as Engel writes, 'to leave this wealth to this man's children and nobody else'. This was the reason for the demand that the women must be monogamous. But when the development of human society is traced further back, beyond the point of common origin of wealth concentrated in the hands of one person and of compulsory monogamy, one finds social organisations that are characterised and dominated by genital love-life which production is still almost entirely undeveloped and is based on communal economy, on primitive work-democracy. This type of organisation is disturbed by a process consisting of growing restrictions and supression of genital freedom."* ("The Invasion of Compulsory Sex-morality" 1931, reprinted 1971 at p. 147.)

In other words, the rise of a male based ruling class arising from private ownership in the means of production and an oppressed class that did the work could only be achieved and maintained by the domination of the male within the family and the restriction of his woman's sexual freedom.

Reich went one further than Engels, observing that, when Engels wrote there had simply been no scientific work done on the nature of mental illness or into phenomenon of sexual need, which along with food, constitutes one and the two most basic of all human needs. He elaborated on the social restrictions of sexual gratification which not only apply to married women but extend to children from the earliest age and to youth and which are a built-in feature of the institution of the family as we know it and which are enforced by all the established institutions. The total effect of institutions and traditions on sex establish attitudes in the individual that lead either to denial of gratification or the feelings of guilt.

Reich summarises: *"The problem of the sexual misery of the population can only be solved by a movement towards freedom from any kind of oppression . . . the final elimination of the effects of thousands of years of sexual suppression and the establishment of a satisfactory love life for the people will be possible only when work-democracy has been established and consolidated in the world and the economic security of the population is guaranteed"* (p. xxvii).

And he proceeds to prove that what he calls "self-regulation of sex through sexual gratification" as observed in real life in a matriarchal society renders *compulsory* regulation either by parents or by society superfluous and there should be no attempt at regulation even for infants. Popular misconceptions are that this would lead to promiscuity, but not so.

Affection as the genuine bond between man and women, with all the property considerations removed, with full orgastic potency far more developed and pleasurable in both partners because of the presence of sex-affirmative education since childhood would provide a far more stable sexual liason than the double-standards of monogamous marriage that were detected by Marx and which persist to this day.

Reich attacks another popular misconception: that the culture of civilisation is sublimated sex, which becomes impossible if sex is to be gratified.

"Sexual gratification is not in opposition to the sublimation of sexual drives in work; the latter, on the contrary, presupposes the former. The relation between sexual gratification and sublimation is not a mechanical one ('The more sexual suppression the more social achievement') but a functional one: to a certain degree, sexual energy can be sublimated. However, if the diversion goes too far, sublimation changes into its opposite, a disturbance of work capacity" (p. 160).

Now all capitalism's established institutions run exactly counter to such concepts (as did those of other patriarchal authoritarian elites before the capitalist, whether feudal lords, or slave owners) because power over masses of people requires the institution of sexual fear and sexual guilt feelings and the subservience of children and youth to adults since all this serves to paralyse the intellectual critical powers and initiatives of the masses of individuals.

Reich, incidentally, has written a book on "The Mass Psychology of Fascism". Reich's scientific approach, we suggest, is a far sounder explanation of mass neuroses under capitalism than unsubstantiated arguments that it is caused by congestion in big cities.

Capitalism, in fact, as Engels long ago showed in detail, has a double-standard for men and women in relation to what is supposed to be the sanctity of the monogamous marriage based on love. *"If only marriages that are based on love are moral, then, also, only those are moral in which love continues."* Engels said and he argues for a high morality for marriage under communism.

"Since sex love is by its very nature exclusive . . . although this exclusiveness is fully realised today only in the women — the marriage based on sex love is by its very nature monogamy . . . with the dis-appearance of the economic considerations which compelled women to tolerate the customary infidelity of the men — the anxiety about their own livelihood and even more about the future of their children — the equality of women thus achieved will, judging from all previous experience, result far more effectively in the men becoming really monogamous than in the women becoming polyandrous. What will most definitely disappear from monogamy, however, is all the characteristics stamped on it in consequence of its having arisen out of property relationships. These are first, the predominance of the man, and secondly, the indisolubility of marriage . . ." ("The Origin of the Family" Marx, Engels Selected Works Vol. II, 1951, p. 218).

We think that the position taken by Engels and the elaboration of this position by Reich is substantially correct, although the recent advent of effective mass birth control measures and the rapid development of the potential of automation in reducing the muscular aspects of work add new dimensions to the potential for women's equality with man inconceivable either for Engels in 1884 or Reich in 1931.

These possibilities together with the inevitable impact of ecological imperatives on limiting the size of families will surely mean possibilities of job-mateship and domestic-mateship which cannot fail to demand a radical change to life-style.

A recently published theoretical work on women's liberation, however, does not agree with the basic position of Engels or Reich. Shulamith Firestone in a book "The Dialectics of Sex" published 1971 claims to use the marxist dialectical materialist methods yet the fact is she does not regard the tradition of marriage, of family, of child-rearing, of male supremacy expressed in culture and other matters related to sex as forming part of the superstructure as Marx and Engels did.

Instead she considers the sex division of labour to be not only a part of the infra-structure, but even a more important "sub-stratum" of the infra-structure than are the main modes of production that determine a whole epoch of the history of society.

Her object therefore is not merely to do away with all classes but *"to assure the elimination of sexual classes"* (which) *"requires the revolt of the underclass (women) and the seizure of the control of reproduction: the restoration of women of ownership of their own bodies as well as feminine control of fertility including both the new technology and all the social institutions of childbearing and child rearing"* (p. 11).

But the purpose of this seizure is not merely to ensure to women a choice in such matters which is

a just demand, fully in accord with Reich and Engels, but to do away altogether with sex differences. *"The tyranny of the biological family would be broken. And with it the psychology of power,"* she writes (p. 12) but we find that this means that she considers pregnancy as barbaric, children should have the right to choose their own household, and she advocates the hastening of the day when fertilisation could take place in test-tubes and the foetus grown in artificial placentas outside the human body.

We consider that she is scientifically incorrect in her view that sex differences are the *motivating* causes of epochal historical changes. This is demonstrated when she twists the obvious historical facts of the period of society known as matriarchy to fit her theory. *"Though its true that woman's lot worsened considerably under patriarchy, she never had it good, for despite all the nostalgia it is not hard to prove that matriarchy was never an answer to women's fundamental oppression. Basically it was no more than a different means of counting lineage and inheritance . . . it did not allow woman into society as equals"* (83).

She conveniently passes over here, a whole long important epoch of human development of several thousands of years and would do well to reflect on Lewis Mumford's account of the sexual revolution that must have accompanied the agricultural revolution, giving women equality if not predominance in the important matter of livelihood because it was the women with "habits of gentling and nurturing and breeding" who came into her own in the new permanent village settlement, inventing baskets and pots, learning how to breed and cross breed, establishing village communal sharing of the care of the young and so on ("The City in History . . . pp. 19-30).

In fact Firestone nowhere seems to take into account (as Engels does in abundant detail) how humans get their livelihood and its bearing even on the sex divisions of labor either in the past or for the future as we hope we have tried to do above. Instead she dismisses the whole awkward problem by simply saying about the future that "the division of labor would be ended by the elimination of labor altogether (cybernation)" (p. 12).

If you say this quickly enough it sounds good, but we believe she has shot too far back into the past in seeking biological motivation for historical epochal events which have much more immediate causes. And we think she has shot too far forward into the future on the above aspects of her arguments to have significance for the stupendous changes needed to establish ecological equilibrium by re-establishing community control of the means of production, thus giving not just the opportunity but the ultimate certainty of dissolution of male authoritarianism which has been based on slavery, feudalism and capitalism.

Firestone is much more real when she calls for "the economic independence and self-determination for all" (p. 270) and "total integration of women and children into the larger society" (p. 271) and some of her practical ideas for new life-styles for liberation-living we find most fruitful and will shortly mention.

We have described, above, the sort of campaign that needs to be waged by male workers in every place of employment at every level to give job-training and retraining not only to boys and adult male workers, but to girls, and female workers (including housewives) in lesser positions as part of the full process of full participation by the workers in self management of their factories, offices, laboratories, studios, learning centres and other workplaces.

We have warned that wishful ideas by the male workers, collectively, in such new circumstances to continue the mystique of job-secrets of the male workers collectively trying to exclude the women could not be tolerated. It would be thoroughly inconsistent with the collective all-in effort of full participation of the whole community and not just the male half of it.

Moreover, both men and women after the first shock of the transitional period would find that mateship on the basis of real discipline of the job would be a most acceptable feature.

The political task for such mixed-sex work collectives all over Melbourne would be to carry the new-found concepts of male-female egality beyond the job into every aspect of the "superstructure" through whatever democratic form of government as may be devised. In the process the public authorities, the mass media, the law, the schools, and universities, social services and other institutions would be stripped of the century-old "mystique" of male authority-superiority.

In one aspect this would be a similar process to the one already mentioned, namely opening the door of such organisations to women and establishing their status within them. In another aspect, however, it would be a more prolonged, more complicated process, subjected to democratic public participation, of rewriting curricula and textbooks, special measures for crash-course training and promotion of girls and women to previously-barred decision-making areas, rewriting laws to protect children and women, abolishing the age-old attempt to censor sexual gratification, revising therapy for neurosis, over-hauling the social services, and organizing new, more flexible catering, laundering, child care and cleaning services, and a hundred such efforts to eradicate the sources in the superstructure which perpetuate male orientated authoritarianism.

One branch of such activity would be urban planning designs, orientated on sociological and ecological considerations and capable of adaptation to the emerging new life-style for liberated women to which we now turn for a few brief suggestions.

A Design For Mates

The word "mate" for an Australian conveys some special brand of egalitarianism. Although maybe a trifle overworked, and even tinged for some with a degree of sentimentality, we still think the word, basically, has come to represent an effort to establish a warm firm human relationship.

The word has mainly been addressed by males to males, and if one were to say "work-mate" a male worker springs to mind. With job equality with women, a measure of success will be the transference of the notion of "workmates" to encompass women and men indiscriminately, to be used indiscriminately by both.

But "mate" has another important meaning. Man and woman mate. They pair, as Engels says "sex love is by its very nature exclusive". The word used for humans is associated with love and affection. Marriage, under communism could become, to use Illich's terminology, a convivial institution of the extreme left without any tinge of supremacy or "manipulation" or subservience of one over the other.

Let us now combine the two concepts and by "mate" we shall mean a friendly human work equality with both sexes whether in job-collectives or voluntary collectives, and stretching right across the ages, counting learning as work and as applied to man and wife we shall mean with love and affection between both adults and their children. In both senses we will mean that they are "with it" — both sociologically and ecologically, these being the over-riding, uplifting aims which call forth their collective efforts.

The design exercise therefore is to so design workplace, leisure-place and homeplace accommodation for the life style of mates.

Applied to the Gippsland corridor therefore it would look not to "present Melbourne" only for "acceptable" life-styles in the manner of those who survey the trend that is, and extend the curve which is then said to be scientifically predictable. Instead we propose to look to the future, whose portents are only vaguely discernable at the moment, because the movement of ideas and organisation far outstrip the ability of working people to translate them into bricks and mortar, let alone whole town plans, especially in a society geared to market objectives in opposition to the sociological and ecological aims.

As we explained in the note at the head of this chapter on "Life Styles" acceptance of the Gippsland corridor does not hinge on acceptance or rejection of our concepts in this chapter at all which were written for those, like us, who are thoroughly disillusioned with capitalism.

In the same way, the suggestions that follow, we believe, can be implemented under capitalism, but if capitalism cannot solve the ecological problem, then the design concepts would also lie in the right direction for the new system of society.

A few ideas occur scattered through what has already been written which have a bearing on life style which we will quite briefly recall before developing a few different ones.

Work-Style and Study-Style

Rip Van Winkle's experience in a functioning mini-metro centre and along the rapid transit (see under "Decentralisation") and other references above make it clear that the collective activities in the mini-metro concourses would provide maximum opportunity for work-style and study-style changes.

Ready Access to Concourse Collectives by:

* Housewives and elderly people during week days (child care facilities in concourse).
* Students at secondary and tertiary level already in the heart during week day (and labor-intensive factories also in the heart).
* Workers in all labor-intensive factories.
* Commuters on the way home.
* The whole suburb after work and in weekends.

Ready Access to Collectives or Other Facilities in other Mini-Metros, City-metros or the C.B.D.

* Anyone via rapid transit.

Ready Access to much wider selection of Bush or Beach for Relaxation.

* Anyone (because of rapid transit and shape and length of corridor and the natural amenity of the area).

Life-Style Effects

* Instead of spending hours of leisure time and a big proportion of income sitting isolated in a small steel cabinet (car) which further separates mates from mates, in leisure time, everybody would have maximum time to spend with their mates in some collective or other and with less expense.

* No housewife, elderly person or child need feel isolated or "out of things".

* No great weekend escape cavalcade in small steel cabinets necessary for relaxation in the bush or the beach because participatory concourse-collectives would be becoming more interesting and when escape desired, it would be cheaper and quicker to travel by rapid transit.

* The popularisation of sociological-ecological collectives in the concourse would increasingly bring pressure on "manipulative institutions of the right", so that, in addition to the above design features, there would be gradual increase in life-quality; more durable goods produced, so less shopping and more time; less "brands" of identical products so less space for shops and less time spent on shopping; less advertisements so more money and time for better class features; all this generating more interest of more people for more of the time in participatory collectives with their mates.

The division, sub-division, re-division and general problem of adapting concourse-spaces indoor and outdoor to fit the particular activities as they diversify and expand in quantity would be a constant design challenge. Many of the flexible construction suggestions of Firestone, to which we now turn, could be possibly usefully adapted, but if we could add a thought of our own.

Toilet facilities are compulsory for public places. The bare bones of catering facilities should also be compulsory (if no more than a kitchen sink, water, stove, refrigerator and a simple cupboard for crockery and cutlery, as in a holiday caravan) such minimum facilities would permit a flexibility of basic human needs which often tend to break up an association of mates, who want to continue, but cannot because of lack of such elementary provision for food and drink and physical comfort.

Home Style

The principle should be optimisation of choice of style so that people's real needs (and they will

be changing ones) can be met. Change of home-life style with gradual decline of products and services from the institutions of the manipulative right, will mean a decline in compulsion to "keep up with the Joneses". Moreover, a gradually increasing interest in participatory collectives in the concourse could mean less time spent in the home. Both trends together with a new regard for simple, comfortable, rational yet aesthetic living quarters could well lead to a shift from a demand for bigger houses with more and bigger rooms on big blocks covered with English lawns, towards relatively smaller houses with flexibility of room dimension on smaller blocks, perhaps with more protected courtyards to give due regard to indoor and outdoor privacy-community principle as developed by Chermayeff and Alexander in their book "Privacy and Community".

Remembering further that there would be a choice between low or mixed low/medium density in the outer areas of the mini-suburb, medium/high density in the heart and high density in the core, the following ideas of Shulamith Firestone are worth considering:

"City planning architecture, furnishings, all could be altered to reflect the new social structure. The trend towards mass produced housing would probably continue but the housing might be designed and even built (perhaps out of prefabricated components) by the people living there to suit their own needs and tastes. Privacy could be built-in; either through private rooms in every household or with "retreats" within the larger city to be shared by people of other households, or both. The whole might form a complex the size of a small town or a large campus. Perhaps campus is the clearer image. We could have small units or self determined housing, prefabricated component parts set up or dismantled easily and quickly to suit the needs of the limited contract — as well as central permanent buildings to fill the needs of the community as a whole i.e. perhaps the equivalent of a "student union" for socialising, restaurants, a large computer bank, a modern communication centre, computerized library and film centre, 'learning centres' devoted to various specialised interests and whatever else might be necessary in a cybernetic community" ("The Dialectics of Sex" pp. 265, 266).

Note that her campus town would just about match up with one of our mini-metro suburbs and similarly conceived, although she is more up-to-date with mention of computerised services which should obviously be a standard service for use by collectives. The idea of a "home retreat" in the core or the heart to be shared by several households also seems a good suggestion, it would provide somewhere members of the family and neighbours could meet between concourse activities or housewives could repair to at times when there were no collectives operating that attracted them.

Firestone also mentions that *"as for housework, larger family-sized groups (probably about 15 people) would be more practical . . . the waste and repetition of the duplicate nuclear family unit would be avoided, e.g. as in shopping and cooking for a small family, without the loss of intimacy of the large communal experiment. In the interim any housework would have to be rotated equitably, but eventually cybernation could automate out almost all domestic chores"* (p. 265). We consider that the larger household idea could well be an experiment to meet an increasing demand of young people to try out such ideas. It meets up with "commune type groups of young couples" which, mentioned above, should be catered for.

It should be remembered that with ecology-minded parents, one child or two child families are increasingly likely. It is increasingly being realised that it is not in the best interests of mother or child to confine young children for long periods without any contact with their peer groups, and common indoor/outdoor play space in a large household, with separate quarters for man-and-wife under the same roof, could well prove very workable. Even young children need mates; "playmates".

It is interesting to note that Walter Gropius visualises similar automation of housework to Firestone . . .

"As the family transfers numerous domestic chores to the machinery of socialist production, women's sphere of domestic activity shrinks and she looks beyond the family for an outlet for her natural need for occupation. She enters the world of business and industry. In turn, industry, rejuvenated on basically new foundations by the machine, shows woman the impractical nature of her domestic hard labor."

"Recognition of the shortcomings of the individual household awakens new thoughts about new forms of centralised master households which partially relieve the individual women of her domestic tasks

*by means of an improved, centralised organisation which is capable of performing them better and more
economically than she can perform them herself, even when she applies all her efforts."* ("Scope of Total
Architecture" 1956, p. 109).

Gropius (whose genius partly lay, incidentally, in practising and preaching interdisciplinary
teamwork), published the above statement when he was over seventy years of age. Firestone wrote
"Dialectics of Sex" when she was twenty six We have included these personal details to indicate our
identity of thought with Firestone on another principle namely that understanding is not a matter of
age, but stretches over all ages, from infancy onwards.

We have given other ideas, for residential design, for example, for the elderly and for migrants in
the section called "Social Mix in the Gippsland Corridor".

Let someone else summarise for us the need for other residential design innovations not specifically
for brand-new very advanced ideas of living like Firestone's, but providing nevertheless a long overdue reform
which could give immeasurably more scope for new life-style experiments.

A very recently published book "Living and Partly Living (Housing in Australia)" contains essays
by Ian McKay, Robin Boyd, Hugh Stretton and John Mant and illustrations of a range of already constructed
town houses, project houses, residential colleges, pensioners houses, Housing Commission homes and high
rise flats.

Each of the four authors have some ideas which correspond with those put forward by us. We
select the following sentences from Ian McKay. After stating some of the changes taking place in the pattern
of living in Australia and stressing the need for "face to face contact to avoid alienation", he writes:

*"It is strange that these socio-economic factors have not produced momentous changes in housing,
both on the micro-individual dwelling scale and on the macro suburb or city scale. Obviously it can be argued
that housing is a reflection of public taste and a result of public choice, but this would ignore the effect of
example. Australians have had the opportunity to see and experience only an extremely narrow spectrum of
possibilities because our prejudices have become enshrined in legislation. At no time more than now has
the opportunity to experiment and to develop new ways of housing been more urgently needed. Great
social changes have taken place, but even more significant ones are likely to eventuate, and if housing does
not reflect them the whole fabric of our city society will erupt into the sort of dissatisfaction and
discomfort that the U.S.A. is experiencing."*

Sure! Its backward with a set of outworn institutions of the authoritarian "manipulative right"
setting the tone of "keeping up with the Joneses"; or forward, with the Joneses as mates (instead of an
image) with the help of a complex of institutions of the "convivial left"!

