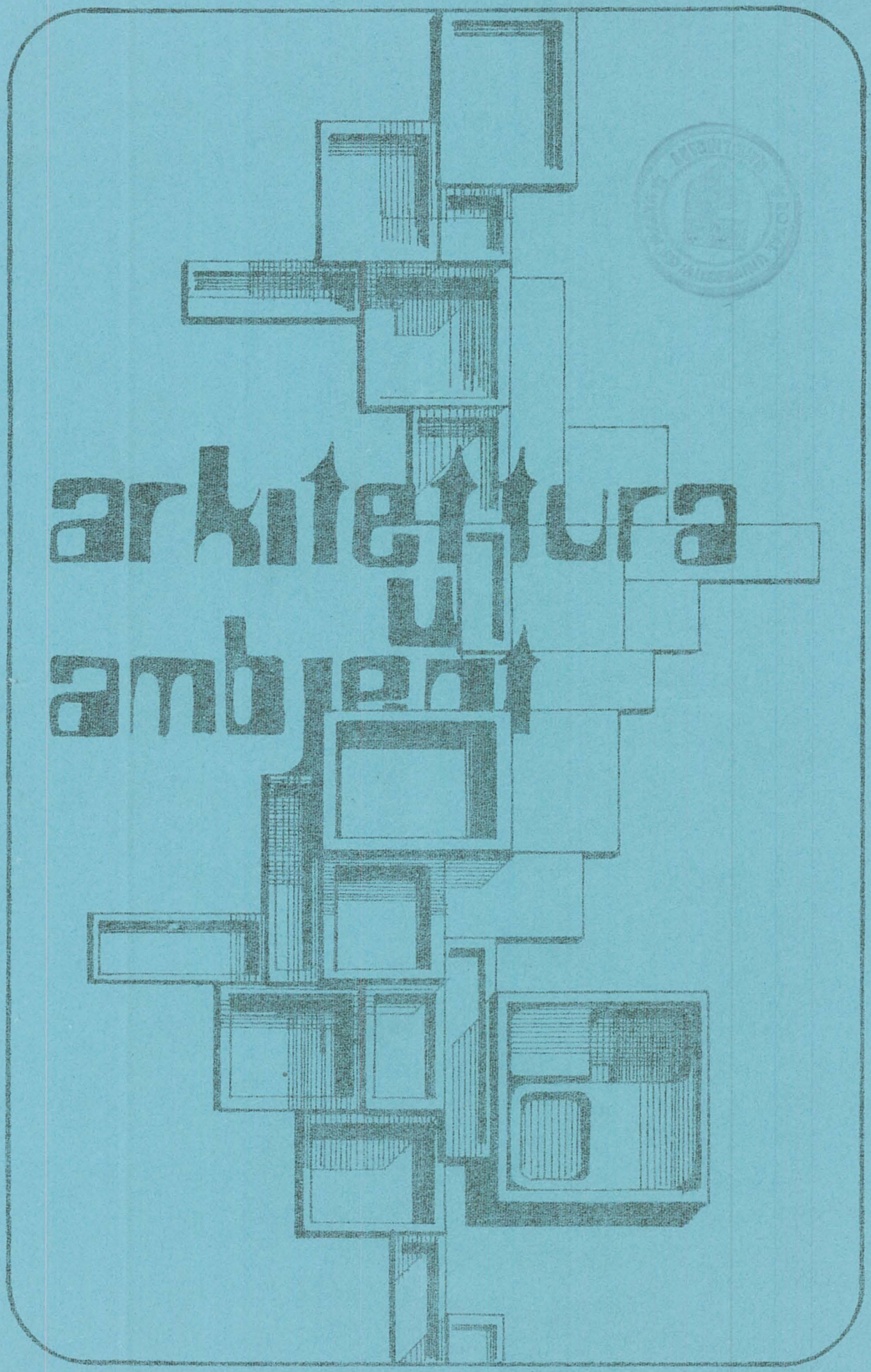

arkitektura
ambient

Volume 1 No 3 Mar/Apr 1978 8c

CONTENTS:

All correspondence is to be addressed:

The Editor,
'A-Arkitettura w Ambjent',
Architecture Department,
University of Malta.

Back numbers are also available at above address.

editorial.

B.E.&A. COURSE - WHAT FUTURE????

Now, that for future courses the writing on the wall reads, "student-worker", and a restructuring of the course is to be carried out to achieve this aim, we feel that the time has arrived to suggest some vital points which ought to be given consideration.

It is a well known fact that a few years ago the courses leading to degrees in architecture and civil engineering were amalgamated for the reason that, "work in Malta does not require such qualified persons but for everyday work one need only have a grounding in both - for specialised work we will get foreign experts". As it happens having architects and civil engineers who have a grounding in each other's fields is the ideal situation for they can collaborate better in their work. However, we feel that the way it was carried out in our case we are not going to qualify neither as architects nor as engineers - we will not qualify as architects and civil engineers either (Jack of all trades .....). The main reason for this is that there is very little dialogue between the two departments concerned, i.e., that of Architecture at the University and that of civil engineering at M.C.A.S.T.; for example, till a few weeks ago the civil engineering department did not have a copy of the time-table we followed at tal-Qroqq. (Besides the above-mentioned reason there are others such as no head of departments in both cases, lack of staff, etc.). However, now that the course seems as if it is going to be centralised in one university, the above reason would not hold any more.

While the student-worker course is being restructured we have the following propositions to suggest to the authorities:-

i) The course would be divided on two levels - an intermediary and a final level. During the first part of the course the students would be given a good grounding in both disciplines; during the latter part of the course the students would be allowed to specialise in either civil engineering or architecture, according to their wishes and in the field they seem more adapt.

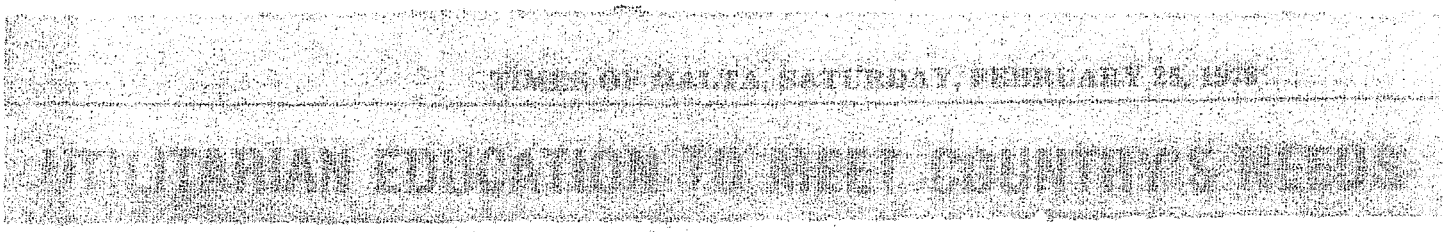
ii) All lecturers involved should know exactly what the other is doing and the design projects are formulated to suit both architecture and civil engineering fields, i.e., the students would be asked to prepare both architectural drawings as well as other working drawings, such as structural ones and construction ones.