We are all for a Gippsland corridor fit for mates to live in!

5. IS THE "EVANS" PLAN A FAIT ACCOMPLI?

Objections to our objection will no doubt come thick and fast from realists, those who pride themselves on their "practical politics" or who flatter themselves they have a monopoly of "commonsense".

We can easily anticipate some of these:

"The authorities can't ignore the pressure of investors who have their money tied up in land, or in plans to use land. The M.M.B.W. must have taken this into account when they made the plan: how can you expect them to scrap it and start all over again?"

"The price of land will go up if there is scarcity. There is only enough land zoned residential for new housing for half a million people. We need to immediately zone enough land for a million people or prices might rise. You can see for yourself that the authorities have no alternative but to release land within the area of the M.M.B.W. plan, because unfortunately there is not yet a plan available. An interesting idea, though, a Gippsland corridor! Don't drop the idea; why not keep it 20 years or so and put it up again when growth patterns for the Melbourne region are up for discussion again?"

"The M.M.B.W. plan was published nine months ago. How can they change it now? There would be such a fuss from those whose land is shown as "urban" on the plan, and who find that it will finish up non-urban, that they would have to be compensated and where would the money come from?"

This class of argument we reject because, whilst those who advance them may sincerely believe they are incontrovertable, the fact is that, whether they realise it or not, the ultimate source of such ideas come from those who see planning as a method of making money for themselves. A person is entitled to have such a value-judgement, but plans so based should not be called "planning for people".

Once bow to this class of argument and you immediately have . . .

1. Planning according to pressure (which really means non-planning)
2. Participation in planning made a hollow farce.
3. Even the "objection" system is meaningless except for relatively trifling adjustments.
but most important of all . . .
4. Over-riding ecological, sociological and even economic considerations are sacrificed.

In principle, the short answer is "where there is a will there is a way". For example:

* Genuine cases of hardship, as distinct from speculation can be compensated. Compensation plus a good plan can be cheaper in the long run than a bad plan enforced under pressure.

* Prices of land can be kept down by government purchase, subdivision and resale (we advocate this in any case) or by accelerating supply of services to sub-divided "raw land" zoned urban and for which plans for such supply are in an advanced stage.

It is to be hoped that amongst the authorities and their advisers enlightened views will prevail and the Gippsland corridor proposals will not be ruled off the agenda on the grounds of realities that are neither ecological, sociological or economic.

7. RESTRUCTURING PRESENT MELBOURNE

At the beginning of this book we mentioned that for those readers who could not see any relevance for them in the shape of new urban growth around the city there were several reasons why they were wrong.

One of these reasons was that the shape of Melbourne can have a big impact on the built-up areas, "especially" we said "if the principles proposed for new growth are progressively applied to the older growth by *restructuring*" which we promised to explain.

Now it is not our purpose here to give a full account of proposals for what we have called restructuring "present Melbourne". To do so would take another book, and these ideas have not been advanced as part of our "objection" to the M.M.B.W. regional plan, which is the primary purpose of this book.

Apart from that many of our ideas for present Melbourne occur already in "Plan for Melbourne Part 1" and "Plan for Melbourne Part 2" some in embryonic form, some in a more developed form. Most of the ideas in these earlier publications had their basis in sociological approaches as appear from the value judgements which occur throughout, but they were deficient in that they lacked any depth of understanding of ecological values. Fortunately, as it happens, the two approaches are not in conflict, that we can see one fortifies the other. However, a reformulation in summarised form of some of these earlier ideas, modified somewhat to adopt some of the thinking and terminology we have used in this book and elaborated a little could be helpful.

Restructuring Techniques

By "restructuring" first of all, we do *not* mean bigger or smaller or differently organised units of administration. These may or may not be advisable, but in any case that is not the first question to consider: it is the last question.

Australian political parties have developed the unfortunate habit of vying for electoral favours by invariably defending or proposing some administration machinery that, above all, must be different to that of their opponents. Arguments about administrative machinery too often dominate or even replace the purpose and value-judgements for which the machinery is intended and as a consequence are quite often meaningless except in terms of an old fashioned "power struggle".

Still less by "restructuring" do we mean the sort of physical building efforts called variously "redevelopment" or "renewal" in the inner areas, for which the Housing Commission makes a specialty of block destruction, and private industry makes a speciality of piece-meal destruction, both forms having a "community scattering" effect, although what we have to propose will involve new buildings in locations especially selected to have a "community gathering" effect.

By "restructuring" we shall mean the systematic and persistent top-to-bottom overhaul of all elements of urban life to accord with the ecological-sociological goals which we have outlined earlier for the Gippsland corridor.

Start then by considering a functioning segment of the Gippsland corridor. What are its principles and how can they be applied to present Melbourne?

Each of the busy metro-centres constitutes, in one aspect, an ecologically efficient way of enabling people to associate in work or recreation outside the home because it reduces wasteful transport energy, partly by deliberately clustering people-attracting facilities, partly by designing them to be high-density in the core and high/medium density in the heart, and partly by providing mixed land-use zones and permitting mixed functions within buildings to enable close association of complementary human activities.

But these measures serve simultaneously for sociological efficiency creating the concentration of people and ease of access as a foundation for the social engineering of satisfying participatory collectives in the concourse-spaces, which are to be deliberately built into the core and the heart.

It will be observed that these interlocking objectives of:

(1)   concentrating social activity to minimise transport energy, and

(2)   heightening participatory enjoyment

each reinforce the other.

Thus, the more successful the collectives become, the less will be the desire to travel for travel's sake. The more therefore will be the demand for expansion of mixed type facilities in the heart to cater for expanding popularity of such activities. The whole could not succeed without a very frequent all-day home-to-core transport, and efficient railed public transport, the interchange between the two modes being in the middle of the core. The car could be virtually eliminated from the core (thus making it even more compact) and not needed much in the relatively compact heart because most destinations would be in easy walking distance from anywhere else in the heart.

Since anyone desiring to travel outside the metro-city would find transit or electric the most convenient, he would always at least pass through, if not stop at, another complex with a high density of human activity in another mini-metro, city-metro or the C.B.D., thus contributing to strengthening the activities of the centres of destination.

In other words, the whole land-use transport design is a consciously planned community-gathering device.

But in the suburbs of present Melbourne the unplanned increasing use of the private car for all purposes is having the unconscious and unintended tendency to enforce the opposite, namely community-scattering of whatever degree of concentrated human activity there had been clustered around the railway stations of the suburbs of the earlier period.

Moreover the whole process is self-generating in the other direction. Thus the more impossible parking becomes in the higher-density commercial-manufacturing centres, around a local suburban rail station, the less attractive the centre becomes and the more people use their cars to travel further afield to new car-based shopping centres or factories designed for the car age.

The more this happens the more public transport declines, and the more people are driven in despair to use cars, and so the weaker becomes the area around the stations and the less it is used even by the train travellers, or those people who used to come by car, and ever new car-designed facilities spring up in separated locations and so on and on and on.

So the problem of "restructuring" present Melbourne is: what steps can be taken to reverse this whole sick community-scattering trend?

It is easy to see the answer, namely take every possible measure to make public transport more attractive, the areas around the stations it serves more attractive, the feeder bus services more attractive, and accelerate the process by locating concourse for participatory collectives in the areas surrounding the suburban stations.

There are of course, as we have mentioned, those pundits of the Tewskbury Symposium variety who scientifically measure the whole sorry process, predict that public transport and suburban centres are finished except for the aged, the sick, school children and the poorer housewives, and serve us with a program of freeways as the alternative which only make the deprived more deprived and the whole community sicker still. ("Plan for Melbourne Part 2" dealt in principle with this . . . see also Appendix No. 12.)

We are not here concerned with this, but the tactical problem: what to do about reversing the situation? It is one thing to discern that a bolting horse should be caught and returned to the paddock, it is another problem again to stop his momentum before he breaks his neck. And the car-boom rail-decline process has enormous momentum that is completely underestimated by many of that precious band of public transport enthusiasts who advance single-measure or partial-measure remedies such as:—

(1)   get more comfortable carriages, or
(2)   reduce or abolish fares, or
(3)   improve train frequency.

Any one of these measures, even all three together, would in our opinion be hopeless.

Let us return to part of a thought from Dr. Breuning whom we have already quoted under the Section "Cost" above:

Speaking of the two modes of transport, private and public, he says . . . *"What is called for is the progressive modification of both transportation systems so that each modification of both erodes one or more objectionable characteristics of the affected system"* (Adelaide Transportation Report p. 8).

We believe this is the only way the problem can be tackled in present Melbourne (as distinct from the Gippsland corridor).

We are not saying that Dr. Breuning has the necessary degree of regard for survival ecological or sociological considerations, but that his tactical approach to the problem is correct; for, no matter how vigorous the action for improvement of public transport or in denying freeway development, the very land-use pattern dictated by the car has enforced and will continue to enforce car use, engraining habits which cannot be suddenly changed no matter with what degress of radicality the problem is tackled (short of an externally imposed catastrophe such as petrol supplies cut-off).

Every single trend-reversing technique possible will be necessary. We wish to inject another proposal, along the same tactical lines as Dr. Breuning but relating to land-use, not in general but specifically for urban or suburban centres.

There are two contradictory trends in land-use for any area where attraction of the maximum number of people is desired, under conditions when increasing numbers of people desiring to use such centres come by car.

The first is that sufficient car-parking space is provided within easy walking distanct of the shop, office or factory concerned. This is a process which thins out or attenuates activity in the interests of access to the land-use activities. The second is that as big a range of activities as possible be concentrated in as small an area as possible so that people coming for one purpose can, with convenience, combine other purposes as well, which is a process that thickens or intensifies activity.

If for example, older homes and small factories are pulled down behind the area of shops in the main shopping street, to create parking for the employees and customers of such shops, the shops, immediately lose the custom they previously enjoyed of the people living in the demolished houses or working in the demolished factories. As nearby factories buy up adjoining properties to create car parks, the effect is multiplied.

If on the other hand houses are demolished to make way for a higher density of activity in new shops and factories, there is immediately created the problem of how employees and customers are to be provided with sufficient extra parking to have easy access.

To express the problem of land-use in the same sort of terms as Dr. Breuning did for transport therefore we could say:

What is called for is the progressive modification of both trends in land use, the access-facilitating trend and the activity-intensifying trend, so that each modification of both erodes one or more objectionable characteristics of the other.

Bringing together, then, these two sets of opposing trends, and setting out to modify a typical present Melbourne suburban centre towards a goal of a mini-metro centre as conceptualised by us, what should be done?

Rail-based transport *(mixed-blessing)*	v.	Road-based transport *(mixed-blessing)*
Inflexible, unidirectional but ecologically superior for long-haul mass conveyance		Flexible and superior for multi-directional short trips, but sociologically community-scattering
│ generates ↓		│ generates ↓
Urban-type mixed centres (blessing)	v.	*Anti-urban depot for staples (curse)*
Activity-intensifying multi-purpose land-use sociologically superior to extent participatory.		Space-excessive, access-facilitating (for cars not people) tending to uni-purpose, mass retailing or entertaining.

Let us start with the feature we have dubbed, for our purpose, a "blessing" that is with activity-intensity around a rail station favourable for the formation of participatory collectives. So the problem is: how to achieve this?

Such is the extent, fortunately, of railway land around many suburban stations that a fair-sized start on the "core" could be made without disturbing any surrounding properties at the outset. Assume that at selected railway stations there were superstructure building complexes on top of the actual stations and spreading sideways and along the track both ways. We shall call such a key, central building the *"core arcade"* to lay emphasis on its pedestrian character which must dominate it.

Chermayeff and Tzonis ("Shape of Community") have suggested that at interchanges there should be deliberately established a complex of publicly-owned facilities which draw customers to them. They point out that private enterprise would establish quickly enough to fill in the interstices if sufficient people were attracted by virtue both of the fact that it was an interchange for travellers and also a place where people had to go for basic public services.

In Melbourne conditions for example, some of the facilities that could be established in the core-arcade are: post-office, branch of the State Savings Bank, or Commonwealth Bank, municipal child minding centre, municipal library, electricity supply office, gas supply office, Commonwealth Employment Office, Totaliser Agency Board Office, Magazine Kiosk, a "railway refreshment room" or (to change the image) we shall say a railway bistro, coffee lounge and tavern, municipal baths with gymnasium attached, municipal squash courts, "comfort stations" that are really comfortable, including showers and rest rooms . . . and so on.

Then interspersed amongst these pace-setting, people-attracting, part publicly controlled facilities (many of them incidentally, being institutions of the "convivial left" rather than the "manipulative right" in Illich's spectrum) would be concourse spaces for all manner of participatory functions, as well as commercial enterprises such as shops, hotels, cafes judiciously mixed.

As the core arcade would have the advantage of being a new building, such of the rather scrappy design principles we have already mentioned in connection with mini-metro cores would apply, e.g. (i) pedestrian access in every direction (ii) concourse spaces left undifferentiated, but as steady voluntary activities become established designed so that passersby feel welcome to tread from the full public passage of the arcade to the semi-public activities of some participatory group, and (iii) that all concourse spaces be equipped to be self sufficient with simple kitchens as well as toilets.

Existing voluntary local organisations should be offered, in advance, use of concourse spaces which would range in size from small committee rooms to theatres and dance halls; but established groups, like progress associations, rate-payers associations, residents associations, school committees, kindergarten

committees, shop committees, scouts, guides, dancing classes and so on should be regarded not as the only examples of voluntary activity which the community is capable of generating, but as only a small fraction of the potential. "Reception rooms" at reasonable rental rates where people could "throw their own party" without disturbing neighbours or shifting all their furniture, could be popular too.

Primary school and secondary school use of core-arcade facilities could commence from the outset, if at first only in rudimentary style, e.g. using library, baths, gymnasium, workshops, or threatre as part of school activities.

Before going further, let us pause at the point of establishment of the original unextended, core arcade building to answer a few awkward and legitimate objections.

The most obvious objection is that the core arcade building would, if successful generate a tremendous increase in car-parking demand for users of facilities, but the very land around the stations which could otherwise be used for car parks would be taken by the building. In other words we seem to be caught on the horns of a dilemma of the conflict we have mentioned between activity-intensifying land-use and (car) access-facilitiating land-use.

Many people cannot realistically get from their home to such a core-arcade without their car. The argument of the public transport enthusiasts who point out that whereas car-access runs counter to high-intensity use this drawback does not apply to rail access does not get over the position of people who cannot conveniently get to the core-arcade in the first place, nor home again.

Our answer to that is twofold:—

(1)   The feeder-bus system should be a publicly owned public utility as are the trams and trains because they should be an integral part of what we have called the pace-setting function required for community shaping purposes, and the services should be frequent throughout the day and evening and in the weekend, and cheap. The economic loss might well be set-off against the economic gain to rail revenues and core-arcade rentals. But, if on balance, there is still an economic loss it could be written off against the sociological and ecological gain.

(2)   The core-arcade building should have a level for car parking separated from the pedestrian level, ample for current needs.

If ever, because of the effects of changing habits due to successful restructuring measures through-out present Melbourne (which will be described later) buses replaced many of the cars, it would mean, that since more space would be required to meet the requirements of core-arcade activities and less for car parking, part of the car park could be turned over to storage, workshop or other suitable uses.

For those who say that core-arcade buildings could have a high cost, we can only say that it would be a very small cost compared to the extravagant attempt to do the same thing namely build multi-storey car parks in the C.B.D. which would furthermore dictate an extravagant super-freeway system to serve them.

The whole process would be a design to "erode" the wasteful daily commuting use of the car and to "erode" the disadvantages of railed transport by grouping all big people-attracting facilities around stations which would give maximum and convenient access to all functions of commerce, business, culture or entertainment involving concentrations of people, thus strengthening the feature for which railed transport is superior: long haul of masses.

It would simultaneously begin to "erode" what we have called the "curse" of the tendency towards an "anti-urban depot of staples" because it would get the cars out of the way (underground or overhead) It would thus create old-type conditions favourable for "small man" activities whether commercial or voluntary which exist in typical "mixed" urban style and prevent them being swamped out by the bigger supermarts, hotels, car salesrooms and sale yards. These bigger concerns are the ones which tend to dominate where car access at ground level is a condition of survival because only they can afford the high-cost of parking-supply in a shrinking area for commercial activities in which land prices are increasing and in which pedestrian customers are daunted to explore far beyond a single-purpose destination because of the expanse of parking to traverse.

At the same time it leaves to road transport (preferably bus, but if not car) the feature in which this mode is superior, namely the multi-directional problem of collecting/distributing people who live in every direction and who cannot easily (at this stage of technology anyway) be served by any form of rail to/from the station. It also leaves to the car the time-flexible, multi-directional short haul recreational uses which it accomplishes so superbly.

We concede that, in a transitional stage, we can anticipate only that such a policy could "begin" to erode, and not eradicate, at one blow, all the negative features of the private car.

However we contend that this compromise is the most effective way to compromise between rail and road transport, eroding more of the objectionable features of both modes of transport than any other possible measure.

The least effective ways to compromise is a system (which the M.T.C. plan misdescribes as 'balanced transport') in which the community wastes public money for facilities, namely freeways, which encourages the individual in turn to waste his money to overuse his car for purposes for which it is least suited (long haul mass conveyance), side results of which are the impossible agony of pulling down half of the C.B.D. and inner areas to accommodate the cars as well as the people, and the further deterioration of railed transport and suburban centres.

Let us now return to our half-finished description of the original core-arcade building of a suburban centre to elaborate a little on the problem of designing or rather re-designing, land-use to directionalise transport, thus correcting the functional maladjustment between car and railed transport, and between mass produced commodity/service staples and "small man" or community produced articles and services.

At the other extreme the as yet weak, public transport lobby propose a solution which by its very nature, can only be partially successful at most, in altering trends and the ultimate extent of success would always be in doubt no matter how much public transport was improved and how much freeways were protested. This is not because what they propose is not needed; it is. It is because their solutions do not go far enough.

There are two weapons with which to fight the chaos of the car-gone-mad, to tame it and incorporate it in a way of life in which it ceases to waste our energy and sap our community cohesion; public transport and land-use.

The public transport lobbyists are fighting with one weapon in one hand only; public transport. The other weapon, design of land-use to directionalise transport, is in a hand tied behind their back.

The object would be to gradually re-locate high-intensity activities, no matter where they are now sited throughout the suburbs, around an every-expanding high density core and a medium density heart surrounding it, so that continued necessity of the car for "business" purposes, so long as that was necessitated by scattering of such facilities would gradually be reduced.

Even if there were socialism, so that community considerations were paramount, and the profit of a particular enterprise did not have to be taken into account except as part of an overall accounting system, it would not be sensible or even practical to force such changes at too great a pace. For example, the prospect of the abandonment of special-purpose buildings, only recently erected, or their conversion for other purposes would in itself, be a retarding factor.

However, in a future Melbourne in a socialist-transitional stage, it would mean at worst, both for customers and workers, a change of direction to go to work, to shop, for business or for pleasure. But, it would, on the average, be a change for the better. They would more likely be served by acceptable local public transport, i.e. the improved feeder bus system, and workers, customers and visitors alike, would be in a complex of other activities where human standards of convenience and conviviality were given higher chances.

For customers and workers, the same conditions would prevail in present Melbourne so restructured, but there would be the further complicating factor that local private enterprises would not only have to re-locate because it would pay them better to do so, but since they would have to make the

decision to do so, the appreciation of the advantages may only come to the decision makers years after the advantages have actually appeared.

However, we are already far too close to the "limits to growth" to afford the luxury of laissez-faire policies any longer.

Acceleration of Restructuring

What immediate practical steps would be taken, therefore to hasten this process, so important to restructuring of our lives towards energy conserving habits of appreciating each other in terms of mutually satisfying participatory activities as distinct from the energy-wasteful habits of out-doing each other in a car-based challenge to fulfil induced consumer-packet ambitions?

We propose:—

(1)   Inducement to Locate in the Core

The whole of the "core" area around the suburban station should offer business accommodation initially priced so low as to give a positive advantage to any enterprise shifting there (apart from being nominal, of course, for participatory groups). The price of commercial accommodation could be geared to the gradually increasing quantity of customers on the returns of the particular enterprise as has been done in leasing contracts with Chadstone-type developments where the dominant emporium offers such franchise to selective small commercial operations on such an arrangement.

It is essential that the whole core land and core buildings be publicly owned and its development strictly determined by the activity-intensifying goals we have outlined. Leasing with perpetual rights subject to equivalent space if ever required for redevelopment would probably be the ideal form here to give maximum overall community control of the socially most priceless land; but internal lay-out of all classes of accommodation would be entirely at the discretion of those using the premises.

The original core-arcade building should be so designed, we suggest, that it would be capable of expansion upwards by the addition of storeys, and capable of expanding sideways. The limitation of the size of such a core building would be that it would be a reasonable walking distance from one extremity of the core to the opposite extremity; or to put the same proposition in another form, from any part of the core area to the bus stop or to a person's car (parked above or below the pedestrian level). The initial low rentals therefore would not reflect the ultimate total rental. Such a core building could make a handsome return on the relatively low acquisition cost of present low to medium density land around the stations. In fact, at some stations there is enough land already owned by the Railways Department for such core complexes sufficient for the purposes outlined above.

The initial re-location of the nearest enterprises would be relatively easy to imagine. The small and middle sized shopkeepers and commercial firms usually strung out along the length of the "station" street, that rapidly loses its appeal and therefore its share of passer-by trade, the further it recedes from what has become the shopping focus would all have a magnificent opportunity.

From a trade point of view none of these type of businesses would be worse off, all could be better off, because they would all be closer to the transport interchange, they would all be closer to an ample carpark (above or below them), instead of as now, tucked away somewhere behind them, (if there is any at all), and favouring some rather than all. Moreover, most would be shifting to new premises where there would be the prospect of rapidly rising levels of passers-by. Those who preferred residential accommodation above their shops could have it in upper storeys of the core-arcade.

On the problem of acquisition of the present shops and buildings, for shop-keepers who already own their building, it could be a tremendous advantage. They could invest part of their compensation in anticipation of more customers or use the return on their investment to pay their rent.

Now it should not be gathered from this that we suggest that the lucky local enterprises that just happen to be near to a station chosen as a "core-arcade suburban centre" would be given an exclusive monopoly franchise, all of them destined to enter into a mecca of commercial expansion at the expense of

the unfortunate enterprises cited at railways stations not chosen for development as core arcades, or at car-based commercial centres, whose custom the core arcades would gradually be picking up.

All high labor-intensive or people-attracting commercial enterprises whever located in the area to be served by the re-structured core-arcade and heart of the suburb would be given opportunity for resiting: indeed that is the whole purpose of the design to give directional advantage to public transport and public-concentrated advantage to participating effort. Nor would it mean that first-comers would be best-served. Clearly other centres would only gradually decline, and the inducements to relocate in the core-arcade centres would only gradually operate. The gradual extension of the original core-arcade building however to cope with gradual absorption of enterprises further afield would be accompanied by an extension of the car-park storey or basement, which coupled with relocation of bus-bays could direct as many potential customers past newly sited premises as past the old.

(2)   Redevelopment Without Tears.

Of course the expansion sideways of the high-density core-arcade building complex involves redesigning of the street pattern around the station, and would constitute in fact, "redevelopment" or "renewal" of nearby buildings — words which have become "dirty" words around the inner areas of Melbourne. This is because the Housing Commission operations have involved mainly pushing people out of houses and areas, against their will, in the process offending those who rightly cherish the old solidly-built, finely designed houses of last century which can be sensibly rehabilitated. The less brutal but more insidious operation of private enterprise with the same effect is gradually operating to overwhelm those whose value judgements are for preservation areas, in all except a few small precious "token" areas.

We suggest the redevelopment necessary for the core and the heart is not of the same character for many reasons. In the main the areas concerned, to the extent that they involve houses, even around the older stations, do not consist of the same class of solidly built terrace-house or row-houses so prized in the inner area. Secondly the houses in such areas that would need to be acquired would constitute a very small fraction of the total of similar housing-stock that extends endlessly in every direction. It would not be the case, as it is in the inner areas, or virtually extinguishing the whole "feel" of an environment of an earlier period. Thirdly, in the main, the houses around the stations, were the first to be built in the area concerned and are more likely to be near the end of their economic life. Fourthly, home-owners could be offered alternative accommodation, if they so desired, in the residential sectors of the core-arcade building. Fifthly compensation for home-owners should be so generous as to enable the person whose house is required to buy a similar house in a similar situation and to be compensated for the upset (which does not occur with the usual Housing Commission operations).

While we are dealing with such machinery aspects of this subject, and before turning to the design and functional problems of the "heart" around the core-arcade (which after all are the survival-important ones), a few more comments on redevelopment could be usefully made.

The system of suburban core-arcade and hearts would throw the emphasis on redevelopment in such selected spots in middle and outer suburbs, and take the pressure off redevelopment of the present destructive character in the inner areas.

On the issue of the inner area, specifically, we affirm our attitude and proposals contained in the Section called "Urban Renewal" of "Plan for Melbourne Part 2" to which we refer the reader for a full account.

Obnoxious and obsolete land use, such as cattle-yards, council depots, meat by-products production, foundries, transport bulk storage, ancient tin-shed factories and stores, under-used railway land, Commonwealth Defence land and other anachronisms and new inappropriate uses such as ground-level car-parks could provide hundreds of acres of land for "redevelopment" of high-density residential and high-density industrial development.

Regarding our proposals ("in Plan for Melbourne Part 2") for three basic types of treatment for the inner areas (1) a "redevelopment area", as just mentioned, (2) a "preservation area" including all residential areas whatever which it is judged worthy to keep "as are", and (3) a "co-operative area", we still think that

this third technique is a useful one that could be applied experimentally for the problems of "the heart" areas around the suburban core-arcades.

Such areas would have high *"minimum-density" standards* (meaning density in terms of people not in terms of bulk of building such as buildings used for storage only) so that density could only be increased, several fold, never decreased.

Existing owners would be encouraged and assisted with technical advice and finance on how to co-operate for the progressive redevelopment of their block or segment of a block. This may involve retention of existing structures, extension of existing structures, or demolition and rebuilding of existing structures; but all would be so designed and phased that, with the assistance of "decanting" within the block, where required, no person would cease to work or live in the same block. The ultimate objective would be a strata-title system so that all affected parts, small or big, old or new, would finish up with security of residential/commercial/industrial accommodation (as the case may be) together with much improved, co-operatively-owned facilities such as canteens, child play spaces, laundries, car-parking or whatever.

(3)   Inducements to locate in the Heart.

Combining such-like combined-purpose multi-use block strata-title concepts, with those of "flatted" factories, "industrial parks", mixed-zone use *within* buildings, these density-raising techniques could provide an immense area of extra floor space for industrial/commercial/residential use in the hearts, around the core-arcade of the selected suburban stations.

Such a system would combine an opportunity for the full reign of individual initiative contained within a co-operative effort of his neighbours in the immediate area. Newcomers to the area, whether factories, offices or residents would buy strata titles giving rights within the Co-operative (or "body corporate") just as occurs now in own-your-own flats.

We have called this an experiment, advisedly. If the success of restructuring outpaced the demand for heart area floor-space, strata title owners, based on freehold, would conceivably speculate with their favoured positions and force up the price of floor-space. This would lead to deterring factory and other enterprises, scattered in other parts of the suburbs, from relocating in the heart in the first place.

If freehold strata title block development techniques in co-operation areas were insufficient in up-building the heart as quickly as the core-arcade development proceeded, incentives, as with the core, might prove necessary.

We would suggest, however, instead of outright public authority control a system of "strata-lease-titles" might be tried. Here freehold would be owned publicly and the area overall publicly developed, but to protect the smaller residents and enterprises, strata-lease-titles would give security of tenure not for fixed terms, but indefinitely (subject to a guarantee of equivalent space if ever the leased space were required for public purposes such as redevelopment). The lessee of such a "title" would retain a democratic voice in the body corporate consisting of all other strata-lease holders, and a voice therefore in the development of community agreed facilities of the common property. As with lessees of core-arcade premises, all strata-title holders (whether under freehold or strata-lease system) would have an absolute right of discretional internal layout, subject, of course, to safe-guarding any load bearing supports or service ducts serving other premises. We hope to elaborate on this and other forms of land tenure in a future publication.

Coupled with such co-operative redevelopment provisions and serving to accelerate them, would need to be measures for declaring as "non-conforming use" all existing activities within the heart which are space-wasting, not activity-intensive, obnoxious or otherwise inconsistent with the overall ecological-sociological purposes for which such changes are being made to establish the heart with its core-arcade.

Warehouses, car-saleyards, service stations, or even space consuming public utilities as Council depots, and the like would have to be relocated elsewhere away from the heart. Differential rates on such unwanted functions should be used to "push" their owners to buy up other factory, office or sale-yard properties elsewhere, in the same or adjoining suburbs. Such properties would be "going cheap" because

they would be up for sale by owners of such high-intensity labor activities who are being "pulled" to relocate in the heart. This "shuffling" process of "pulling" high intensity enterprises into the heart, and "pushing" low intensity enterprises outwards to take their properties, by adapting or redeveloping, them is part of the physical restructuring necessary to create new suburban nodes of core-inside-a-heart of high activity areas.

Such high-activity hearts as an integral part of their redevelopment could have built-in pedestrian access entirely separated from the roads and traversing all blocks, and connecting with the arcades of the enclosed core arcade building.

The genius of Paul Ritter's enthusiastic planning for such human-orientated physical-designing would be in high demand (see "City Planning Perth" or "Planning for Man and Motor" pp. 222-304). Melbourne would need hundreds of Ritters. Most of the pedestrian ways could be outdoor, but there is no reason why partial verandah-type protection could not be provided for inclement weather. We shall call the net of pedestrian ways through the heart, (traversing it and enclosing it) "heart-walks" to lay stress, as with the "core-arcades" on the predominatingly human purpose of the re-creation of intense human activity in the car age.

The core-arcade building complex, then, located in the centre of the heart-walk area, built around a public transport interchange, is a series of physical measures, and maybe the ecologist or sociologist or humanist who has lost the thread of the argument may have forgotten our prime purpose in all this shuffling restructuring of present Melbourne.

It is necessary to shake-off the objective misshaping of urban life dictated unbidden by the uncontrolled use of the car for all purposes in all places. The overall sociological and ecological purpose of simultaneous energy-saving and collective-formation is what can be achieved by the heart-walks-core-arcade policy assisted by the revitalisation of public transport based on, and in turn supporting the revitalisation of the core-heart areas it serves.

(4)   Supportive Restructuring Systems — Physical.

We have described one suburban unit of restructuring and some ideas as to how to accomplish it in present Melbourne. From suburb to suburb, however, there would be endless variations. Apart from political difficulties there would be also all manner of practical difficulties, some probably too big to overcome, except as a very long-term proposition.

For example, high labor-intensive but really big factories, not built near the railway lines would be one such difficulty. Maybe this could be tackled by treating such immense factories as, in themselves, a potential core-and-heart.

The creation of a core in the centre of the factories with all manner of shops and recreational activities (as contemplated in advertisements at least by modern "industrial park" developers) could be supplemented by turning part of the extensive car parks to other associated mixed-core-heart functions in order to humanise the whole total atmosphere, connecting the super-factory core, in the meantime, by fast road public transport to the nearest core-arcade for factory commuters.

In the inner-middle suburbs of Melbourne variations to take account of the extensive tram-network might be needed. There may even be cases where a core-heart complex would be justified around one important tram-based area, perhaps where two tramlines intersect or join to become one.

Obviously not every suburban rail station could become a point for a core-heart centre, because each core-heart would need a sufficient human "hinterland" to be a viable centre. The test of viability would not be commercial viability, many a smaller unit, even in the car-based age, or partly, (where there is adequate parking) because of its car based design would be commercially viable. The test of viability would be its ability to permit the formation and continuing popularity of collectives.

Maybe every second or third station would be sufficient. In outer suburbs with wider frontages bigger areas would doubtless be needed to sustain the same degree of human activity.

How would the whole system be "strung together"? Having re-established the primacy of rail

heads for prime centres of human activity and railed transport as the prime transport medium for mass commuting, the fact remains that a *relatively* decreasing number of workers work in the inner *areas or* the C.B.D. and a correspondingly increased number work in the suburbs. How are they to get to their jobs?

Completion of the reshuffling process partly answers this: they will find on the suburban-electric line (as their fellow workers, from the outset, would find on the transit/electric line of the Gippsland corridor) a concentration of all types of work garnered in from every corner of all suburbs served on that line.

This, however, would not answer the problem of workers whose present employment lies in a "cross-suburban" direction, i.e. where she or he lives near one rail line and has to travel to employment near another rail line. Unequal distribution of industrial, commercial and technical places of work in relation to residential areas, would, if not corrected, make this difficult to correct.

Therefore a "balance of employments" of different types should be attempted, in the very process of core-arcade and heart-walk establishment and in the flexibility of redevelopment occuring such opportunities would be open. But it would require a careful survey and a judicious mix, as far as possible for each suburban heart — core. If a very thorough range could be achieved for each heart-core (and no one could be anywhere near complete) then at least a wide ranging choice from all the heart-cores throughout the length of the suburban electric rail or tram line should be planned and could be provided.

Whilst workers should be left with complete discretion as to choice of jobs, for peculiar and unexpected specialties are a hall mark of big cities, nevertheless a long term "swapping of jobs" of a more common variety could be encouraged.

Once the same class of jobs exists on the job-axis line close at hand, it is an energy waste for worker No. 1 to travel long distances to work at job on another job-axis line, possibly crossing in his journey, unbeknown, worker No. 2 of the same work capacity whom worker No. 1 has deprived of taking a near-at-hand job because he continues to hold it down despite the daily travel.

In times of scarce employment, workers will travel any distance to get a job and are scared to let it go for fear of inability to get a similar job near at hand or for fear of losing promotion, or long service leave. Reform in all these habits and conditions of employment are necessary in order to make labor more mobile and rational. Long commuting, by private car, is energy-wasting, the worker is also sitting in his car when he or she could be spending time in more fruitful ways (some travelling up to ten or more hours per week).

Accordingly we have doubts now, and these doubts are strengthened when ecological reasons are added, about the wisdom of our earlier proposals in "Plan for Melbourne Part 2" which contemplated ready connection of the radial job-axis rail lines by cross suburban circumferential freeways between district hearts situated on such rail lines, (rather than radial freeways competing with the railways).

We think it better now to have a sort of "transport watershed" for " employment catchment areas" strung along the radial electric lines. Thus the local bus would be fast and frequent, but it would be a short-haul shuttle feeder bus, making towards the nearest heart-core. It would not be (as many are now), for commercial reasons, a long cross-suburban route "picking the eye" out of the more lucrative commuter demands along the way and enticing cross-suburban selection of employment. Cross-suburban freeways would be enticing too for the workers habituated in commuting by car.

Such a policy as we now advocate would cause minor hardship for a few workers for short transitional periods, but not greater hardship than the switch of many factories holus-bolus from the C.B.D. and inner areas, to the suburbs, and not in any degree as great a hardship as unemployment and the desperation of finding a new job unrecommended.

The employment watershed policy with transport watersheds to match, would be strengthened by district hearts. We have dealt with these in "Plan for Melbourne Part I" and will not elaborate here. Functionally they would be midway in size, range of activity and quality of activity in the hierarchy

between the heart-cores of the suburbs and the C.B.D. From an employment viewpoint they would tend to concentrate occupational specialities not so easy to find in a suburban heart-core.

We are inclined to feel now it would be better not to invite ready access between district centres on different radial job-axis lines, because it would tend to be a centrifugal force, pulling workers away from their nearest heart-core centre, whereas all our measures for the suburban centres and for the district heart-core are aimed at centripetal force attracting them like a magnet.

The exception would be that where it is necessary to create, as it may be, suburban heart-cores in the far outer suburbs, miles away from any rail line, connection between such a centre or centres to the nearest district heart-core by express public transport may be necessary to break the car strangulation of such areas where there is now no reasonable substitute mode of travel.

To finish these comments on physical features we would point out that the system of movement of people in relation to mode of transport and heart-core centres we have outlined is based on the principle that the radiality of transport is a desirable thing if it is public transport because it enables maximum access of maximum numbers of people to the vital core-hearts ranging from local through district to C.B.D. that people need to re-establish their humanity and the bigger the centre the more effectively it can be so served.

The opposite is the case when the private cars converge radially from every direction into a social centre: they tend to tear it apart, forcing it into unsettling redevelopments that are less human in scale and function and the bigger the centre the more destructive the effects become, so that our proposals are to use every devise to confine the accessory car-parking provisions to the local core-heart, encouraging the shortest car journey possible for any trip involved in daily commuting or shopping. C.B.D. all-day parking accordingly should be severely restricted and district-centre parking relatively restricted. Our proposals localise the unsettling character of the car, and use it as an excuse to physically re-structure centres which have been ruined, retarded or inhibited by the car, using the restructured land-use activities and the vertically-separated car-park levels as an instrument to re-establish the primacy of railed public transport and human intensified pedestrian concourse.

This restores to the car the function for which it is without equal, the random journey with a series of off-centre stops. If the car was no longer needed to go to work or to shop, many families might welcome the opportunity of abandoning the expense, worry and time-wasting of owning one, two or three cars and welcome in its place locally decentralised, plentifully stocked rent-a-car pools which would enable them (like the big business men arriving by air at a strange city) to use a vehicle and pay for it only for the actual period of use.

We have tried to represent, schematically, in Figure No. 6 the social catchments, as directionalised by the restructured centres and public transport, and connected together. By comparison with the equally schematic representation of a segment of the Gippsland corridor in the same diagram, the watershed between suburbs and district could never hope to be as effective, but as we said, it is the nearest approximation possible to applying Gippsland corridor principles to the problem of restructuring present Melbourne.

5.   Supportive Restructing Systems — Social

We feel we may be chided by the sociologists for starting with such a range of proposed physical measures, and neglecting the sociological, as they have come to expect from all traditionalists.

Pardon: but our guidelines for *all* physical restructuring has been, after all, to give birth to suburban-cohesive centres of human activity, designed moreover, to optimize voluntary enthusiastic participatory collectives which, as a style of life, are at once socially more satisfying and ecologically less energy-wasting.

We see this as a prime sociological goal. We have no doubt there are some sociologists who are survey-ridden and trend-constricted and who would not agree, whilst there are others, who believe, as we do, in social engineering to create opportunities for humans to lift themselves out of the rut of habit imposed by restrictive and manipulative influences flung at them from every quarter. It is a question of value judgements.