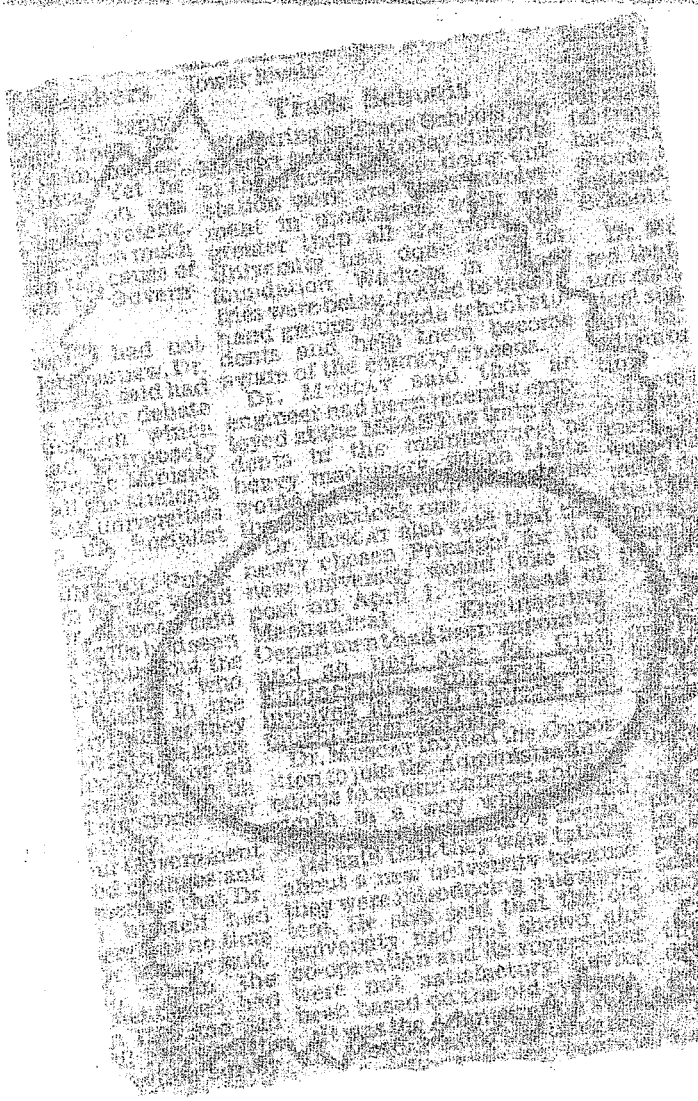
iii) The design projects should be judged by both the lecturers teaching architecture and civil engineering as well as the students themselves; all lecturers should also be on the panel judging the work carried out by the students.

iv) The work assigned to the students should be closely related to their course of studies; for example, if they are studying highway engineering they should be set work on roads.

v) In our case we feel that an interchange scheme with foreign students is of great benefit for architecture has to be experienced rather then seen - maybe part of the work could be carried out abroad.

We believe that if in our course the student-worker concept is applied well, it ought to improve its standard to a great extent such that it would benefit all concerned.





AFTERMATH TO MINISTER'S BUDGET SPEECH

Part of the Hon. Minister of Education's speech during the presentation of his department's votes for the forthcoming financial year states: "The Head of the Mechanical Engineering Department had been appointed and so had one for Civil Engineering who was also involved in PWD projects and and taught other workers". (As reproduced from 'The Times of Malta', Saturday, 25th February 1978 - 'Utilitarian Education to meet Country's Needs')

It would be wise first of all to make it clear that when the Minister or any other person in authority refers to Civil Engineering students, we would be right in assuming that reference is being made to Architecture and Civil Engineering students - students undertaking a course purely in Civil Engineering are non-existent in Malta since the courses of Architecture and Civil Engineering were amalgamated into one some years back.

As was reported in our last issue (The Cuckoo's Nest) the Government had succeeded in bringing over to Malta a certain Mr.Towler who was given the headship of what now exists of the Civil Engineering Department at the M.C.A.S.T. Mr. Towler set to re-organise the department and a great 'innovation' was the introduction of Structural Design which was introduced in the syllabus of both fourth and second year students. Mr.Towler's stay on the island came to an abrupt end in early December of last year. Ever since no substitute has been provided to take the students for Structural Design and according to reliable sources the Civil Engineering Department's headship is still very much vacant.

It is in this regard that the words spoken by Dr.Philip Muscat surprised us one and all. Is it possible that the responsible Minister is unaware of Mr.Towler's departure. And if he is unaware of this occurrence how is it that he didn't say so in his budget speech?

And putting one further question to whoever is responsible (and God only knows who that may be!): Who is responsible to enroll a lecturer to take us students for Structural design, and whoever that may be, how is it that after months nothing has been done?

(We have put up this comment as we feel that unfortunately the students's society in our department has fallen in one big sleep and we firmly believe that the issue at stake is of considerable importance - one that we shouldn't let go ebbing by. We look forward to any counter comments by the responsible parties in the matter).

TO WHOM IT MAY CONCERN

We would like to remind our readers that we can provide space for classified adverts. For all students and staff members this is free of charge. For all others the rates are as follows:

i) 3c per word for adverts containing no diagrams

ii) diagrams are worked out on a different rate according to the space they occupy.

If interested please contact us at the Architecture Department, University of Malta.

We would like to remind anyone who is interested in obtaining back numbers that Vol.I, No.1 is sold out.

buildings of to-day.

BY J. M. GALEA

PENNZOIL PLACE - HOUSTON, TEXAS

"Skyscrapers" are generally a bore. One box-like structure is much the same as the other and a city like Houston with its over 4 million square metres of lettable office space has more than its fair share of them, laid out monotonously over the rigid grid of 24 - 30 meter wide streets laid out by Gail Borden in 1836. So when J. Hugh Liedtke , chairman of the Pennzoil Co., approached Gerald D. Hines, a noted developer, with a request for some 37,000 square metres of office space in the centre of the city, he wanted none of "these cigar boxes with boring flat tops". Hines, figured out that to make the development of the 76 metre square site in central Houston economically viable the amount of lettable space would have to be more in the region of 112,000 square metres. Pennzoil raised their demand to just over 57,000 square metres and Hines set out to find the necessary extra tenants - three other major ones were found - The United Gas Pipeline Co., The Zapata Corporation, and the accounting firm of Arthur Anderson. Pennzoil Place, as designed, provides over 130,000 square metre of lettable space. Hines commissioned Philip Johnson and John Burgee to come up with a design, with "a multiple image", for a building to house "multiple major tenants". Johnson and Burgee came up with a stunning, deceivingly simple building, which does just that and in the process proved that multi-storey commercial buildings need not be the shoebox structures everyone has come to hate. Eventually they also showed that quality design is still possible within very strict controls of time and cost.