RE-STRUCTURING (LARGE-SCALE, PHYSICAL & SCHEMATIC ONLY).

UN-STRUCTURED

RE-STRUCTURED
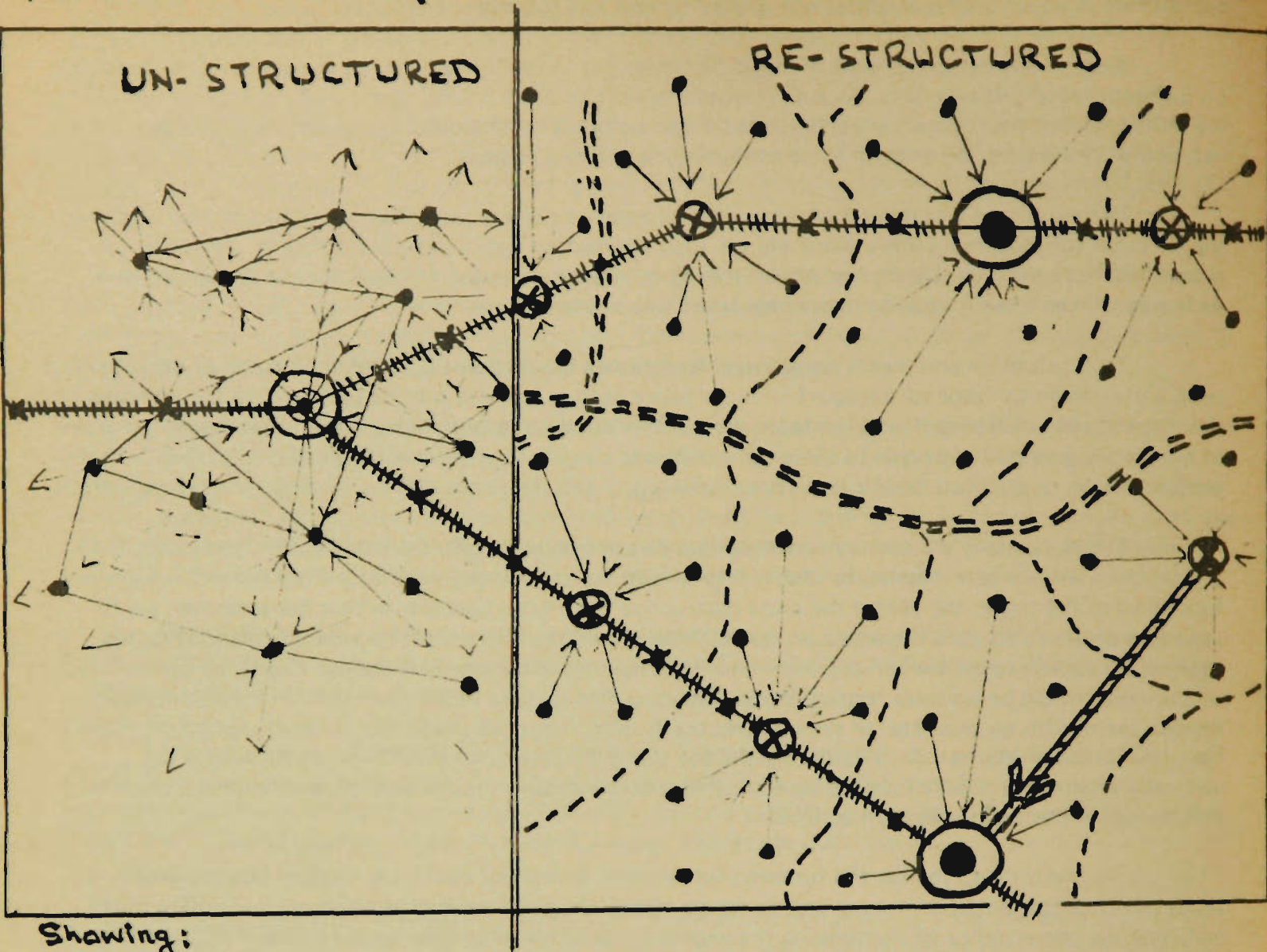
Showing:

1. **Reorganising** random locations of human activity [shown •] into suburban multi-purpose centres [shown ⊗] and district centres [shown ⊙] all sited on railway lines [shown ┼┼┼┼] except where suburban centre is too far from railway lines [shown ⊗] which is connected to nearest district centre by special public transport [shown ▰▰▰▰].

2. **Redirectionalising** regular daily car traffic flows [shown •→] through reorganised centres to public transport flows within commerce and employment watersheds on a suburban basis [shown -----] and on a district basis [shown ======]

GIPPSLAND CORRIDOR STRUCTURING

(LARGE-SCALE, PHYSICAL, SCHEMATIC ONLY)

Mini-metro
(every 2 miles or so)

City-metro
(every 10 miles or so)

City of 100,000 = 5 suburbs 20,000

Rapid Electric Transit rail

FIGURE NO 6

Re-reading our physical restructuring proposals from that point of view we consider the sociological aspects have not been left to a pious after-thought, but have been built-in throughout.

A few more comments not so directly connected with the physical restructuring are needed.

In the section on "desegregation of the west" we advanced certain techniques of social engineering which we proposed should be applied to the deprived west and north. But we mentioned later that similar differentiation (though in smaller patches; not on the same grand scale) exist in the south and east. In the construction of the suburban core and reconstruction of the heart, similar techniques would need to be applied, not overlooking the district core and heart in those particular areas where the attraction of tertiary trained workers can assist to lift the lagging standards of social services.

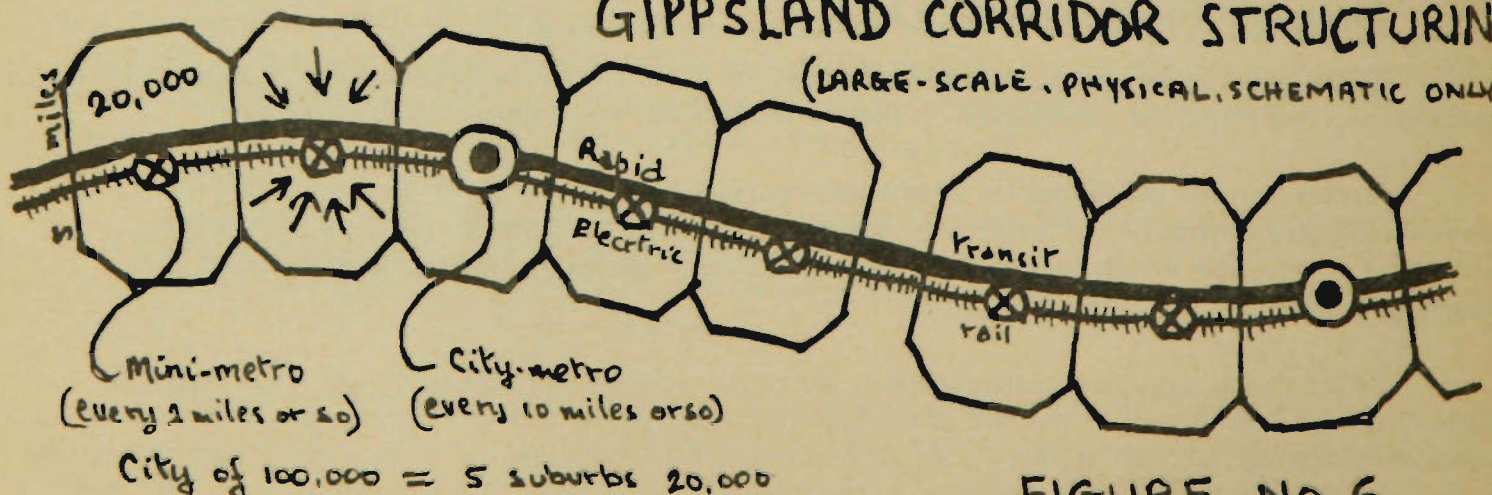The creation of core-heart centres, both in the west, north and relatively deprived enclaves in the east and south, incidentally, should help the whole process, because an increasing participatory level of collectives, at no matter what level, tends to raise the humanity of the participants and their receptivity to unfamiliar ideas.

This is a social engineering task, indeed, of such magnitude that *everyone* possible must be enlisted in the task not just the sociologists, in the same way as everyone must become public transport enthusiasts and core-heart building enthusiasts and conservationist enthusiasts.

A merging and mutual appreciation of all the occupational and training differences that have tended in the past to keep us in our own small groove, indeed, is part of the sociological-political problem preceding the restructuring of present Melbourne or the structuring of the Gippsland corridor. Consequently on such structuring and restructuring there can proceed a vast expansion of such processes amongst every segment of the community.

Restructuring as we have suggested, into community-functional units, eventually require re-organisation of local government administrative machinery. We are not dealing with administrative machinery in this book, but will mention two principles; first any readjustment must be made *after* not before the physical-social restructuring have been determined. Secondly, units of local government should be able to gather around a table *all* authorities responsible for *all* elements of physical-social urban life which means that all government departments and instrumentalities need to be reorganised so their sub-branch activities correspond to new local government units.

IMPACT OF GIPPSLAND MELBOURNE ON PRESENT MELBOURNE

The further and the faster the Gippsland corridor grows outwards, if it is based on rapid transit, there would be less and less inclination for its residents to use cars to visit present Melbourne, especially if this was restructured as described to make it a much easier place to get to anywhere of importance by public transport.

Looking ahead, say, thirty or forty years, therefore, instead of a prospect of a Melbourne population doubled and with a car population that has trebled, the figures could be quite different. Suppose half of Melbourne were living in the Gippsland corridor, and a reduced use of cars for long haul commuting is required in restructured Melbourne, the M.T.C. forecast for the number of car-miles travelled and the number of freeways necessary to bear such traffic would certainly be fairly wide of the mark.

We say that the prospects of a Gippsland corridor coupled with the urgency of the ecological-sociological imperatives, provide sufficient evidence to suggest that the Government should immediately direct Melbourne's freeway planners and constructors to put a stop right away to the freeway program pending a major rethink.

The Gippsland corridor therefore would drastically reduce the future volumes of cars and trucks in present Melbourne (and this quite apart from how many individuals had access to the use of a car when he needed it, which could be equal to or even higher than now).

To a considerable extent, therefore, the Gippsland corridor would ease the increasing pressure of

cars in present Melbourne suburbs, simultaneously greatly strengthening the public transport system in a general way, both effects playing their part in helping the restructuring process.

This would follow because the more dependent more people are on more cars, the more random are the location they are able to conveniently visit, the more random are the travel-habits people acquire and the more arduous it would be, as a consequence, to stop and reverse this trend by techniques we have suggested above.

A second effect of the impact of the Gippsland corridor on present Melbourne is that it would transfer the heavy emphasis on redevelopment from the inner areas to selected spots in the middle and outer suburbs whereas the task of restructuring present Melbourne in the manner described would seem too hopeless even to undertake in conditions of an increasing flood of vehicles with which to contend coming into present Melbourne from the seven corridors of the M.M.B.W.-Evans plan. Such a project however is possible under conditions of a nearly-static car population in present Melbourne, due to a gradually decreasing reliance on cars from those who would live in the Gippsland corridor.

Thus the Gippsland corridor lays down the conditions for an immense amount of construction and reconstruction (in part of which the Housing Commission as well as private developers could participate) in the core-heart-building projects.

Thirdly the Gippsland corridor could have an inspirational effect in accelerating the restructuring of present Melbourne.

There would be nothing equal to excursions to inspect a functioning busy mini-metro centre with its concourse humming with life, voluntary participatory groups of various activities obviously absorbed and fascinated by the satisfaction of "doing their own thing". The contrast to the "dead and alive" listlessness or even emptiness of a suburb of present Melbourne after tea or in the weekend could be a spur to political activity to hasten restructuring present Melbourne on the lines outlined.

We end this book on a note of political activity: and we do not mean party political activity in the familiar style (although without exception all political parties and minority action groups need to take stock of themselves in the light of the new challenges to the physical and moral survival of humankind, and to ask themselves, whether their motivation is not embedded in habits of conflict around issues that are either historical anachronisms or of minor consequence).

By political activity we mean activity that has as its object the arousing of the whole community to the revolutionary prospect of changing its whole life-style: from a style where the main object is acquisition of status-images bestowed by packets of consumer goods and services to a style where such goods and services play a subsidiary role to the enjoyment of association with men and women around worthwhile purposes.

By political activity we mean a movement, spear-headed by youth, who are the most readily capable of grasping the needs of the time and joining with all those of whatever age whose thoughts have not become atrophied and whose actions have not become stereotyped. We mean a movement that will struggle for a durable goods economy against the waste of material and labor in consumer goods, with their extravagant packaging, advertising, built-in obsolence, and fashion-obsolence. We mean a struggle against excessively large rooms in unnecessarily large houses on unnecessarily large blocks. We mean a struggle against the "institutions of the right" of Illich and including the car and its misuse as an all-purpose status-symbol tied to a whole series of extravagant status-symbol activities. We mean a struggle against squandering energy and materials of every description.

We mean a struggle for a simple life-style, "rich" in association with fellow men and women. We mean a life-style stripped of authoritarian power over persons, including male over female and older persons over younger ones that goes with the status concepts of a society based on the acquisition of wealth, recognising humanity at its best as being the finest thing that any other human can enjoy.

So, as part and parcel of all this, we add our contribution of a Gippsland corridor and a restructured Melbourne . . . a feasible "ways and means" solution, we venture, to carry out such principles, to generate local participatory events many times more attractive than far-off non-participatory ones.

We said at the outset, and we say again; we believe that capitalism is a system, that, of its very nature, cannot encompass the scope and depth of changes required.

Especially (though it may seem the most harmless on the surface) the capitalists, we believe, cannot accommodate their system to genuinely participatory collectives that take a hand in decision making, which we believe to be the keystone to changes on the scale required. Direction of affairs by members of the community for community ends in any really thorough going way (and this is what global equilibrium demands) is, we believe, entirely inconsistent with profit-making concerns.

So we end on the note we started. We offer this set of proposals to the public. If the Government can organise the capitalists to carry them out (or something different and better, but at least as radical and effective) good luck!

If not, please move over! "Entirely new approaches are required to redirect society towards goals of equilibrium rather than growth. Such a reorganisation will involve a supreme effort of understanding, imagination and political and moral resolve" (Limits to Growth, p.192).

Those at the helm, at all levels of decision-making, public and private, who cannot arise above the present social system to the height necessary to redirect it along revolutionary new principles will be left behind by history, along with their outworn social system.

The Evans-M.M.B.W. seven-corridor radial plan and the Gippsland corridor plan (structured and organised as we have proposed) confront Melbourne citizens with a genuine alternative.

The Evans plan augments car dependence, augments the consumer-status life-style, augments both the power over persons and energy power that goes along with such life style.

The plan we propose augments community-interdependence, augments a simple but creative life-style, augments the participation with teams of people who run their own affairs that goes with such a life style.

The choice is: one corridor of participants, or seven corridors of power!

OBJECTIONS TO M.M.B.W. REGIONAL PLANNING SCHEME PROPOSALS (lodged by M.S. Crow, 1/6/1972).

1.   Nature of Objection. The proposed amendments to the Planning Scheme should be modified by the provision for the major part of all future outward urban growth to be contained in a "Gippsland corridor" as amplified below.

2.   Reasons for Objection. The reasons for the proposed modifications are on conservation, sociological and other grounds as set out in the attached sheets.

*AMPLIFICATION OF OBJECTIONS TO AMENDMENTS NO. 3 AND NO. 21
MODIFIED AMENDMENTS TO THE PROPOSED SCHEME*

1.   The proposed Werribee Melton Sunbury Merri Plenty and Lilydale corridors to be deleted.

2.   All future outward urban growth anywhere to the south-west, west, north-west, north, north-east or east of the city to be contained by limiting it to urban zones contained in the present M.M.B.W. planning scheme, and all urban zoning within the extended area now under the Board's planning control area to be reviewed with a view to permitting only such very limited future growth as is provided by already-serviced subdivisions or which is required to "round off" any existing urban development.

*3.   Melbourne's future outward urban growth to be in a linear corridor, called the "Gippsland corridor", the first segment of which is the proposed Berwick corridor (and the balance of the Gippsland corridor to be in the same general south-easterly direction as far as Warragul or therabouts). ***

4.   A rapid transit railway service of the type that attains a speed of at least 150 mph. to be planned as centred in the Gippsland corridor, alongside the existing Melbourne-Dandenong-Gippsland railway tracks which should be retained to enable the continuation of the present electrified rail service gradually beyond Dandenong to keep pace with outward growth, and the continuation of a service to intermediate country stations in the Gippsland corridor not served by rapid-transit stations.

5.   All major centres for industrial, retail, commercial or administrative employment and for education, recreation, health or culture, together with medium and high density housing zones to be grouped in "metro-towns" located on the Gippsland rail line, the biggest of such centres on the few rapid-rail stations with smaller ones at selected intervening stations; and all planning techniques possible, including strong home-to-station public transport and mixed zoning in metro-town centres, be utilised to make such centres highly popular and attractive social focal points.

6.   All non-urban areas in the planning region, especially the conservation and landscape interest zones to be retained as proposed by the M.M.B.W. amendments, but all corridors except the Berwick corridor to be re-zoned for appropriate non-urban uses.

*Note: It is appreciated that that part of item 3 above as is contained in brackets is now in an area that lies beyond the planning powers of the M.M.B.W.; but it is proposed that the Board should ask the Government to extend the planning boundaries of the region by an area taking in shire council areas surrounding the proposed Gippsland corridor for at least as far as Warragul. Following remarks will, unavoidably, be referring to the whole proposed Gippsland corridor, although they will affect equally that part of it now called the Berwick corridor, and even, by way of redevelopment, in the present built-up metropolitan area between the C.B.D. and Dandenong, following the same direction as the principles outlined in point 5 above.

AMPLIFICATION OF REASONS FOR OBJECTIONS

1.   Survival Conservation Reasons
*   The transcending reason for a linear Gippsland corridor is to conserve energy. The radial corridor pattern of growth maximises the use of the motor vehicle for commuting, for transport of goods, and for*

all other transport purposes. The furthur apart the radial corridors grow, the greater would be the necessity to use the motor vehicle, the further would become the distances needed to be covered, and the more energy, both in the form of renewal of the vehicles, and the use of fuel, would be wasted.

During the main period of preparation of the Board's report, the scientists and conservationists appeared mainly to be warning about the effects of pollution and the need to conserve areas of bushland. The Board's report and proposed amendments in fact correctly take into account such considerations, and constitute in this respect a big advance on earlier planning e.g. in the proposed provision of sewerage, in the provision of "green wedges" between the corridors, and "landscape interest" and "conservation" zones within the green wedges, in the warnings against motor vehicle emissions etc.

Only quite recently has there appeared an accumulation of scientific weight warning of conservation problems of a far graver character.

One aspect has to do with exhaustion of material resources, and another and related aspect has to do with the rate at which energy is used, the consequent rate of heat radiation, and the world's thermal balance which can have a devastating effect on ecological systems as we now know them.

Whilst there appears to be ample room for argument amongst the scientists as to the probable effects of continuing with present population and production growth patterns, enough eminent men have issued warnings strong enough to indicate that the ecological balance of the biosphere is in danger of acute damage. The objector has no pretences to be an expert on such matters, and is not critical that the Board's proposals do not deal with them, because the Board's plan had to be worked out a few years too early to be expected to take account of such considerations. Moreover the Board's planning possibly had to be an exercise within the constraint of announced Government policy as long ago as 1968 on so-called "balanced" growth patterns for Melbourne.