Pennzoil Place (the building has been christened after the largest tenant) which was almost completely occupied by 1976 consists of two 36 storey towers, 150 metres high, trapezoidal on plan that are mirror images of each other. The blocks are separated by a 3 metre wide slit and on the ground floor define two 45° triangular spaces which form landscaped, air-conditioned plazas containing a variety of commercial activities. The 45° angle is the dominant feature in the whole design.

The plazas themselves are enclosed by truss-supported glass roofs slanting upwards at 45° to the eight floor where the 3m slit starts. The towers thrust vertically upwards, through these sloping glass roofs, to the 29th floor where one of the walls "bends" over at 45° to the vertical and becomes the roof, thus giving the two towers their characteristic profile - Johnson calls the towers "parrot beaks".

Below the plaza level is a shopping concourse which links up to a pedestrian system of 3.7m wide by 2.4m high tunnels connecting the building to nine other central area city blocks and fourteen other buildings. These two levels together provide some 3,400 square metres of commercial space. Below the shopping concourse are three further levels for parking capable of taking 550 vehicles.

The towers themselves provide the usual open general office spaces in 27 of the floors (c.1900 square metres per floor), while the remaining floors under the slanting "wall-roof" accommodate executive offices and suites. Services and lifts are contained in the concrete shear-wall core of each of the welded-steel-frame towers. Vertical circulation by means of lifts is in stages. Six lifts travel between the ground floor and the 12th floor, five between the 13th and the 22nd and another five between the 23rd and the 28th floors. The executive offices and suites in the "attic" are served by special shuttles. The subsurface levels are served by separate lifts which start from ground level and are housed in circular kiosk-like structures at plaza level.

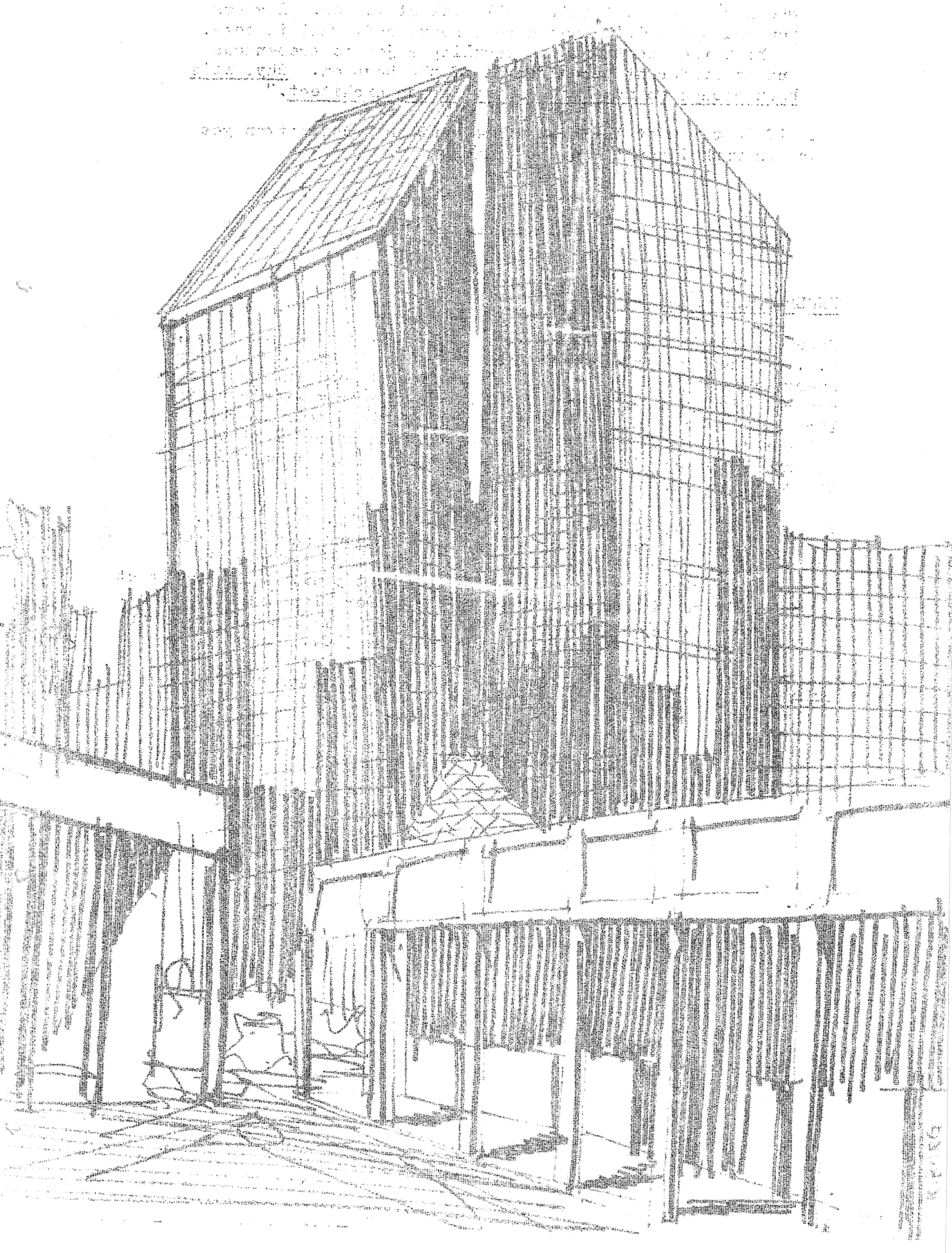
Pennzoil Place is successful not only in terms of its appearance, detailing and architectural qualities, but also as a business venture in terms of cost and return on investment. The imaginative and innovative design made it easier for Hines, the developer, to secure tenants (60% of the space was already leased by the time work started in 1972), and hence also easier to negotiate the £60 million mortgage necessary. Good design pays.

Costs were then carefully controlled at each stage of the project and every design detail was scrutinized to achieve maximum economy without compromising the design concept and quality. In the end the "premiums" paid for certain design features, such as, the sloping "wall-roof" of the towers, the visual character of the building "skin", the skylights or glazed sloping roof over the plazas, etc., etc., were much lower than what one would have expected in a building with such a forceful design concept.

Most of the impact the building has, arises from its basic geometry which makes it extremely legible and interesting. In response to criticism that "fascination for geometry may seem a bit old-fashioned" Johnson replied: "I am interested in shape, damn it, <u>shape</u> ..." (Architectural Record Nov.76).

However, whatever the reasons the architects had for designing the building as it is Pennzoil Place represents a departure from the commonplace, speculative, well-worn image of multi-storey office buildings everywhere in the world.