However, confronted with a set of alarming and hitherto unsuspected facts about conditions of survival of future generations, it is submitted that the Board's planners should re-think the regional planning problems, and approach the planning problem much as an engineer would do in designing a bridge, that is, leave a greater margin of safety than may seem necessary, rather than take a chance. In the context of the world's ecology, predictions about which are far more unreliable than bridge-building, this means to do everything possible to conserve resources, and especially energy.

The Gippsland corridor concept coupled with rapid-rail transit and the other measures calculated to assist in changing life-styles back towards strong reliance on public transport and simpler but more satisfying social enjoyment of urban-type activities (as distinct from long trips by car as a form of relaxation) could minimise car commuting and car use generally, and in the process make a very marked saving in total energy expended.

2.   Other Conservation Reasons

One advantage of the M.M.B.W. proposed radial corridor pattern is the "green wedge" conservation areas deliberately protected between the corridors, both because it conserves such areas from uncontrolled peripheral growth and because it provides open country not too far away from anyone living in the corridors.

The Gippsland corridor concept retains both aspects of this advantage. It is not uncontrolled peripheral growth into areas that should be conserved, and people within the corridor would have just as ready an access to the "green" country on either side of the elongated corridor, as if they lived in one of the radial corridors.

There are possibly some difficult pollution considerations to be solved in connection with the Gippsland corridor, for example, the protection of Westernport from pollution. But, on balance, this would seem not more difficult to achieve than the extra pollution to the Yarra both directly and indirectly through its tributaries which, it is explained by the M.M.B.W. report, would result inevitably from urbanisation of the northern and eastern corridors.

Problems such as the ultimately expensive flood mitigation works mentioned in the M.M.B.W. report as a result of further urbanisation in the catchment areas of the Yarra and its tributaries would not seem to arise in the same degree from the Gippsland corridor proposals.

3.   *Sociological Reasons*

The western suburbs and to an extent the northern suburbs have a much greater complement of residents who are industrial workers and who regard themselves as "deprived", and in fact are relatively deprived in relation to education, health, child care and other services and amenities, as compared to areas in the south and east.

The M.M.B.W.'s 1954 report gave all the reasons why people preferred to live to the south and east of Melbourne: higher rainfall, better soil, undulating country, nearer to the more popular seaside and mountain resorts, and cheaper for any undergrounded services such as water or sewerage and for house foundations and road construction.

There is nothing to indicate that these same factors do not still operate. To pay a subsidy for forced development to the west will not basically change the socio-economic composition of the population living there, no matter how it is zoned or what the corridor pattern is, nor overcome the deprivations of the existing communities which require social remedies outside the scope of the present planning powers of the Board.

The recent strong challenge of the south-east to attract industrial development and industrial workers, as well as all other types of socio-economic groups, indicates that the Gippsland corridor could far more easily be planned, as Canberra is planned, to ensure that all income-groups are mixed in each neighbourhood in such a way that all support and enjoy the same schools, shopping centres, hospitals, child care facilities and other services.

Also the Gippsland corridor plan would greatly strengthen the C.B.D. despite the deliberate creation of metro-towns, because, being based far more firmly on public transport than the radial corridor pattern would permit, it could attract far more people into the central area than could be accommodated when a high proportion comes, as now, by car. It would also slow down the destructive effects of a too-rapid redevelopment in the C.B.D. and inner areas caused by attempts (ultimately self-defeating) to accommodate the ever-increasing influx of cars. In turn the retention of a sufficient stock of relatively low-rent space in the city and inner areas encourages the optimum conditions for small and medium sized enterprises, both commercial and voluntary which combined supply such a large element of diversity, character and liveliness to the life of the city and inner areas.

Even the concept of a "balanced" Melbourne would be observed by the Gippsland corridor plan. Instead of equal growth in every direction based on transport travelling at certain speeds of the same order, the rapid-transit speed along the longer distances of the Gippsland corridor, would equalise in terms of time the slower speeds along the shorter distances of the present built-up areas of Melbourne.

Above all, however, the Gippsland corridor could be used as an experiment in restructuring the relatively unstructured car-based outer suburbs and re-establishing various concourses of citizens around the metro-towns involving gradually increasing interest and participation in their own common affairs at these focal points, and similar focal points.

Without a blossoming of public participation facilitated in every way, including the deliberate design of the regional plan, the awakening in time by the public to the moral and practical measures necessary for survival, may come too late.

4.   *Other Advantages*

        (i)   *Economic considerations*

        It could be objected that the Gippsland corridor proposal has the disadvantage of the cost of an expensive rapid-transit system. It would seem likely, however, that the economic benefits would far outweigh this cost, quite apart from the conservation and sociological benefits.

        The extension of Melbourne in a Gippsland corridor would mean that the reticulation of the major basic resources of water, electric power and natural gas would be much cheaper.

        Also on the credit side would be the enormous savings to the community because of a lower expenditure of resources, energy and pollution due to minimising motor vehicle transport and minimising commuting distances.

A minor, but not unimportant economic advantage could be that the unexpected direction and rapidity of urban growth in one direction would mean that the Government could be asked to acquire development rights in the Gippsland corridor at relatively low prices due to the unexpected direction of urban growth. Authorities established for the purpose could acquire, plan and resell thus avoiding the onerous burden of speculation-profit inevitably accompanying the long-anticipated radial-type corridor development in a radial pattern and within the Board's new regional planning area.

(ii)   Decentralisation

A linear corridor growth such as an elongated Gippsland corridor should be regarded as a modern form of decentralisation. The metro-town structure proposed for the Gippsland corridor could have all the advantages claimed for the more traditional type concept of a separate decentralised town, namely a community of a certain size regarded as "manageable", with a certain degree of economic independence and not so big that the resident feels that there is nowhere he "belongs" and yet big enough to offer a reasonable range of employment opportunities, educational, cultural and recreational specialties and other characteristics of modern city life.

A metro-town structure designed to heighten community concourse and therefore community identity could, along with other measures, help to overcome much of the homogeneity, randomness of location of many community facilities, and absence of lively centres of citizen activity associated with car-based outer suburbs, not only of Melbourne but also in the bigger country towns.

For purposes of strengthening self-identity of each metro-town and its associated community, each could be separated from its neighbours by a mile or two of non-urban "green" territory, and each planned with a range of mixed employment and community facilities, thus giving as much independence as can be expected of a complex modern society.

Further, to the extent that there is a valid argument against conurbations because of the concentration of pollutants such as smog, the elongated Gippsland corridor type of city growth pattern would minimise such factors and correspond to the effect of decentralisation.

Indeed there would seem to be no advantages claimed for the separate decentralised town that cannot equally be claimed for an elongated structured, metro-town corridor-type of decentralisation. Yet the Gippsland corridor would have tremendous advantages over the more traditional type of decentralisation, retaining ready accessibility for everyone to the C.B.D. by rapid rail helping thus to overcome much of the resistance of people to shift too far from the metropolis.

(It should be added that the objector supports other, traditional-type decentralisation efforts of accelerated development, if only to give the people of Melbourne a wider choice of habitat and city-styles.)

(iii)   Long-term-advantages

Long-term planning beyond the regional territory of the M.M.B.W. (even as extended to Warragul as proposed in this objection), and beyond the span of years encompassed by the M.M.B.W. proposals has, of course, tremendous uncertainties to contend with. Not the least of these uncertainties is population control possibilities, mentioned in the M.M.B.W. report, to which could be added control of energy expenditure and resource utilisation in industry.

Yet it would be as well to bear in mind general considerations of a long-term nature, because it would be wrong to plan for short-term advantages only to find that they lead to long-term disadvantages.

As petrol and natural gas resources become exhausted, it will be necessary to turn again to coal as a major source of energy. The Latrobe Valley would then be re-established as a most significant area economically.

Looking forward this far, the Gippsland corridor concept could then well be linked with a "second Melbourne", either near Warragul at the gateway to Gippsland, or perhaps at a suitable location in the heartland of the Latrobe Valley towns.

The rapid transit link would then serve and be served by such New Town building.

The Gippsland corridor proposals would, on the face of it, therefore appear to have attractive long-term possibilities as well as obvious short-term advantages.

TYPICAL UNSUBSTANTIATED "POPULAR" ASSUMPTIONS.

Assumption: High density and big cities cause social deterioration and ecological imbalance.

We quote three recent examples of what we regard as pseudo-sociological and pseudo-ecological beliefs, from the publications of the Victorian Chamber of Manufactures (V.C.M.), the Royal Automobile Club of Victoria (R.A.C.V.) and the Victorian Council of Social Service (V.C.O.S.S.).

These assumptions are so widespread that we could have quoted many others. Our selection is a random one only.

Example 1:

From the Victorian Chamber of Manufactures (V.C.M.)

"World cities are choking to death . . . with a frightening rapidity.

"Sixteen cities currently support more than five million people each. Four of these hold more than ten million people each.

"How do these people live?

"With poisoned air, noise, a violence and vandalism born through the frustration of confinement, and with an unnecessary sickness and poverty that high density living brings . . .

" . . . Today, many thinking people and organisations throughout the world are turning their attention to the giant problem of city living. From their studies emerges a dominant thought . . . society must learn to spread itself more evenly if it is to preserve some sort of life quality!

"It must decentralise."

(From cover page under main headline "Shoulder to Shoulder Living" of the Weekly Service Bulletin of the Victorian Chamber of Manufactures 16/6/'72, Vol. 17, No. 22.)

"The social benefits of decentralisation come chiefly from the avoidance of the social ills resulting from overcrowded cities, including the pollution of air, noise, and water and disturbance of the ecological balance of the region. Overcrowded city living is also associated with an increase in juvenile delinquency and breakdown of mental, moral and physical growth.

"Successful decentralisation would further help to preserve family ties since it would provide a community environment in which school leavers could find gainful employment and not have to migrate to capital cities to find jobs."

("Victorian Chamber of Manufactures "Decentralisation Report" May 1972, at p. 11.)

Example 2:

From the Royal Automobile Club of Victoria (R.A.C.V.)

"There is evidence available to substantiate the opinions from urban centres in many parts of the world that problems of pollution increases, quality of life deteriorates, social alienation occurs, crime rate soars and mental health problems become much greater, more severe and more difficult to manage in direct relationship to population's concentration and size of urban area."

(From report of the objection to M.M.B.W. regional plan drawn up by a special committee which included an urban economist, a professor of psychology, a psychiatrist and a planner. Published in R.A.C.V. Journal "Royal Auto" July 1972, at p. 6.)

Example 3:

From the Victorian Council of Social Service (V.C.O.S.S.)

"Nevertheless in the light of increasing problems being experienced in very large cities, it is irresponsible for the M.M.B.W. as a planning authority for the metropolitan area to assume without any protest a course which will only lead to increased social problems, crime, alienation, inaccessibility of services, pollution and congestion."

We rely on our arguments in the main text to rebut these assumptions. Here we will quote Chermayeff and Tzonis from "Shape of Community".

"Density of population per se is not a measure of urban decline. Appropriate systems of sub-systems properly designed, could make life very pleasant in densities now considered dehumanizing." (p. 110)

"Environmental crisis caused by technology is usually identified with the city. It is, however, not a city crisis per se, but simply that the city shows to the greatest extent the effects of "pollution" which in the broadest sense are total and ecological" (pp. 7, 8).

PRELIMINARY VIEWS OF "CLUB OF ROME" SPONSORS ON MESSAGES CONTAINED IN CONCLUSIONS FROM "LIMITS TO GROWTH" STUDY.

Below we publish excerpts giving the main messages seen by the sponsors as arising from the study. They acknowledge that they are not speaking definitatively for all their colleagues in the Club of Rome "for there are differences of interest, emphasis and judgment amongst them"; but being convinced that the findings "contain a message of much deeper significance than a mere comparison of dimensions" and they proceed to give their views, emphasising that they are preliminary views only.

The excerpts are taken from pp. 191 to 195 but we urge readers to read the full text which includes explanations of the rather bald generalisations we have selected. If we would underline any one of the following points it would be from point 1 that we are confronted with a need for "a fundamental revision of human behaviour and, by implication, of the entire fabric of present-day society".

1. We are convinced that realization of the quantitative restraints of the world environment and of the tragic consequences of an overshoot is essential to the initiation of new forms of thinking that will lead to a fundamental revision of human behaviour and, by implication, of the entire fabric of present-day society.

2. We are further convinced that demographic pressure in the world has already attained such a high level, and is moreover so unequally distributed, that this alone must compel mankind to seek a state of equilibrium on our planet.

3. We recognize that world equilibrium can become a reality only if the lot of the so-called developing countries is substantially improved, both in absolute terms and relative to the economically developed nations, and we affirm that this improvement can be achieved only through a global strategy.

4. We affirm that the global issue of development is, however, so closely interlinked with other global issues that an overall strategy must be evolved to attack all major problems, including in particular those of man's relationship with his environment.

5. We recognize that the complex world problematique is to a great extent composed of elements that cannot be expressed in measurable terms. Nevertheless, we believe that the predominantly quantitative approach used in this report is an indispensable tool for understanding the operation of the problematique. And we hope that such knowledge can lead to a mastery of its elements.

6. We are unanimously convinced that rapid, radical redressment of the present unbalanced and dangerously deteriorating world situation is the primary task facing humanity . . . Entirely new approaches are required to redirect society towards goals of equilibrium rather than growth.

7. This supreme effort is a challenge for our generation. It cannot be passed on to the next. The effort must be resolutely undertaken without delay, and significant redirection must be achieved during this decade.

8. We have no doubt that if mankind is to embark on a new course, concerted international measures and joint long-term planning will be necessary on a scale and scope without precedent.

9. We unequivocally support the contention that a brake imposed on world demographic and economic growth spirals must not lead to a freezing of the status quo of economic development of the world's nations.

If such a proposal were advanced by the rich nations, it would be taken as a final act of neocolonialism. The achievement of a harmonious state of global economic, social, and ecological equilibrium must be a joint venture based on joint conviction, with benefits for all. The greatest leadership will be demanded from the economically developed countries for the first step towards such a goal would be for them to encourage a deceleration in the growth of their own material output while, at the same time, assisting the developing nations in their efforts to advance their economies more rapidly.

10. We affirm finally that any deliberate attempt to reach a rational and enduring state of equilibrium by planned measures, rather than by chance or catastrophe, must ultimately be founded on a basic change of values and goals at individual, national, and world levels.

EXPONENTIAL GROWTH

A Rough Measuring Device for Laymen

For the convenience of laymen (like the authors) who want to calculate exponential growth (or principal plus compound interest), and who are not versed in slide rules or in applying algebraic formula such as occur on p. 60 of "Limits to Growth", namely:

$$Exponential\ index = \frac{ln\ (\ (r.s)\ +\ 1)}{r}$$

Where r = average rate of growth and s = "static index" and given that $ln = 2.303 \times log_{10}$

A friend, who believes in de-mystifying mathematics and science supplied the nomogram on the opposite page.

How To Use Nomogram

1. Select period of years (see horizontal line half-way down page).

2. Select line showing rate of increase (top half of page) or decrease (bottom half)

3. Note intersection of rate line and period line.

4. Read horizontally from this point to vertical axis on left.

5. Now multiply your original figure by factor there shown.

6. This will give figure representing total growth or total diminution (as the case may be).

Note: You need not follow the above sequence only.

Given any two of the three factors (i.e. time, percentage rate of growth and the multiplier) you can deduct the third.

For example: If you wanted to find a figure representing the average increase per annum for some system which has increased 3 times in 17 years:

Select 3 on vertical axis.

Move horizontally right up to 17 years.

From this find rate between 6% and 8% (say, 7%).

Another example taken from p. 29 of "Limits to Growth":— "A French riddle for children illustrates another aspect of exponential growth the apparent suddenness with which it approaches a fixed limit. Suppose you own a pond on which a water lily is growing. The lily plant doubles in size each day. If the lily were allowed to grow unchecked, it would completely cover the pond in 30 days, choking off the other forms of life in the water. For a long time the lily plant seems small, and so you decide not to worry about cutting it back until it covers half the pond. On what day will that be? On the twenty-ninth day, of course. You will have one day to save your pond."

INCREASE   20%   15%   12% PER ANNUM

x100
x90
x80
x70
x60
x50
x40
x30
x20
                                          10%
                                          8%
x10
x9
x8   6%
x7   5%
x6
x5   4%
x4
x3   3%
                                          2%
x2
                                          1%
INCREASE

NOW   10   20   30   40 YEARS
x0.9
x0.8
x0.7   99% OF LAST YEAR LEVEL
x0.6
x0.5   98%
x0.4
x0.3   97%

x0.2   96%

                                          95%

x0.1 = 1/10   94%
x0.09
x0.08
x0.07
x0.06
x0.05

x0.04

x0.03   92%

x0.02
                                          90%

x0.01 = 1/100

DECREASE   80%   85%   88%

APPENDIX NO. 5
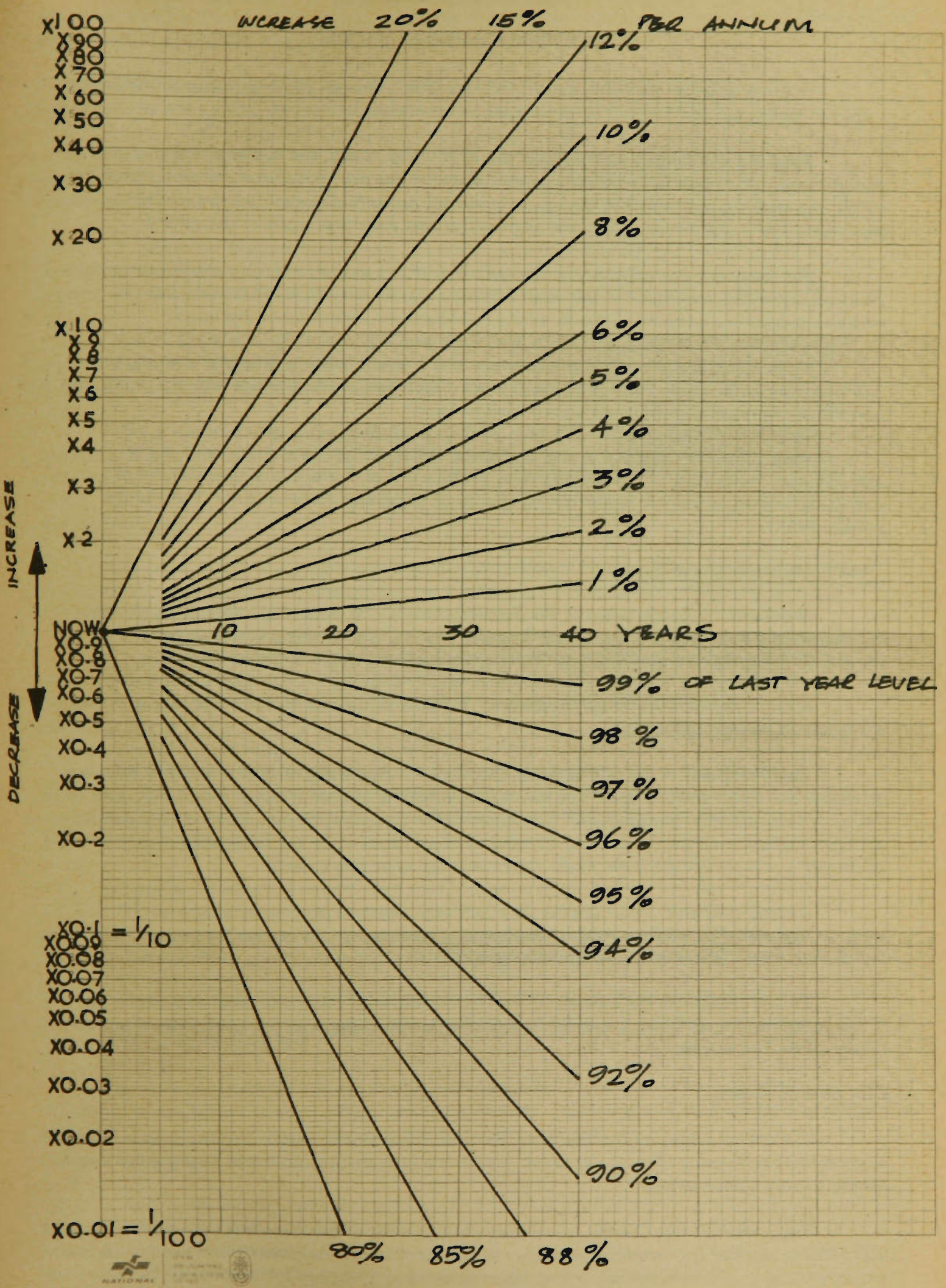
THE ECOLOGY AND CAPITALISM

(Reprint of an article by M. Crow for "Lots Wife", Monash University Student Newspaper — special ecology edition 20/3/72 by permission of the editors.)