PENNZOIL PLACE



A worker on the site commenting on the building said:

> "I took a look at the design for this when it was announced and muttered to myself, 'I pity the s.o.b. who has to build this'. Well look at me now. I guess you could say it's been a real hoot, and, what is more, I think the excitement of tackling a job so tremendous and so different turned a lot of the boys on. Why, it's been enough to make you want to be an architect."

And if that is not the best compliment an architect can get for his work I don't know what is!

UNDERGROUND MANIA

Recently six houses started being built underground in Idaho, U.S.A. Their owners argue that such houses do not use up much energy for they keep warm in the winter and cool in the summer, are relatively cheap to construct, are safe from atomic radiation and the ground serves as a very efficient sound barrier between these houses and all the activities going on above ground. Openings in the ceilings ventilate each room and allow the sunshine in.

Their architect, Malcolm Welles of Cherry Hill, New Jersey, argues that this craze for building underground has come about with the energy crises which led to a fuel shortage and the very severe winter which hit the States last year. This architect has already received some 10,000 requests for plans of such homes. And no wonder, if correctly planned, Welles says, such houses can cut down an energy consumption by as much as 80%.

N.B. For further information look up past editions of 'A' (Periodicals Review).

C.B.

letters to the editor.

THEY SHOOT HORSES, DON'T THEY (Noel DeBattista)

Dear Sir,

I am sorry that my first contribution to this magazine is dirty linen, but I think it is about time someone does something before we start killing each other off. How is it that we have left our course, which is supposed to educate us for the future to become such a horrible and vulgar rat-race? How is it that one can no longer speak freely about what he thinks, feels and wishes?

Everyday I walk into our beloved building nowadays, I get the feeling of either being the only one there or that I am being mobbed. The first feeling I get is when I walk in for some lecture or tutorial and find I am the only one there on time, and for a long time after too. Many nowadays are relying on their 'friends' goodwill to supply them with their 'missed' lecture notes or even laboratory work. The second feeling is when I walk in and find everyone just eager to take in one really good glance at some work being carried out so that they might use it to gauge their own work - and I mean EVERYONE. Now that most are happy that they have forced everyone else to help in forming notes on a communal basis, they have more liberty to work on their fabulous and fantastic projects. Oh, what beautiful paper castles I have learnt about lately. I really pity Paul Rudolph and all those other big shots when we are let loose on the world scene. It is true that our course has taken the form of a log in a storm but lately we have helped into making toothpicks of this poor log.

It's about time 'people' stop saying one thing and doing another. How many people say that the university is a place for education of one's character? Don't you think we have a lot to cover yet to improve in this field? - do we! A bit of treatment to your neighbour as you want to be treated yourself is what is needed and not fake smiles and stabbing in the back attitudes. This letter is intended for fourth year students mostly but others should take heed too. After this very brief period at Tal-Qroqq/ M.C.A.S.T., we will all be together in one profession as colleagues and competitors. If we carry on like this between small numbers, what will happen on the national scale - sacrifice principles for personal glory or what? I don't know if the second years have followed in our footsteps or not or if their troubles were inborn too. All I know is that I have the displeasure of having met some of the most egoistic bums (for use of a 'better' word) ever.

To arrive to their state really requires working hard at it. A small example is their complete 'non-chalance' attitude they have when they enter the studio during one of our lectures for every minute reason possible, making the most disturbance they can. Take it from me, you ain't making a good impression on anyone, even if this is not said out loud every time.

Well that's it for now. I know things will not improve as they are far gone so all I can say is "Good luck to one and all"

PEDESTRIANISATION IN VALLETTA (Street Crawler)

Dear Editor,

As all your readers are aware of, a few years ago the authorities closed up to traffic the most commercial part of Republic Street and part of Britannia Street. As happens the world over, at first this measure met with opposition, both from the shopkeepers and shoppers - the former thought that they would lose their trade, while the latter didn't relish carrying their purchases to their car. And, as happens the world over, after sometime, both shopkeepers and shoppers became aware of the advantages of such a scheme and were all for it - trade increased while shoppers were more at their liberty to talk, watch or just idle the hours away. Now, that this scheme is an established part of Valletta's circulation pattern, I think something should be done to enhance more the street scape of this thriving business centre.

For one thing, I would suggest either removing the entire sidewalks along these streets or otherwise raising the streets to sidewalk level. The fact that a sidewalk exists creates a psychological barrier between the road and its sides. One can always notice that although these streets are traffic-free, there are always as many people walking on the sidewalks as there are walking down the road, if not more. Besides, when one is in a hurry, weaving his way through the crowds which usually fill these streets, one hates the going up and coming down imposed by this level difference. Hence, for the benefit of the people using it and to give the street a more permanent, pedestrianised appearance, I think it would be better if this difference in level is smoothed out. To put safety minded pedestrians, who know that during restricted hours vehicles are allowed to move in to service the establishments in these streets, at rest, I

would suggest that a different sort of tiling (could be in shape or colour), is used for the middle section of the road over which the vehicles pass, other than that placed at the sides. This would tend to create a visual guideline for the drivers of such vehicles. Besides, tiling the entire surface would tend to enhance the street scene especially if tiles are set according to some design pattern and are of different colours.

To implement the above proposals is quite costly but since by enhancing the street and creating a better environment trade would increase still more, it would seem reasonable to assume that all shop owners would contribute towards such a scheme.

I hope that my proposals are given due consideration by all those concerned for everybody stands to benefit. In this way, we would be improving the environment of our unique, splendid city.

MISPRINTMIXUP (!!??) (Tneduts)

(Or in simpler terms:- The XIth Commandment:-

Thous shalt not MIX UP Students
with series MIX UPS
in MIXED UP Examination Papers)

Dear Sir,

Here we go .....

..... Foundation Studies: Surveying
Date: 1st June 1977
No.5(b). A hell of a mix up in the listing down of a level reading. Some student started right off with this one .... poor lad(!) ..... only after he'd been half way through it that whoever was responsible noted the MISPRINTMIXUP.(Don't try to look for that world in the Oxford Concise!)

..... Engineering Analysis: Structures
Date: 2nd June 1977
No.4. A couple of lines missing on figure(3). Some student (a rumour went wild that it was the same one as the above) kicked off the examination with this one. The examiner was again too late to observe the MISPRINTMIXUP!!)

No.6 (Same examination). Figure(4) was misleading .... and mixed up a number of students. Some complained that they wasted precious time trying to make out the proper diagram.

Believe it or not these incidents occurred in a space of less then TWENTY FOUR HOURS during last Summer's end of the Year University Examinations for first year architecture students.

This brings us to a vital question: HOW IS IT THAT WHOEVER SET THESE PAPERS HAD NOT PROOF READ THE PRINTED VERSION BEFORE BEING DISTRIBUTED TO THE STUDENTS??? These incidents should not repeat themselves in future and to ensure this, the people responsible should see to it that proof reading of the printed version (lest we assume that MISPRINTMIXUP was not on the original set question paper?!) should be done PERFECTLY WELL! Students would be tense enough with the atmosphere itself .... such incidents definitely do not improve conditions!

On the same theme..... we are now living in the 20th century and units like BTU ft^{2} hr ^{o}F sound outdated like any Silent Movie you see on the telly these days! These units were still top of the pops in certain examination papers last June .... we hope that come next June, the use of such units would be sidelined and S.I. Units used throughout.

I believe we are still in good time for whoever is responsible to take these suggestions seriously. On our part it would make our examinations less tense and that's one thing I am all out for!

S.A.C.E.S. (Figolla)

Sur Editur,

Qatt smajt bis-S.A.C.E.S? Le, mhux dik il-kumpanija Taljana tac-Ceramika, lanqas is-'Swedish Association for the condemnation of Exiles into Siberia', izda is-'Society of Architecture and Civil Engineering Students'! Jinghad li darba din twaqqfet u ghandu jkun l-ahhar laqgha tal-kumitat saret nhar id-9 ta' Novembru 1977 qabel Kristu.

X'iz-zokk qed taghmel is-S.A.C.E.S?! Jekk mhix attiva bhalissa, meta ser tkun? Il-President tant hadem li qabdu breakdown, dejjem b'ghajnejh homor jikteb ir-rapporti mal-lejl; is-Segretarju li spiss jidher f'ritratti fil-gazzetti u bl-ittri li jikteb; dak l-ambaqru Vici-President li tant inkwieta dan l-ahhar li bi zball nittef id-daqqna Leninenska li kellhu; it-Tezorir ta' kunjom twil li kien tajjeb biss biex johdilna nofs lira Maltija (gimgha allowance tal-Gvern!) u fuq kollox dawn ma qalilniex x'ghamel bihom; u dak li tant iddefendina li sahansitra kiser idejh bi protesta; u l-P.R.O. li tant hareg stqarrijiet lill-istampa u ddisinja Chalet biex jahzinhom u fl-ahhar u mhux l-inqas dak ta' zewgt kunjomijiet li hallih jitbaqbaq u jdeffes halqu f'xi microphone, etc., etc!

Din le mhix hrafa hbieb, dawn huma fatti, f'zmien meta suppost is-Socjeta tinsab fl-aqwa tal-attivita' taghha tinsab ghaddejja fl-aqwa tan-naghsa twila li waqghet fiha. Niltaqghu fil-General Meeting li jmiss!!!

SEMINAR DWAR IL-PROTEZZJONI TAL-WIRT NAZZJONALI

Hafna huma dawk li jhobbu jinghalqu f'qoxorthom, jaqraw il-kotba tas-sillabus, jitghallmu bl-amment dak kollu li ghandhom bzonn ghall-ezami ..... u bla dubju jgibu marki gholjin f'kull okkazjoni li tigi li fiha ghandhom x'juru kemm studjaw. Pero', ara ma jfettillekx tistaqsihom xi haga dwar il-hajja ta' madwarhom, dwar dak li qed jigri madwarhom ..... ghax f'dan it-test ifallu. B'daqshekk ma rridx nghid li bhala studenti ghandna nqattghu l-hin taghna kollu f'attivitajiet ta' barra l-kurrikulu. Pero', hu daqshekk iehor hazin li nissakkru fina nfusna u ninghalqu fissillabu tal-kurikulu. Hajjitna mhix biss is-sillabu ta' l-ezami.

B'dan il-hsieb f'mohhi ddecidejt li ghandi nqatta l-ahhar tlett ijiem tal-vaganzi tal-Milied, bejn it-28 u t-30 ta' Dicembru, f'seminar organizzat minn "Din l-Art Helwa". Ghal dan is-seminar in-numru ta' partecipanti kien sabih u jkolli nghid li l-fatt li hafna baqghu jattendu sa l-ahhar juri li s-seminar kien interessanti. Hawnhekk, mhux l-iskop tieghi li noqghod nghid x'qal kull wiehed minn l-erba' esperti li pprezentaw il-karti. Dawn, kull wiehed minnhom wera d-dedikazzjoni tieghu lejn il-qasam li fih jispecjalizza, u dan, ghamluh b'kapacita' kbira hafna. Hawnhekk ta' min jghid li dawk li pprezentaw il-karti, Dr. A. Bonanno, Profs. J. Boissevan, il-Perit J.M. Galea u Dr. L.J. Saliba, l-erbgha li huma jispecjalizzaw f'xi qasam tal-hajja, u kollha wrew kif l-ambjent ta' madwarna qed jigi 'attakkat' u kif dan jista' jigi 'protett'.

Forsi hawnhekk ta' min isemmi li wara li nqraw dawn il-karti l-partecipanti nqasmu fi gruppi li kienu maghzula skond il-preferenzi tal-partecipanti, biex jiddiskutu dawn l-erba' karti. Dak li gie diskuss inkiteb u r-rizulatat ta' kull grupp inqara fis-serata finali tas-seminar. Hawnhekk ta' min jghid li permezz tal-hidma siewja ta' dawk li hadu sehem, kif ukoll ta' l-organizzaturi dawn ir-rizultati finali hemm hsieb li jigu ppublikati f'forma ta' ktieb li mistenni johrog ma jdumx.

Ghalhekk, mhux dmir tieghi li noqghod nghid x'rizultat hareg minn kull grupp. Ghall-kuntrarju, ghal dan nistennew ftit u zgur li jkollna xoghol ahjar minn dak li nista' noffri jien, ghax jien hadt sehem biss fil-grupp immexxi mill-Perit J.M. Galea. Pero', ikolli nghid li jekk il-gruppi kollha kienu mqanqla daqskemm kien il-grupp taghna, tant li f'jum u nofs ta' diskussjoni hadd ma kien qal dak kollu li xtaq, dan is-seminar zgur kien success. Nisperaw ghalhekk li kull min kellu x'jaqsam ma' din l-attivita' jiehu spinta minn dan is-success u jorganizza seminars ohra fuq kull suggett li jista' jolqot il-hajja ta' madwarna.

VINCE GALEA

periodicals

BI-MONTHLY REVIEW C. BUHAGIAR

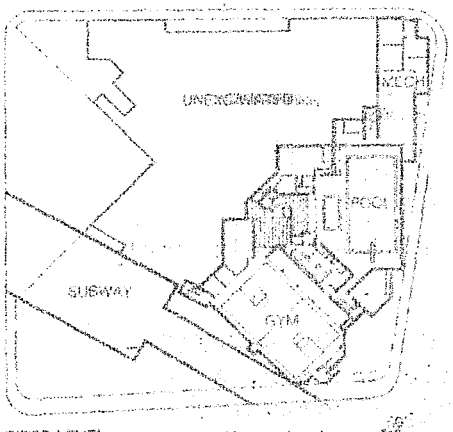
Selection from Foreign Periodicals

Urban studies is a subject which I have always found to be of great interest and for this reason I shall start off this feature by reviewing THE PLANNER. In the January (1978) issue an article which is of great relevance to the local scene is that by John Burrows, "Vacant Urban Land - a continuing crisis". With our very restricted area, (100 sq. miles), we cannot afford such idle land and it may prove beneficial to learn from the mistakes of others, and the subsequent analysis of such mistakes.