Since the anti-fascist movements of the 1930's and 1940's, the two most widely-based political mass movements have been the peace movement and the pollution movement. From the outset, the establishment attacked the peace movement as a subversive communist-inspired movement, and it was indeed mainly the communists who were first active in this sphere.

But because it corresponded to the real needs of the people, and in its anti-Vietnam war phase corresponded patently with the needs of the youth, the long-term results have been a penetrating questioning of the authority of the establishment, especially by the youth.

If, to the disillusionment with capitalism over Vietnam were to be added disillusionment over pollution issues which potentially touch every citizen personally, and not only the youth, the position of the establishment could indeed become shaky.

Hence the more far-sighted capitalist statesmen are all for "taking the lead" in the anti-pollution movement. No doubt they hope to discipline and reform their greedier, more ruthless colleagues so that capitalism can be seen to be capable of containing the threat to the environment.

The Establishment Out in Front

Wishful-thinking statesmen of the Establishment are no doubt beginning to congratulate themselves that they have laid the foundations for "licking" the terrible problem of rapid environmental deterioration which constitutes a menace to mankind as well as "nature".

That roving environmental "do-gooder", Prince Philip, Duke of Edinburgh, has won over his family to his own standpoint.

Said the Queen in her "Christmas message": "We are passing on to our children the power to change our whole environment. But we also leave them with a set of values which they take from our lives and from our example. The decision they take, and the sort of world they pass on to their children could be just as much affected by those values as by the technological wonders of the age". Nor do Elizabeth and Philip fail to practice what they preach.

Already their son, Prince Charles, in a carefully-contrived and impeccably-time P.R. exercise "happened" to go for a swim at Elwood, and on emerging "happened" to be overheard saying that it was "like swimming in diluted sewage".

Thus at one stroke the popular environmental movement has been given a royal charter: for its youth section, by Charles; and for its adult section by Philip now President of the Australian Conservation Foundation.

Dick Follows Philip

In Victoria two successive Ministers for Local Government, Hamer and Hunt, have engineered a whole series of measures which give all the outward appearance of boding good for the Victorian environment.

The State Planning Council, chaired by the Chairman of the Town and Country Planning Board brings together for "strategic planning" the heads of all the main departments and instrumentalities concerned with development, now being underpinned by meetings of the technical chiefs of these instrumentalities.

There are "statements of planning policy" emanating from this Council (e.g. Westernport, Mornington Peninsula, the Dandenongs, the Yarra Valley) which outline, amongst other matters, generalised propositions for conservation within the areas mentioned.

Then, just before Xmas, regional plans appeared for the extended Melbourne region, and for Westernport giving geographic definition to conservation and industrial areas.

In addition, there is the "Land Conservation Council", which includes conservation experts to recommend balanced use of public land in Victoria, and which is to take into account "preservation of ecologically significant areas," . . .

On top of all this there is the new "Environment Protection Council" which is to licence the emission of all pollutants by industry according to acceptable standards of environment protection, and detected infringements are to be punished with stiff fines.

Assuming the advent of socialism were to depend solely on capitalism proving incapable of removing dangers to the ecology, then, on paper, whatever happened overseas or in the rest of Australia, Victoria, at first glance, should remain capitalist for the next millenium!

Of course to what extent strong vested interests can bully or buy their way through loopholes in such controls, or even prevent effective controls being promulgated at all, remains to be seen.

Ecological Angels

Big corporations are already showing they are prepared to spend a small fortune on mass media propaganda to create the illusion that they are ecological angels, rather than spend the big fortunes that are going to be needed to prove their credentials.

To make these controls work at all, persistent vigilance and pressure will be needed by conservationists to ensure that the public is not deluded into a false sense of security in the belief that reliable and influential authorities can be counted on to automatically protect the public's interests.

Assume, however, that the Prince Philip-Hamer-Hunt type reformers have a win over those who represent the more immediate interests of the big corporations. Assume the conscientious implementation of all the above-mentioned policies in Victoria, will the menace to the ecology be finished?

Suppose the class of problem were confined to cleaning up the Yarra to the point where fish could breed and children swim; cleaning up the air until "smog" became a memory and preserving reasonably big stretches of beaches and countryside and their native life, and the adequate disposal, treatment of prohibition of ecologically harmful products.

These, and such-like objectives, our local capitalists can, in my opinion, go a long way towards achieving, provided there is a vigorous popular movement. I will call this class of ecological problem the "surface" conservation problem.

But this is not the full extent of ecological problems. There is another class which I will call the "Survival" conservation problems. There are many of these. In the short term, they are associated with problems of food supply for the growing world population and with the always insatiable and often insensate demands for raw materials.

In the longer term they are related to the growth in the demand for power which according to scientists at present growth rates calculated only on those of the presently industrialised countries will, within perhaps three generations, make such a significant contribution to the heat balance of the earth that as the temperature rises, the sea-level, presumably of a polluted ocean, will rise.

Scientists have no way of knowing, we are told, just how fast or how irregularly these changes

will occur or their consequences for future changes in the movement of the earth's crust, plant growth or urban civilisation. Nor do we know the degree of irreversibility of these changes measured in terms of their effect on human production relations.

This distinction between 'surface' and 'survival' pollution I draw to make political judgment. On scientific and technological grounds they are obviously interconnected.

The Hamer-Hunt legislation can be used to achieve "surface" conservation, but the very formulation of the "survival" conservation problems demonstrates how far the framework of such legislative policies fall short.

Underdevelopment

The underdeveloped countries cannot catch up with the advanced countries' rapidly growing power production without bringing closer the danger to the heat balance. An equitable sharing of the world's capacity for power generation must involve a restriction in the growth rate, if not an active contraction of power per head for Western industrialised countries. They use many times the quantity of power per head as that used in underdeveloped countries.

But this constitutes a reversal of the Bolte government's whole claim to fame, because it has based itself on accelerated industrial growth not merely indigenous growth but by attracting interstate and overseas industry to Melbourne and Westernport.

More fundamentally still, irrespective of who stands at the helm, capitalism by its very nature presses upon the market an increasing flood of consumer goods. Indifferent to the fate of that half of the working people who are still "battling" to obtain a good home, a good car, and even enough for good food and clothes, capitalism presses upon the other more affluent half a compulsion to accumulate.

Not enough for each 2-car, 3-car or 4-car family to have a household crammed with the latest household goods, and a swimming pool, worse: they are induced to drag hundreds of miles around the countryside a boat which travels a few score miles in the water a year, or a caravan which serves for accommodation for a few weeks. As if this were not enough, there are now motorised "joywheels" for the youngsters and a "beach-buggy" for their older brothers and sisters.

A more irrational and damaging waste of energy can hardly be imagined, unless indeed it is the built-in obsolescence based on fashion or frailty which guarantees a multiple expenditure of energy for any given utility.

A Rich Life with "Fun-Wheels"

To pose the way out of the rapid descent towards irreversible destruction shows how ill-equipped capitalism is to cope. Paul Ehrlich's "zero-population" movement is one answer. But, if, as a result of success there is, say, half the population increase, there will be that much less wheat, wool and all other goods required. Thus, compounding the problems of the labor-saving aspects of the technological revolution would be the simultaneous self-imposed contraction of the total potential market demand.

The day when our economy can operate on continually contracting markets, it will have ceased to be capitalism or be capitalism in its last gasp.

Going further: population control or not, there is also required a course of action impossible to imagine under capitalism: the manufacture and advertising of goods to last a life-time, which could raise the standard of living of the non-affluent without raising the energy per head due to continual replacement of goods prematurely obsolescent.

More fundamentally, what is required is a life-style that lays the emphasis on creative social human activity of one type or another, as more satisfying than accumulation of material goods beyond the level needed for reasonable comfort.

More creative human activity is basically a simple matter that may, indeed, require some equipment, but not great quantities and certainly not a continuous flow of material goods. That is why it "does not pay" the capitalist to invest in mass creative activity, only in the "stars" whose shine can be sold for entertainment.

The increasingly popular desire of younger men and women to jettison the never-ending syndrome of accumulation of material goods practised by their parents in favor of a simpler more satisfying life-style is most encouraging for the ecologist, although most discouraging for any upholder of capitalism right or wrong.

War and Pollution

Capitalism has been confronted with two different types of major community disaster: war and pollution. War, so far from destroying capitalism, has helped it. It "goes with the grain" of capitalism, being an extension of the competitive character of the system into armed conflict. "War is a terrible thing; but a terribly profitable thing!" as Lenin observed.

But whilst the clean-up type "surface" conservation operations could also be "terribly profitable", the survival solution of live-simpler-but-better is unprofitable and "goes against the grain" of capitalism, the very essence of which is expansionist.

The miracle of industrialising the whole world has been achieved by capitalism. But the system has no brakes. It is a system adapted to quantity rather than quality.

Capitalism can guarantee neither peace nor ecological survival, and mankind is confronted with a race to replace this system before it destroys him.

The answer however, though it lies most certainly with socialism just as certainly does not depend on socialism of any-old–sort. Socialists of all brands and in all countries, socialist and otherwise must take stock of the world ecological crisis only recently apparent. Marx or Lenin never contemplated socialism as anything other than a transitional stage to communism conceived as a system where men and women liberated from the alienating shackles of degrading toil inseparable from feudalism, capitalism or even socialism itself can have restored to them, classless and human creative associations.

Such perspectives, which will remove not only the competition for aggrandisement between capitalists and nations, but along with that the competition between workers themselves to "keep up with the Joneses" in consumption status symbols are the only sure foundation for the permanent conservation of nature.

THE THIRD ECOLOGY

A selection of concepts from "Shape of Community" by Serge Chermayeff and Alexander Tzonis

After mentioning the two "natural" systems of ecology: the ecology of the sea and the ecology of the land, the authors state:

"What is not yet clearly demonstrated and understood is that the human species, through its ability to alter bits and pieces of the laws which govern the natural environment and its ecology, has in fact created a completely new environment — a man-made one which in complexity and scale of containment is comparable to the natural. This new environment now requires a new ecology of its own order so that it can be fully comprehended: a third ecology within which, with luck, humanity may find a new symbiosis with other living things.

"The human organism grew in ability through interaction with the natural environment and other humans. The tools which aided individuals developed into tools which modified social organization. Collective action in turn developed the capability of transforming the natural environment into a man-made one. Thus, the third ecology environment may be described as technological in its production and control processes, but at the same time social in its continuously developing nature. It cannot therefore be uniquely explained in biological or technological terms.

"The new ecology which we seek is at the center of interacting forces: natural, social and technological. No human evolution is possible outside the social entity of mankind and man's collective interaction with his environment. Thus although an individual may exist temporarily as a complete single organism he may not even survive, far less fulfill his full potential, without involvement in social action at all levels. This requires that the individual participate actively and creatively in the ecological and social process through constant involvement in its modification." (pp. 39-40)

It can be readily understood that from a standpoint such as this, Chermayeff and Tzonis do not turn their backs either on modern technology, or on urban life, or on big cities. We thoroughly agree with their approach on this matter.

"Urban environments are the latest products of the evolutionary process and are to date the highest ecological order achieved by any organism. The urban environment which is now operating on a global scale meets not only the material collective needs but in addition provides man with the most effective social extensions: a constantly improving springboard for the next jump in the humane part of the evolutionary process."

"We contend that urban facilities which provide opportunities for human, exploratory intercourse create the most favorable environment for the evolution of knowledge and understanding. These human interactions perform a complementary role to technological interactions obtained by other means such as information and communications media. Places where men meet in concourse are not only the physical containers for many men, but may act as crucibles in which humanity is transformed.

"The development of the third ecology may reasonably be expected to lead to a theory of urban design." (p. 40)

The transformation of humanity of which the authors speak is not tantamount to a constriction of freedom, but on the contrary. Those who flee to the bush or into small urban commune groups for comfort intensely feel the need for precisely the sort of humanising influences that Chermayeff and Tzonis talk of although such groups are poor and often fleeting substitutes for which the city should and only can supply to everyone permanently and abundantly.

"Humanity can move from a less ordered to a more ordered society, and in the process individual

man can move from a less free to a more free status operating within it" (p. 56).

This is very similar to the quotation from Engels we have made: "*Freedom is the recognition of necessity*", and "*necessity*" *must be seen not only in the form of* "*the laws of nature*" *but now in the form of a society more consciously organising itself at a higher more sophisticated level of interaction both within society and within nature. The ecologically desirable "simple life style" must never be confused with abandoning technology, which, properly utilised, can become a tool in the aim of permitting a simpler life style and restoring a better ecological balance, (as, for one example, the proposed rapid transit in the Gippsland corridor).*

Chermayeff and Tzonis smartly dispose of the very current simplistic belief that big cities are the problem.

"*Environmental crisis caused by technology is usually identified with the city. It is, however, not a city crisis per se, but simply that the city shows to the greatest extent the effects of "pollution" which in the broadest sense are total and ecological. The man-made and the natural are now inseparable.*

"*Given the new context of the environment of crisis, fresh concepts and personnel are needed to cope with its destructive effects. But, instead, new threats are met by old beliefs that the failures of our day may be overcome by archaic means: city-planning, urban renewal, land use, zoning, new towns, freeways, etc. — while nature is to be preserved in national parks. We suffer from the illusion that technical and professional expertise and scientific knowledge are matched by the political and economic capacity to take curative and preventative action. Unfortunately this is not true." (pp. 7-8)*

The principles of socio-technical re-organisation of cities, therefore begins to become clearer, once this is understood:

"*Perhaps the contradiction between technological potential and sociological response in relation to the human habitat is best illustrated by familiar situations about which we can ask reasonable questions in the framework of apparent increasing urbanization. Such questions apply with equal cogency to 'city', 'suburbia', 'exurbia', etc.*

"*Modern urban man exists simultaneously in all pieces of urban environment, whatever their name may be, and employs high (expensive) technology to do so. High technology is a cheaper per capita convenience if used in great intensity, density and frequency, but the same technology is more expensive if used in low density.*

"*The continued use of the same transportation techniques for both high and low density situations can now be seen as patent nonsense, a conspicuous symptom of techno-pathology." (p. 47)*

And so they write:

"*The heart of our commitment is the maximisation of human contact at the human goal level: provision of face-to-face leisurely intercourse to complement communication sub-systems of increased and accelerated mobility and instantaneous information" (p. 81).*

"*Places of concourse*", *they write, thus become the catalysts, joining flows and containers in a socio-technical organisation. It is this system alone, we suggest, that can provide the basis for the urban revitalisation of existing cities or for model cities to be built." (p. 100)*

From that last quotation the reader, relating it to our proposed mini-metro and city-metro "cores" and "hearts" based at the conjuncture of transit and electric rail with feeder transport, can see why we pay so much homage to Chermayeff and Tzonis. In broad outline, "Plan for Melbourne Part 1" expressed such principles, as did our earlier contribution in 1967 to the Living Standards Convention, but Chermayeff and Tzonis have enriched such ideas for us immeasurably, making so many syntheses of so many facets of life, that the above scattered quotations give indeed a very poor impression of the immense value of their contribution.

We urge readers to read the whole book, and then perhaps re-read it because, as the authors say, it is structured like a crytal so that you keep coming at an old idea from a new angle of synthesis.

We finish with a few more quotations to illustrate the particularly fruitful idea with which we started in the text: namely "the third ecology" and the therapeutic function required of concourse.

"Traditional urban environments are vanishing in technologically advanced societies. Modern urban man needs pedestrian-filled places from which interfering and irrelevant technology is barred and civic and civil intercourse are priorities. These people-places by definition can be fitted into the smallest segment of the community as well as into the greater collective. But whereas in old cities a few special-purpose places of civic mingling were sufficient, our territorially extended community, contrary to current tendencies, requires a great new hierarchy of places which might serve the same social integrating purpose. In other words, we call for a hierarchy of places designed as pedestrian concourses for a greatly expanded variety of purposes and scale, not to replace the existing facilities, but to complement them. Such a hierarchy will depend for its success on an appropriate system of movement, applying the same principles to the problems of both access and distribution. This is an essential complementarity now missing in our society . . ."

" . . . A hierarchy of new Agoras, or their modern equivalent, may produce a sociological counterbalance to technological power: democratic assemblies in many places to keep decision making in balance and technology under control at all social levels." (p. 156)

"Places designed for unspecified events in fact soon develop their own identity and become naturally special, thus being quite different as environments from stereotyped, staple places which characterize the single-purpose target areas prescribed by mass-culture. We could even now specify some undesirable and desirable characteristics for the people-containers we have in mind: none should be so monumental or so large as to appear purely ceremonial and by implication occasional and formal.

" . . . The implication of these specifications can now be extended. Places must invite participation. The confrontation of the individual with the rest of the participants is of the utmost importance both for the individual and the society. It is part of a continuous learning process to exist and behave and think in community: to learn to become human." (p. 157)

"Mankind may learn quickly enough, for instance, that the availability of information through technological media alone is not enough to create human purpose and that direct, constant interaction between people, individually and in community, as well as concern for the well-being of all things in the environment, is required. This is central to our theme and why we emphasize the provision of the full gamut of human experience in the form of direct interaction between work, leisure and learning, between the private and the public realms and between the participating and the temporarily alienated." (pp. 191-192)

"To create the hierarchy of untrammeled, independent, safe and varied movement (flows), everyone must be within easy walking reach of an 'exchange' where the pedestrian may become a passenger, free to move further afield in the urban environment. In our model the ability to move easily on foot and to travel in comfort and safety thereafter, if desired, is a basic urban right. Without cheap, if not free, mass-transit, proliferation of ghettoes can only be accelerated. This and pedestrian precincts containing basic public services of housing, health, education, welfare and information are all integral physical urban components of social security and may be considered as guaranteed minimum environmental norms which technological society could reasonably provide along with guaranteed minimal income. Based on these norms every station in a public transportation system then becomes a point of transfer between many modes of movement, public and private, mechanical and pedestrian — a modern agora and gateway at the same time, an 'exchange' and a place of public concourse."

"A comprehensive, free, channeled movement system between community facilities is essential. It can transform passive private consumers into citizens." (p. 192)

"The urban model suggested was an attempt to structure the 'third ecology' of the man-made environment before mankind will have reached a point of no return in its evolution, far short of human potential. The most promising method for preventing ecological mayhem, if not the extinction of all living things on earth, undoubtedly must start with the containment of stereotypical scatteration and emphasize the implementation of planning for an excellent and comprehensive urban compactness." (p. 195)

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EXAMPLES OF WESTERN DEPRIVATION

(1)   Preschool Education

Mr. Tom Roper (Centre for Urban Education, School of Education, Latrobe University) used figures from a report by Dr. Marion de Lemos as his authority on the provision of preschool education in the western suburbs.

Early in 1972 Dr. de Lemos made a preliminary analysis of research projects on preschool experience of children entering Melbourne's primary schools. This research is being conducted by the Australian Council for Educational Research.

The preliminary analysis shows that only 24 percent of children of non-English speaking parents attend kindergarten compared to 70 percent of children of Australian parents. (In the "Suburban West" sector in 1966 there were 36.1% migrants. In the whole of Melbourne the migrant population is 9.9%. Figures from 1971 M.M.B.W. "Regional Policies", page 105.)

Mr. Roper presented a table to the Deprived West Seminar which showed the pre-school experience of "prep. graders" in 1971 at 46 western suburban schools. This showed that 50 percent were well below the average of Melbourne as a whole, 20 percent were about average and 30 percent above the average for the rest of Melbourne.

(2)   Primary and Secondary Education

In the introduction to his report to the Deprived West Seminar Mr. Tom Roper said that he was at present working on an index ranking schools so that scarce resources can be chanelled to where the needs really are. This research is not yet concluded, but Mr. Roper said . . .

"Nevertheless one impressionistic conclusion is possible. On many of the criteria . . . test performance, teacher turnover, scholarships won, pupils receiving financial assistance and so on . . . the western suburbs are much worse off than their equivalents on the other side of the Yarra."

He gave some statistics to indicate the educational disadvantages:

(i)   "How Many Western Suburbs students enter the University?" he asked. His statistics showed the position and he drew the conclusion "In other words, western students when compared with the state as a whole have half the chance . . . with the south-eastern, one third the chance." (His statistics to illustrate this conclusion are on pages 3 and 4 of his report to the '72 Seminar The Deprived West.)

(ii)   "A contributing factor is the lack of teachers resident in the west and north western suburbs" Mr. Roper pointed out. To illustrate this point he said "In the 1966 census 4000 teachers were resident in the west compared to 20,500 in the east. Given that the west has 25% of the total population the expected number would have been 6,000. . . . Teachers have to travel long distances, are reluctant to do so and can take little part in community involvement programmes." (page 8).

(iii)   "According to some headmasters their staffrooms have revolving doors, young teachers come in for one year and then leave," Mr. Roper reported. He stated "To make matters worse the turnover rate in many schools exceeds 50 percent, a veteran is one who has taught there for three years." (p. 7-8)

"Modern teaching aids, and books are just not so plentiful on the wrong side of the Yarra," Mr. Roper said. He pointed out that the present per capita grants make no allowance for past deficiencies and that under the subsidy system, now restricted to major items, schools in poorer areas with lower fund raising capacity received less than the affluent." (page 8)

("The Myth of Equality" by Tom Roper, first published 1970 by the National Union of Australian University Students, is a valuable reference book on education deprivation in Australia.)

(3)   Child Care

Although these figures were not included in any published report from the Deprived West Seminar we include them here as further evidence of deprivation.

From Hansard, April 18, 1972, in a reply to a question by the Hon. H. A. Thomas (M.L.C. for Melbourne West) asking about day care in Melbourne West Province (Altona, Footscray, Kingsville, Sunshine, St. Albans, etc.) the Hon. V. O. Dickie replied . . .

"There are nine child minding centres registered and one day nursery subsidised by the Health Department." He then listed the names of the minding centres. The list showed that 233 children are at minding centres and 64 children attend the Footscray Creche which is subsidised by the Health Department. Continuing his reply to Mr. Thomas, Mr. Dickie said . . .

"It is considered that few, if any of the child minding centres, with their present staff and facilities are up to the standard required for the payment of a subsidy to a day nursery."

(4)   Hospital Care

Dr. Harry Jenkins, M.H.R. for Scullin gave a paper at the Deprived West Seminar which included some figures on hospital bed utilisation. In presenting the chart he said: "These figures represent a high utilisation rate of the hospital resources by the usual standards of application."

"Even greater evidence of hospital bed pressure is found if one examines Sunshine Hospital" (this hospital draws its patients from Sunshine, St. Albans, Deer Park and Melton).

Dr. Jenkins said that there are 600 births per year and 11 midwifery beds. "In other words 55 birth/bed/year. "Comparative figures are:—

Royal Women's Hospital	23 birth/bed/year
Footscray	45 "
Burwood	47 "
Dandenong	50 "

which places Sunshine under a high pressure indeed. Consequently maternity patients at this hospital are very lucky indeed if they can have 6 days in hospital and many will have much less."

(5)   Doctors Living in the West

Again quoting Dr. Jenkin's paper at the Deprived West Seminar: "On 1966 figures there were 100 doctors, and dentists resident in the suburbs of Altona, Footscray, Melton, Sunshine, Werribee, Williamstown, and Keilor combined, yet in the City of Camberwell alone at that time there were 442 doctors and dentists residing". This is by no means an absolute comparison as with the development of group practice and after-hours locum-tenens services, many health practitioners reside in suburbs other than where they work. But it certainly gives a relative measure of what is available."

"INTERNAL AND EXTERNAL CARETAKERS"

The term "internal and external caretakers" is used in the book "An Australian Newtown, Life and Leadership in a working class suburb" by Lois Bryson and Faith Thompson. On page 10 of the study they write:

"Because Newtown citizens are predominantly unskilled and skilled manual workers we might expect to find working-class people with a similar outlook and values in positions of leadership. However this is not always the case. Apart from Newtown's councillors, who as elected leaders do seem to represent their constituents quite well, the most active people in civic affairs are the members of what we shall call the Civic Group. It is this group which approached us at Monash University and requested that we make a study of their suburb. The members of the Civic Group are virtually all members of the personal service professions, mostly ministers of religion, social workers and teachers. As individuals they are involved with the social problems of Newtown families, while as a group their efforts are devoted to community organisation. As professionals their occupational status is clearly atypical in Newtown. This in itself might not be important if they were able to represent effectively the residents of such a working-class area. However, we found that their middle class ideas often biased them to favour programmes which were not most appropriate for Newtown and did not have widespread appeal. Therefore we suggest that these leaders are acting as external caretakers. This is a phrase used by American sociologists and urban planner Herbert Gans. The term "caretaker" describes agencies and individuals who offer aid which they believe will benefit members of society. Caretakers are classified as "internal" or "external" not on a geographical basis but according to two criteria . . . whether or not the caretaker comes from a similar situation and whether or not he shares the values of those to whom he offers assistance."

Herbert J. Gans "The Urban Villagers; Group and Class in the Life of Italian-Americans" (New York Press, 1965) is the authority referred to by Lois Bryson and Faith Thompson.

APPENDIX NO. 9

EXAMPLES OF INNOVATION IN EDUCATION AND HEALTH SERVICES.

1. Preschool Education and Child Care.

At the Summer School of Melbourne University Family Club in 1972 the discussion was in two parts. Part 1 Preschool Education: A Myth? and Part 2 Training and Organisational Requirements of Preschool Care and Education. Papers from this Summer School are available from the Melbourne University Family Co-operative Limited. Some of the papers reported on new trends in the care and education of young children and the involvement of parents and others in the programs at the centres.

One example of the type of discussion at the Summer School is this reply by Mr. Barry Sheehan (Department of Comparative Education, Latrobe University) to a question asked by Mrs. Winsome McCaughey (from Women's Liberation and Community Controlled Child Care). Mrs. McCaughey asked about the need for a variety of people to staff centres, and the participation of the community.

Mr. Sheehan said . . . "A radical solution comes up for this. It is something I have not mentioned. If you keep up with education literature, the name Illich, together with Paul Goodman and Everett Reimer, will have come to your notice. Their objective is to "de-school" society. That is not really my point; they are aiming at social revolution. But their solution to this sort of educational problem is to say that the community itself has to take responsibility for education. This is partly based on a donation of voluntary skills, if you like, to kindergarten, maybe with some rapid training to help people fit into the set-up. Such an arrangement might help to solve the problem.

I am thinking especially of men who have craft skills, men who might be able to give up a day a week to come to the kindergarten and show the little boys how to make aeroplanes or whatever. Kindergartens are already doing things of this sort. I know of one kindergarten where this has happened, and I think they are visited at least once a week by somebody. But these people are not trained in any way."

2. Education Centres rather than Schools

In 1972 "community schools" were established at Moreland and Swinburne. This has resulted in some of the educationalists responsible for these centres, (and some other people) to produce a new type of education journal "The Open Book" (obtainable C/o 22 Shiel Street, North Melbourne).

In the brochure advertising this publication it is stated "The proposals for action will be filled out with accounts of what people have actually done and how they have got on".

Indicative of this new thinking on education was an address given by Mr. Doug White (Senior Lecturer, Latrobe School of Education) at Melbourne University, Education Day, March 25, 1972. Here is a summary of his address. It was entitled Curriculum . . . Creativity and Instruction . . .

"1.   The usually accepted model of education is that knowledge is distributed, much in the same way as other commodities within the capitalist system or its socialist variants. The relationships between the persons in the process are those appropriate; some people who have more of the commodities distribute them to others, requiring respect and subservience as a fee. The good teacher is a good salesman, or perhaps a better confidence man. In modern education there is a shift towards the distribution of techniques and saleable skills rather than bits of memorised information.

2.   As is usual when the origin of the commodities which give people comfort and power is obscure, various mystical theories have developed as to how they can be obtained by those who are at present missing out. Educational quacks offering coaching services and speed reading programs tend nowadays to replace those who once spread memory training services. A clear current example is of those who preach a kind of cargo cult to those who are said to be educationally or culturally deprived. By following the correct rituals they shall be given a load of the cargo, it is said.

3.   *Since knowledge does not have the properties of a commodity — to know something is much more personal, it requires more involvement, than to possess a car, a washing machine, or even an arm or a leg — various modifications to the unstated model of education as commodity distribution are required. What people learn in school is not, generally speaking, the goods which are dispersed but the nature of the relationships of the distribution. That is, they learn to be obedient, to respect (including to dislike) authority, of the little value attached to their own feelings and experiences, and so on. This is called the hidden curriculum. School students do not usually come to be aware of this; teachers and students generally believe that what is going on is the transmission of knowledge.*

4.   *In recent years there has been some attempt to remedy the situation of deliver — memorize — regurgitate, presumably because the kind of knowing that this results in is quite inadequate for modern life. We have had a spell of 'creativity', 'individual differences', 'work at your own rate', etc; most of this has turned out to mean 'creatively do what I would make you do otherwise', 'discovering' the previously prepared answer etc. The basic authority structure hasn't changed; manipulation merely replaces coercion.*

5.   *A creative curriculum would tend to remove the distinction between knowing another person and knowing subject matter, that is knowing the content of the exchange with another person. The knowledge people have of the natural or social world is at least in part a consequence of the way in which they interact with each other.*

6.   *What is needed is equal relationships between persons which are open, honest and wholehearted enough that the exchanges between them go deeply into things which concern them. If the relationships are between autonomously acting persons, we have the possibility of a curriculum which is personally and socially creative.*

7.   *The teacher in this case becomes one of the many participants in the networks of relationships, but she will also spend some time facilitating their development.*

8.   *Instruction, in the old sense, is a particular and occasional occurance when people decide they need it, and ask for it.*

9.   *A creative curriculum has not much to do with schools as they are now, but not with any other present institutions either. It is probably desirable to have centres where people can meet and find support and of ways of getting to know."*

3.   *Health Centres Serving the Community*

In May 1970 a conference on school medical services was held at the Kindergarten Teachers' College at Kew. The title of the conference was "The Emerging Needs of Children". Prof. R.R. Andrew, Dean of Medicine at Monash University gave the keynote address. Here is a quote . . .

"Would not the community breathe more easily and naturally, and might we not avoid the cyanosis of central control, if municipalities and schools and hospitals had more say in our affairs, that is if teachers, doctors and dedicated citizens were more responsible for the organisation and delivery of their health services? Paul Goodman, among many sociologists, has attacked with vigour and cogency the modern version of centralism. There must, of course, be central control in many areas, but these are mostly physical . . . airports, water supplies, sewage disposal and so on. One is less confident about central control of non-material aspects of life . . . education, health, community life, culture. There comes a time when the unit becomes too large for social, psychological and physical health, madness becomes endemic, and the lemmings go out to sea. This uneasiness about the vast size of the units of society now have impelled many to re-examine our whole health structure and its future.

"The Australian Medical Association over a year ago, invited a group, to which I was appointed, to have a look at the future practice of medicine in this country. We are a heterogeneous collection, but I marvel at the way in which our thoughts converge on the need to consider the health services as not consisting just of doctors; for the consideration of the team in all aspects

of health education and the deployment of services; and the necessity for particular attention to each community rather than some pink, blue or yellow area on the demographic map. Our concept of Health Centres, intimately related to the community they serve, combining private practitioners and health officers, and providing a service for individuals, their families, and the community both therapeutic and preventive, has general acceptance with us and we hope, some day with the professions and legislature" (page 5 of report on "The Emerging Needs of Children").

Prof. Andrews also spoke about such health centres at the First International Congress on Domiciliary Nursing, Melbourne, in February 1970. He said "These health Centres should be peripheral and probably built close to shopping centres, especially super-markets, for convenience to the local community, for parking, for the valuable social purpose of the old market place" (page 51 "Proceedings of the Congress on Domiciliary Care").

At these two historic conferences Prof. Andrews was only one of the many voices challenging the accepted method of caring for those in ill-health and suggesting how illness could be prevented by better community health care.

There are at present four committees considering establishing community health centres. These are St. Kilda, Caulfield, North Melbourne-Flemington and Queenscliffe.

APPENDIX NO. 10

STRATEGY OF THE VICTORIAN COUNCIL OF SOCIAL SERVICE ON THE "DEPRIVED WEST"

In June 1972 the Victorian Council of Social Service (VCOSS) published its objections to the M.M.B.W.'s regional plan (see "position paper on Comments and Objections to the Regional Planning Policies of the M.M.B.W." drafted by Mrs. Judith O'Neill, Dr. Faith Thompson, Mr. Colin Benjamin and Mr. Don Glasson).

"The aim of the M.M.B.W. to obtain a balanced growth around the Central Business District should be supported (within the context of drastically curbed metropolitan growth) because it will lead to a more balanced metropolitan structure in socio-economic terms, thereby creating a greater equality of opportunity in the northern and western suburbs than currently occurs within the predominance of people of power, socio-economic status in these suburbs." (p.3)

If by "equality of opportunity" they mean equality of opportunity of those investing money in land, in manufacturing or commercial enterprises in the northern and western suburbs, this would be quite true.

But we really cannot believe that the authors had this in mind because what they say is that investment of money in the north and west "leads to more balanced metropolitan structure in socio-economic terms." Actually, as we think we have shown, quantitative growth of factories and population would lead to the opposite . . . more of the deprived in the west, more of the affluent in the east.

If on the other hand, they mean that expenditure of money in the west on services to upraise the standards of the present population and attract a wider cross-section of the working people according to the strategies suggested by us (or better strategies if they can be devised), this could lead to a better balanced metropolitan structure in socio-economic terms.

But V.C.O.S.S. cannot have it both ways! Socio-economic mix is a question of quality and has nothing to do either with the quantity of population or quantity of land populated. V.C.O.S.S. analysis mixes up the two questions.

We are inclined to think that V.C.O.S.S. have mixed up this question through haste. Examine two more of its formulations:

It says: "In view of the concentration of people of middle and higher socio-economic status in the eastern and southern suburbs, political pressures for the servicing of these sectors of the metropolitan area will continue to bias the provision of services in these directions. The M.M.B.W. proposal for growth along eight corridors is unrealistic unless a clear priority is given by the Government to the provision of all services in the northern and western suburbs to make them attractive for middle and higher income people. Without this priority in the provision of transport, education, health, welfare, recreation and utility services the power structure of the northern and western sectors will remain and the policy of corridal growth along eight transportation routes will not occur (at p. 7).

Now the intention of this passage seems clear enough; it is desired to break the "power status" of the higher income groups who get a disproportionate share of services and further have a better mixed population in the west. That is, the intentions are anti-deprivation and anti-segregationalist.

But it is not quite so easy as V.C.O.S.S. make it out to be (as we hope we have demonstrated).

One of the V.C.O.S.S. broad "objections" to the M.M.B.W. regional policies is "that whilst recognising the need to provide means for encouraging growth to the north and west in order to obtain balanced development, the proposals do not include a strategy for doing so" (p. 5).

We might just as well tax V.C.O.S.S. with the same complaint. Fine! We understand you don't like the deprived living on one side of Melbourne and the well-serviced rich with the power on the other

and we fully agree with your objectives. But your proposals for the Government spending money for "development" growth in the west do not include any strategy for altering the situation!

We have tried to thrash out and solve just this problem. If V.C.O.S.S. can work out a better one we will be grateful.

But any strategy has to take into account basic facts of the situation. In the words of the Sunbury study . . . "whereas a blue collar family may move into an area of middle income residents, the reverse is almost never true" ("A Study for an Australian New Town" p. 73).

In our reasoning of it; some of the people who form the apex of the "power-status" of the east, invest in the west. If more public money is spent on the west to say, double the population, more investors who live in the east will invest in more factories in the west and these will employ more laborers living in the west. Investors, managers, higher executives and higher skilled workers do not yearn to live near the factories that supply their income.

The V.C.O.S.S. document for the M.M.B.W. includes an Appendix which was the material submitted by V.C.O.S.S. to the Design Team for the Sunbury Case Study (it occurs in the R.A.I.A. publication "A Study of an Australian New Town pp. 31(a)-35(a)).

It is mainly a useful check-list for social amenities and administrative measures for them and is recommended for urban development anywhere, not just for Sunbury. There are one or two propositions in this that are not simply list-points.

One of them is: "If mixed income groups are to be attracted, then some mixed development is socially desirable, rather than starting with clearly defined income group suburbs" (p. 33(a)).

In a separate publication for the Sunbury Convention Project entitled "Statement of Social Goals", V.C.O.S.S. develops these ideas more fully in a section "Socio-economic mix".

This seems to represent the real position of V.C.O.S.S. and it should be supported.

We earnestly propose that V.C.O.S.S. re-examines its strategy for carrying out their undoubted desegregationists intentions, in the light of arguments Stretton and ourselves have presented.

The other major points in the V.C.O.S.S. objection e.g. establishment of basic social amenities before urban development (as with water supply, roads, sewerage) "regionalisation" of centralised social services and genuine public participation more along the lines of the Skeffinton Report, we applaud.

APPENDIX NO. 11

AN ANALYSIS OF DR. COLIN CLARK'S ADDRESS TO THE TEWKSBURY SYMPOSIUM 1970.

(The following is given as a sample of the all-to-common "predictive" type planning, which allows the car to shape our cities for us.)