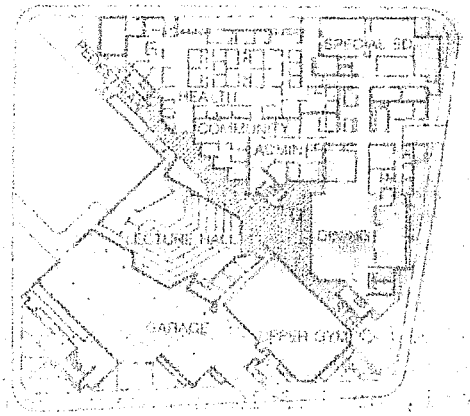
The author starts off this article by defining vacant urban land as all land lying within the boundary of an urban authority which appears to be unused and which is usually distinguished by rough vegetation or gravel strewn surfaces. According to UK statistics 5% of the land in metropolitan areas is vacant. Vacant land occurs in heavy concentration in the inner city areas surrounding the city center being more prominent in certain sectors than in others such as redundant docks, railway yards and industrial lands; this concentration falls off in the middle suburbs and starts increasing again at the rural-urban fringe.

If one wants to solve a problem, one has to get to grips with its roots and for this reason the author asks the question, "Why is urban land vacant?" The answer is that the advent of the motor car and the telephone allowed rapid decentralisation of urban activity and created urban sprawl, leaving vacant land at the urban edge and at the relict urban fringe of the nineteenth century city. This amount of urban land proved to be too much to be absorbed by new functions such as offices, academic institutions, car parking and road schemes. Hence the former use of the site ceased and there was a delay in its reuse. The reasons for this delay are various; the land could be impossible, unsuitable, or undesireable; such land could be unfitting for current development; the land available is not in demand or even if the land is to undergo redevelopment, its implementation is delayed. To avoid such delays a policy has to be established embodying a general approach and a consideration of specific measures which may be employed to prevent the occurence of wide spread land vacancy and to treat that which exists and may occur in the future. Statutory measures could be undertaken to reverse the process of urban decay and decentralisation. Measures are to be employed to avert avoidable land use cessation or reduce the effects of inevitable redundancies while the holding of unused land is made unattractive. When land vacancy is inevitable, this land should be well investigated for temporary uses and if no such uses exist it could be landscaped. In this way one would be preventing whole areas which are to be demolished to be laid to waste for years and even decades.

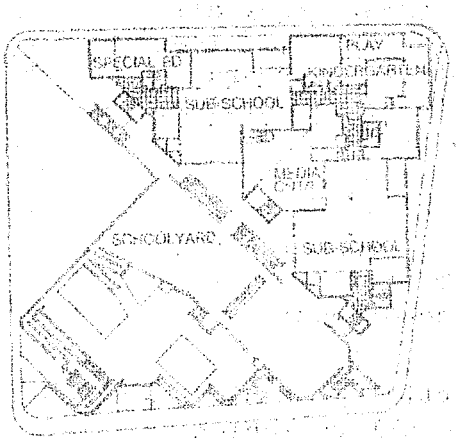
In this periodical, other articles of interest are: The National Exhibition Centre - should planning permission have been given; The Lansbury Neighbourhood Reappraised - one of the twelve London neighbourhoods developed in 1951 according to Sir Patrick Abercrombie's County of London plan is citisised today, National Park



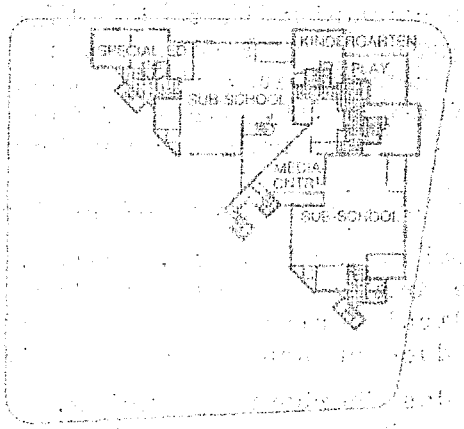
FIRST LEVEL



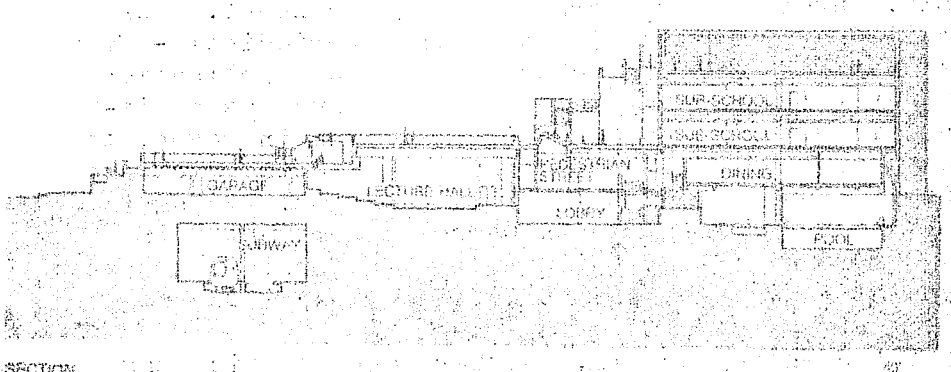
SECOND LEVEL



THIRD LEVEL



FOURTH LEVEL



SECTION

JASAN QUINCY SCHOOL, BOSTON

Plans - these plans are hailed as a milestone in the development of planning.

In the feature, "Common Grounds", found in PROGRESSIVE ARCHITECTURE (Dec 1977), three straightforward realistic schemes, a school, an infill housing project and the third, a community center reflect the architect's commitment to working with various community groups to create a responsive architecture with urbanistic, economic and social implications. These projects, as designed objects, have become vehicles through which activities are encouraged that bring people together, reinforce community spirit and pride and generate a commonly shared sense of urban life. In so doing these buildings foster a sense of community that would effect the economic well being of the neighbourhood. All the projects involved the participation of the community in their planning and design stages. They all respond to explicitly stated realistic needs, desires, values and constraints. They stand as exemplary, straightforward efforts on the parts of the architects to respond to multiple needs in a pragmatic but humanistic way.