Mr. Nicholas Clark, Director of the Tewksbury Symposium held at the University of Melbourne July 14th to July 16th 1970 on the subject "analysis of Urban Development" explains in a preface to the papers presented to the Symposium:

"To those familiar with urban research in the United States, it will be no surprise that the suggestion for and the organisation of the symposium came from the Transport Section of the Department of Civil Engineering. In a number of important respects the inspiration for the symposium came from the 1967 Dartmouth Conference on Urban Development convened by the U.S. Highway Research Board and reported in its Special Report 97-Urban Development Models (ed. George C. Hemmens)."

One must not judge a symposium by its origins, but allow every argument to speak for itself. There cannot fail to be stacks of gold amongst the 525 pages of the papers, by interstate and overseas urban authorities. The symposium was co-sponsored by the Institute of Urban Studies, the Committee for Economic Development and the Victoria Divisions of the Institute of Engineers, the Australian Planning Institute and Institute of Architects.

The following comment is restricted to the keynote address by Dr. Colin Clark, Institute of Economic Progress, Mannix College, Monash University. It is not called anywhere a "keynote" address but by its very character and a study of the arrangement of the order of the subject matter of the following papers, it is clearly hoped that it would provide an overture to the Symposium. In analysing the location of population and industries, Clark says that as between cities there is too great a concentration, and within cities too great a dispersal (p. 1-3).

Stated thus simply and with great generality there is hardly any school of thought which would disagree.

Surprisingly, Clark gives what he says are his conclusions at the beginning. In the fourth paragraph we read that this proposition sums up in one sentence the whole content of the paper! Having got a good mental clap from his audience or reader (for who, these days, opposes decentralisation or supports sprawl?) Clark proceeds with an analysis which, if accepted, would compel a very rigid and in our opinion reactionary solution to both problems.

Individual Market Demand Dictates "Welfare"

His method starts with the proposition that "the public welfare is best served by the free bargaining between individuals in the market . . ." "If A and B freely make a contract to exchange some commodity or labour or land or capital for a specified sum of money, then the economist generally regards the result of such free bargaining as socially beneficial . . ." (page 1.3).

If this were to be taken literally and universally the whole role of planning and town planning would disappear entirely.

But Clark himself wants to see certain changes, so we learn there are three exceptions to the principle of allowing individuals to bargain freely to maximise the public welfare.

In matters of location and land use, first, there is an exceptional slowness of adjustment, sometimes several centuries, before the consequence of a decision are apparent. Secondly, there are "externalities" when the deal between A and B have a series of indirect consequences which affect C and D and E, e.g. if A buys a car from B, thus causing congestion which affects everyone or a major

supermarket location affects hundreds of small shops for years ahead. Thirdly, many locations and land uses arise not by economic laws but by chance.

Now, although Clark does not say this, the planners are apparently permitted to interfere to "correct" those deficiencies of the "free market" to overcome slowness, "externalities" or "indeterminancy" but not otherwise.

The "free market" conceived as between <u>individuals</u> is paramount and any interference is for Clark not so much to upset the principle as to sustain it.

From this it would seem that "the thing" in urban development is not for a planner to come onto the scene with concepts of more rational ways of living or working, nor the sociologist to examine the relationship between people that are not expressed as a market demand.

There follows an examination of the statistics of cities in many western-world countries ranging back 100 years or so, seeking algebraic formulae to express the relationship between residential densities and distance from the C.B.D. which showed that the further a person lived from the C.B.D. the lower the residential density.

But this he shows is changed or changing. Applying what Clark finds to be present day trends he arrives at the conclusion that there seems to be a tendency for "almost uniform densities over large areas of the city". This process he says is going on in Australian cities as well as others and one symptom is that the inner, higher-density, suburbs are losing their erstwhile population. Thus, he says, there is "a pivotal line" of density beyond which a population decrease appears. Thus in suburbs with densities of more than 13,000 persons per square mile for Sydney, 10,000 for Melbourne and 7,000 for Brisbane, densities are declining, the residential density planned for Canberra is 6,500 per square mile (pp. 1.7, 1.10).

We Follow Clark in Diversion

The above figures are "gross" residential densities apparently including roads, industrial land and parks, etc.

Clark (switching from square miles to square metres) says "the normal" density of 10,000 per square mile equals 259 square metres per person. Brisbane and Canberra would be about 400 square metres per person.

Then his politics emerge abruptly. "Some reference to Russian and Chinese technicals journals gives us communist ideas of how much people <u>should be allowed</u> to live in. The results are unbelievable. The amount of ground planned for dwellings per head of population is only 12 square meters in Russia and 10 in China" (i.e. from 1/20 to 1/25 of what Clark says is the norm or e.g. China is 1/40th of Canberra). There are no references given to the "technical journals" where this could be checked though all his other figures are carefully referenced. All his other evidence appears as dry economic facts, but there are no economics in socialist countries, apparently, only what "people should be allowed" (our emphasis p. 1.11). We comment . . . See Peter Hall "The World Cities" at p. 160 for a table of Moscow's population and area. Whatever figures you take from that table it is nowhere near so different from western densities. For example the "old" Moscow area gives a gross residential density, according to our calculations of 37,000 per square mile (compare New York City which is 32,000 according to Clark) the "New City" area of Moscow of 1960 is 18,000 and if the outer suburbs and "green belt" are added this becomes 16,000. So Moscow is no more than twice Mr. Clark's "Norm", not twenty times!!

"Norms" from nowhere

Why 10,000 persons per square mile is a "norm" is nowhere explained, unless we are to take Pittsburg and Chicago, quite arbitrarily as "normal". Whether this figure should be deemed as a "norm" is nowhere argued. Clark then states, without figures, that "in nearly all large cities employment in the central business zone has been stationary or declining in recent decades . . . though many planners seem to be unaware of this fact". Why this has happened and whether it should happen we are left to guess. On land values we learn that "more rapidly in America than in Europe, cities are tending to become sharply demarcated into a small very highly-valued central zone, outside which land values drop almost immediately to a uniform level . . ." But he gives no clue as to why this is so, or whether it should be.

Then we find that the highest rate of growth is for cities of about 1 million, whilst for cities over two millions the growth declines, (e.g. the population of Brisbane, Adelaide and Perth have recently grown faster than Sydney or Melbourne). No reasons given, however either "why" or "should" from all this half-analysed, unreasoned material with value judgments excluded, Clark then settles for "the best pattern of settlement for a modern society within a comparatively small agricultural population with good transport and communications, is a number of industrial cities of ½ to 1 million population, an array of rural service centres of much smaller population, and comparitively few towns in between" (p. 1.21).

He says "we need a situation in which manufacturing labour has a considerable range of choice of employers as well as employers having a wide field of labour from which to select. These conditions appear to be satisfied when the town is somewhere in the ½ to 1 million population range," (p. 1.20). But why this range of population satisfies these conditions and just what is meant by a "range of choice" of employment is not mentioned.

What Clark Strangely Misses

The strangest thing about Clark's method is that he is concerned with densities within a city and their relationship to the C.B.D. he is concerned with showing the levelling process whereby densities (except for the C.B.D.) are tending to equalise, he records "norms" of density, he postulates growth rate of cities of different size, and the optimum size of a city, but he nowhere examines the economic effect of the car and truck upon the whole process!

He finds it necessary to mention that in an earlier period the "very large modern cities with good electric traction system" had "sprawl" and a lower density the further from the C.B.D. (p. 1.6), but nowhere is the effect of the automobile mentioned, on the density-levelling process he has discovered nor on the faster growth of 1 million-size cities!!

The most quaint and "uneconomic" reasons are given for the numerous exceptions and differences between cities that Clark finds. Thus "the desire of the majority of men in many European countries to go home for their midday meal makes them reluctant to live too far from work" (p. 1.6) but we are not presented with any comparative statistics showing lower car ownership in European cities than in American or Australian cities.

Why are cities that grew beyond a million or so before the advent of the car as a mass commuter more dense than the cities that grew up in the mass car-commuting era? Why is London, New York, more dense than Sydney or Melbourne? Why is Sydney or Melbourne more dense than Perth or Brisbane? Why (to give a comparison Clark gives on p. 1.6) is "old established" Baltimore more dense that Dallas "a comparatively new city"?

Our Guess is that the Answer is: The Car!

The level of car and truck ownership at the time a city grew, we suggest couldn't fail to throw a flood of light on real relationships which would demonstrate the impact of the car as an economic factor. Surely this would be a major factor in exploring changes in the character of the C.B.D. and the inner area densities and values, the variation in density between inner and outer areas, the spread of housing and levelling of densities between the railway lines (if its an older city), the random distribution of factories all around the perimeter, the dispersal of potentially-strong district centres, and many other interesting economic facts about cities, rather more compelling than whether dad feels like going home to lunch?

But from Clark: not one automobile statistic, not one automobile graph, not one automobile formula (yet just as "electric traction" changed the shape and size and densities in cities, so just as fundamentally has the car, and these hard transport facts lie at the very heart of the very subject Clark is examining). He didn't even mention the car! He only made one slip: that the traditional model of a city with all work places at the centre could not exist "because the traffic congestion would become inconceivable" and he throws this in only to tell the assembled planners they were, many of them, fools because they didn't know that C.B.D. employment was declining! Otherwise Clark is completely car-shy! He is like a physician dealing with cancer of the throat without mentioning cigarettes!

Why does Clark Miss the Vital Note?

In our opinion the reason that Clark omits the vital note or rather "motif" of the Tewksbury overture is that he wants to establish as "norm" the maximum untrammelled use of the car. More: he wants to do this without saying so, because, if he said so, there would be plenty of people to say: why can't we control the car instead of letting the car control our city? There would be plenty of people to challenge Clark's concept that "the public welfare is best served by the free bargaining between individuals in the market", if by this principle car commuters are to be encouraged to ruin the tremendous social value of the C.B.D. and inner areas as well as their local suburban communities and their holiday resorts!

So Clark comes out with "iron laws" of economics (those foolish planners!) which he pretends can be assiduously uncovered by treating in isolation the facts of densities, distance and size only, but the factors he "discovers" are (naturally) those characteristics of an uncontrolled car-dominated city (in the sense of a city with a high incidence of C.B.D. car commuting)!

If ever the automobile and oil industries were to be looking for a theoretician to justify their self-interest we would recommend Clark, who whether he realises it or not, is their man! The back-room tacticians of these giant corporations must by now be alarmed by the mounting opposition in the U.S.A. to the insoluble, extravagant, city-ruining freeway "solutions" for a city of more than a few millions. Rather than control the car for city commuting and supply modern public transport for this problem of mass conveyance, therefore, it would suit these interests to limit all future urban growth to cities of 500,000 to 1,000,000 which could be entirely car-based with no railed transport whatsoever.

In cities which are already too big for this it would suit them to have uniformly low evenly-distributed densities with a small CBD so that the flow of traffic on the freeway networks is not disrupted by unpredictable higher-density build-ups likely in time to cause either congestion or intolerably extravagant super freeways so as to generate demands for better public transport.

Clark's own description of Dallas, Texas, for example, fits his model of the "norm" at which urban densities are going to "settle down" (p. 1.22). He says: "A comparatively newly-built city, very wealthy in an oil-producing area, Dallas has a small central zone of very highly-priced land, with high commercial buildings built upon it, but as soon as we proceed a little distance from the centre we find both the height of the buildings and the land prices falling precipitately and almost immediately we find ourselves in a residential suburb" (p. 1.6). In our judgment this unavoidably produces a typical car-based barren type of city: a centre of prestigious head offices with little attraction to the ordinary citizen, and the rest formless uniform low density that the citizen feels he has to "get away from" every weekend.

The Melbourne Transportation Plan with freeways orientated on the CBD will impel Melbourne towards this type of city. Clark's theories have the effect of disarming any counter-measures.

The Real Conclusions!

Now to re-state Clark's real conclusions (not his own version of harmless-seeming applause-producing 4th paragraph platitudes!):—

1.   Within cities the free market demand of the individual should be respected (and not interfered with either by resisting CBD all-day carparkers' demands or by improving public transport), and it will dictate an evenly-spread 10,000 persons per square mile density (to ensure maximum utilisation of cars for all purposes good or bad), and

2.   As between cities the free market, which is dictating the increasing size of the biggest of them should be ignored and new cities should be compulsorily held to a population of ½ to 1 million at which size they should show maximum growth rates and would stabilise if it were not for the "slowness", the "externalities" and the "indeterminancy" which hinder market forces in location decisions (and which would require no rail public transport whatever so that here the monopoly utilisation of cars would be ensured).

(Note: the phrases above which are in brackets are our own deductions and, in effect, represent the "awkward" and hence silent portion of the missing motif from the overture.)

But these conclusions which Clark uses so much ability to "prove" are not inevitable.

We are not in the grip of economic laws which we can't control. If Clark were to bring the car back into his economic equation unashamedly, and helped with his economic expertise, to devise an alternate system for city workers, he could not only explain much better some of the disparities he uncovers, but he could help save Melbourne becoming Dallas.

APPENDIX NO. 12

THE MELBOURNE TRANSPORTATION PLAN

It is not the purpose of this appendix to try to review the Melbourne Transportation Committee's Plan critically.

We did this in very general terms in "Plan for Melbourne Part 2" Section II "Transport . . . an alternative" (pp. 37-66) which was written just before the M.T.C. plan appeared on 17.12.1969 (on the basis of the 1966 "Summary" of Wilbur Smith study) and an addendum (pp. 67-76) written immediately after the M.T.C. Plan was released.

Our purpose here is to outline a few facts of subsequent history and to provide for interested readers a few references to further publications on the M.T.C. Plan.

Government Rejects Inner-Ring Freeway

We repeat a few sentences we wrote in January 1970 about the M.T.C. which described its Plan as a "demand plan".

" . . . by demand the Transportation Committee quite literally means 'individual consumer demand' uncontrolled and untrammelled by what we might term "Community consumer demand' ".

"To the Committee, the question of accumulation of all the individual consumer demands of all the car owners added up, quite inescapably, not only to a freeway system of several hundred miles, but one which funnelled traffic right into the centre of the city's heart. It is as simple as that. The question of the most efficient way of conveying people to the city without cluttering it up, which would also create a 'demand' but based on community considerations simply does not come into the Committee's field of thought."

"To prove the point in the sharpest way: take the question, already mentioned, of all-day car parking in the central city area. Now most planners would say that all-day parking should be kept right out of the Golden Mile. As we have seen, Wilbur Smith not only "forecast" the necessity of all-day parking in this area, but even 'balancing' the supply to the demand block by block!"

"The 'Plan' completely succumbs to this idea. To make it workable they have to provide a ring-freeway in a tight loop around the central business district, and the reason given for this stems back precisely to the consumer demand of the city all-day parker!"

" 'Without this by-passing function' (of the ring freeway) it would be possible to increase the central area parking predicted for 1985 except at the risk of overtaxing city streets and creating permanent peak-hour traffic chaos' (M.T.C. Part III, p. 54)."

"We completely reject the basic methodology of the predictive aspects of the Wilbur Smith report as being trend-planning of the most antiquated and narrow kind, and we completely reject the basic tenets of the Transportation 'Plan' based on it." (p. 70)

Fortunately, although we were the first to sound the warning of threat of the ring road to the C.B.D. and inner areas, many others did also; and so effectively that the Government had the good sense to drop the ring-freeway concept in October 1971.

M.M.B.W.'s Defiance Continues

The M.M.B.W. (which is represented on the M.T.C. by its chief planner) however, seems to have learnt nothing. It tried to push through the "F1" freeway (the eastern leg of the inner-ring) over the Yarra near the Henley staging and past the M.C.C. to present all concerned with a fait accompli which would have made the whole inner-ring inevitable, and tied the Government's hand.

Thwarted in the move, it is defiantly pushing ahead (at time of writing this) constructing the city end of the eastern freeway to finish not at Hoddle Street (or at what will be "F2", the main north-south freeway to the east of the city) but with an overpass over Hoddle Street that will funnel this freeway traffic through the heart of Carlton, Collingwood, and Fitzroy and make a revival of the "demand" for a inner-ring freeway only a question of time, once this eastern freeway begins to operate.

This furious construction is happening at a time when the government is supposed to be reviewing the whole freeway network and reviewing the options open after the decision to delete the inner-ring freeway.

We have here, in a kernel, a small but significant miniature of the interminable, unprincipled, pushing-and-pulling process which a massive freeway network is going to impose on Melbourne which will be multipiled many times over as more freeways are built.

The significance of the radiality of the proposed M.M.B.W.-Evans regional plan is that it will aggravate this whole sorry freeway surgery to the point when the patient will revolt after suffering a decade or more of agony that could have been avoided.

Four Reports

The Minister for Local Government in rejecting the "F1" freeway announced that Cabinet had had before it four reports on the subject which helped determine the issue.

Two of them, from the Country Roads Board and the Town and Country Planning Board were confidential reports to the government and not made public.

The other two reports, which were made public, are . . .

(i)   "Melbourne Transportation" by the Town and Country Planning Association (May 1971), and

(ii)   "Transport in Melbourne . . . the Inner Area Crisis"
         Part I Evaluation (Dec. 1970), and
         Part II "Parking Blight . . . Affects on Inner Areas" (Sept. 1971) compiled by the
         Committee for Urban Action (representing a dozen or so inner area residents
         associations).

The first of these reports laid heavy emphasis on free car parking at rail stations outside the inner areas, an upgraded rail service, restricted all-day C.B.D. parking and deletion of the inner-ring freeway.

The second of these reports proposed in Part 1 a "core-preservation" transport policy (i.e. preservation of the character of the C.B.D. and inner areas around it from the damage of freeways and the parking pressures resulting from them) with upgraded public transport within the inner areas; and in Part II attempted a field survey of the whole of the inner areas, showing that "parking blight" was reaching saturation point.

Since freeways would enable a multiplication of cars entering the city and inner areas, all-day parking could only be increased by a policy of massive bull-dozing-type of redevelopment . . . a policy which the residents associations opposed both for their own residential areas and the C.B.D.

If the Government really acknowledges the value-judgements of these two reports, it will need to modify, not only the transport plan, but also the M.M.B.W.-Evans regional plan which, by its very pattern and increased dependence on cars and trucks will mount increasing pressure in the very direction of the insoluble "logic" of freeways to cope with the inescapable "demands" of individuals who are offered no feasible transport choice (as is offered to them by the Gippsland corridor plan).

READERS' IDEAS WELCOME

The authors, working now on Part 4 of Plan for Melbourne would be grateful for the views of any reader of these publications or on subject matter or contents they think should be included in the next part.

Please send your ideas to: Ruth and Maurie Crow,
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"PLAN FOR MELBOURNE" NOW AVAILABLE IN 3 PARTS

PART 1.   "Facts and Principles" (published 1969). This document was prepared by the Modern Melbourne Committee for the Victorian State Conference of the Communist Party of Australia in November 1968.

It was pre-circulated to all delegates, pre-conference discussion resulted in a number of amendments, the final draft was carried by the Conference, then it was published.

PART 2.   "Blue Prints for Change".
* Updated Community Services
* Transport . . . an alternative
* Urban Renewal

The more detailed proposals advanced in this publication, for the most part, fall within the general framework of the general principles adopted for Part 1. The Modern Melbourne Committee of the Communist Party commissioned the husband and wife team of Ruth and Maurie Crow to write it, and the authors took responsibility for the ideas in this document.

PART 3.   "One Corridor of Participants not Seven Corridors of Power".

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