The projects being referred to are:

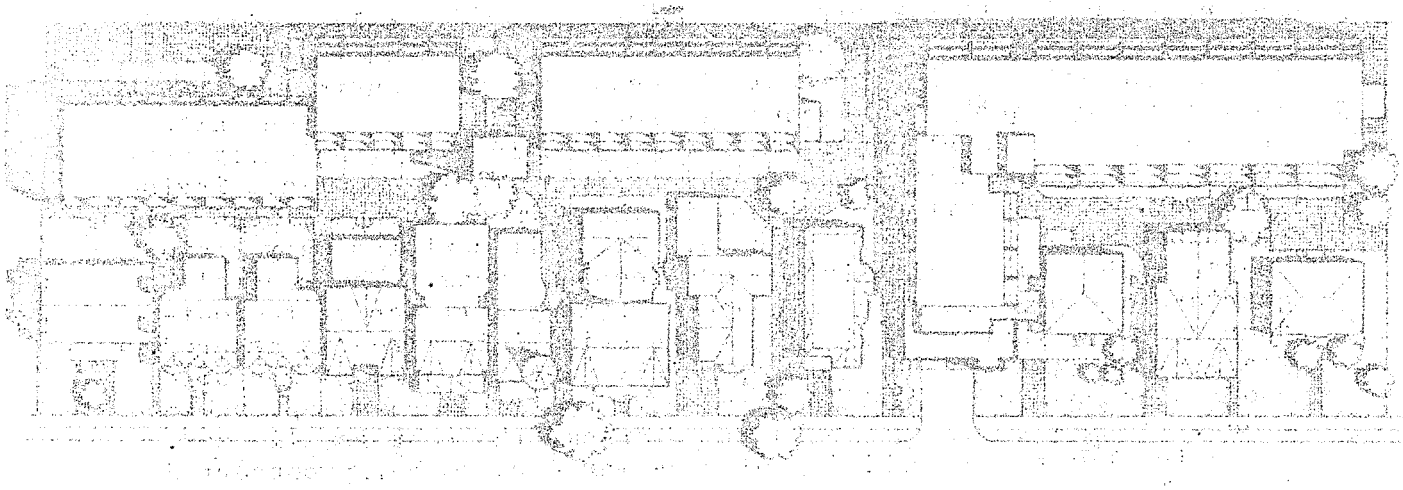
Jasah Quincy School, Boston, in the article "Making Place" - The Architects Collaborative along with the Tufts New England Medical Center and the local community have co-operated to produce an unusual and special school.

Dundas Sherbourne Housing, Toronto, in the article "Housing as Matrix" - housing, architecture and space are all variables that coalesce with varying degrees of success in this project by Diamond and Myers.

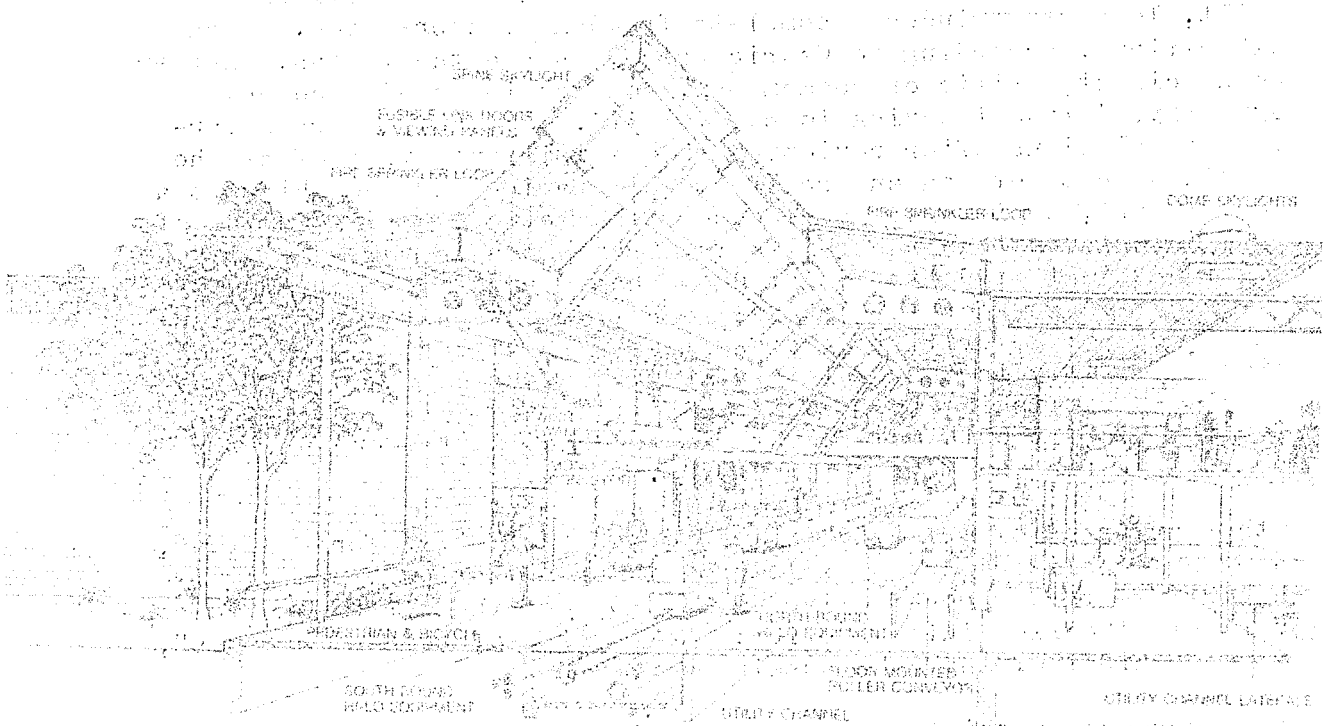
Harriet Tubmin House, Boston, in the article "South End Sophistication" - Stull Assosciation brings high design standards to a community center in the historic, racially mixed Sound End of Boston.

As its name implies, Progressive Architecture tries hard to establish avant-garde concepts, and in these days of the energy crisis, surely solar energy is such a concept. For this reason it features extensively in this periodical - from the article "Rays of Home", which considers the application of solar energy to other than domestic uses, such as a distilling plant in Detroit and an office building in Devon, to the article "News Report", which examines projects which are still in progress and which employ solar systems. Amongst others one finds the Federal Youth Correctional Center in Texas, an underground office building in California and the US Army Corps of Engineers project for Saudi Arabia.

Talking about the energy crisis, another concept which has arisen to enable energy saving is that of building underground. One such project revised in DOMUS (Jan 1978), in the article "Nelle Dune in Bretagne", consists of sunken units atop of



DUNDAS SHERBOURNE HOUSING



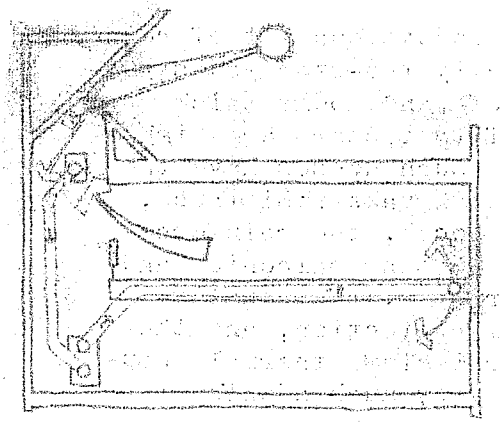
several dunes. The site of the "dune houses" (La Baule, Brittany), is of characteristic morphology - "dune like" exposed to ocean winds, sun and rains and beautiful because of its constantly changing, moody character. The concept proposes to build sunken units on the top of several dunes so that they could be climatically protected and organically integrated into the site in an almost invisible way. Every unit is designed in the form of a centralised cell organized around a nucleus or core. The unit contains only basic spaces such as the main living and sleeping areas. The guests' quarters are organized around such a primary cell across the outdoor space so that the privacy of the main living area is assured. The structural system is simple, mainly based on a truss supported roof which covers the main cell as well as the surrounding sunken space. The walls are to be built in brick, the rest is all wood. There is also the possibility of such large roofs being converted into solar roofs.

Other articles of interest in this issue are, "Componenti Standard", a house for a family of five in London; "Jersey Devil Architects", a group of architects, craftsmen and artists committed to the interdependencies of the design and construction processes, doing all building themselves. This group is based in a factory headquarters in New Hope, and relocate wherever their work takes them, another project arising from energy conservation, a solar house, "Energy at Milton Keynes", undertaken by the Milton Keynes Development Corporation with the assistance of the Polytechnic of Central London.

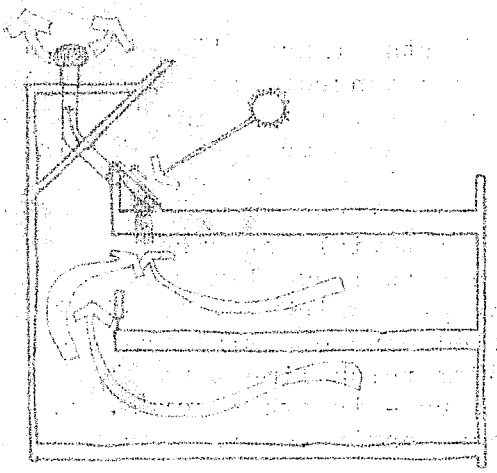
Of special interest to students taking architecture should be the AA Project Review 1977, found in the ARCHITECTURAL ASSOCIATION QUARTERLY (Vol.9, No.1). In this review there is an exhibition of a range of the school of architecture's work. Such an exhibition helps in showing the staff what others are doing and make comparative results of such efforts. Such exhibits have the advantage of being academic exercies and since they will not be built, leave the students complete freedom of expression. Such exhibitions, according to Cedric Price, enable the layman, whether be he client, critic or common man, to exercise prejudice and sympathy, 'without having to pay for it'. The author draws various conclusions after reviewing the exhibition: first of all he distinguishes between an architectural drawing and one which is a work of art, a picture; he considers the methods of drawing as of more importance than the skills for drawing; as a general rule he considers that students do not know what drawings express best their design and for this reason do not know when to stop producing drawings; he critisizes students for their lack of experimentation especially in the exploitation of draughting methods. Price concludes by wishing that such exhibitions are held more frequently for the benefit obtained from their feedback is tremendous. (See figs. for some of the projects).

Other articles of interest in this issue are: "Ildefonso Cerda", a Spanish politician who explained his urbanization proposals in a parliamentary speech delivered in 1852 and then proceeded to convert his theories into practice; "Rekindling of the Seven Lamps", a reappraisal of the John Ruskin Book.

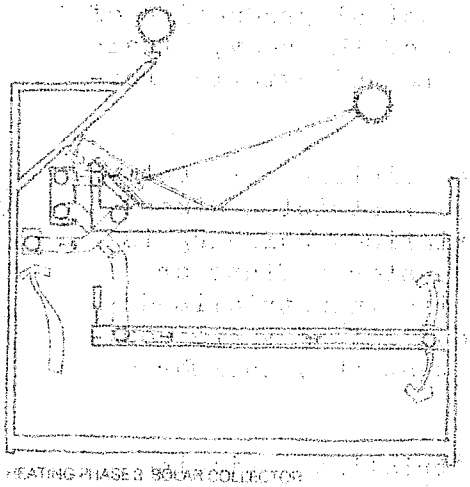
Tom McGregor, a thirty-two year old civil and structural engineer, takes a look at "Industrialised Housing in North Africa", - CONCRETE (Jan 1978) - the usage of precast units to solve the desperate shortages of modern housing in these countries.



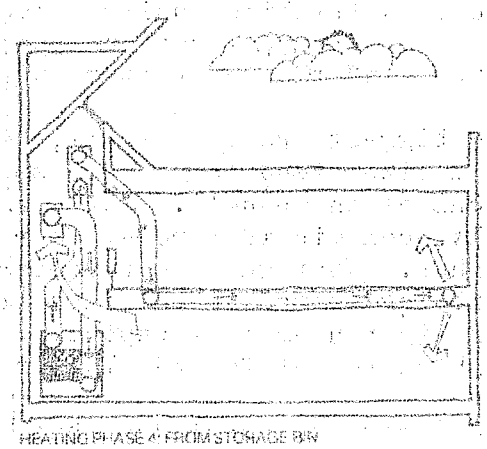
HEATING PHASE 1: FROM HIGH RETURN



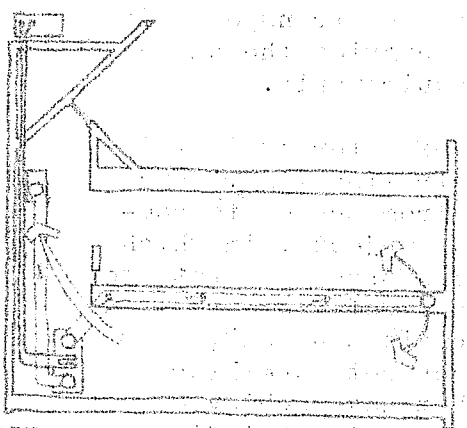
INTERSEASONAL PHASE 2: INDUCTIVE VENTILATION



HEATING PHASE 3: SOLAR COLLECTOR



HEATING PHASE 4: FROM STONAGE BIN



HEATING PHASE 5: HEAT PUMP

HEATING FOR ALL SEASONS

In North Africa, 'Traditional Houses', nowadays consist of reinforced concrete framed, single, occasionally two-storeyed structures, reinforced concrete floors and roofs and 250mm thick limestone blockwork infilling walls. Safety factors are high and finishes are frequently magnificent. Such houses have the technical advantages of providing good earthquake resistance, the materials required are substantially local, the reinforced foncrete frame lends itself easily to projecting balconies and canopies which help shade the walls underneath, the usually tiled concrete slab provides good thermal protection, and the 250mm thick limestone block walls are first class thermal insulators - in other words, such houses are very much adapted to local environmental conditions.

On the other hand, 'Industrialised Housing', is being adapted from the North European market and their convertion to suit different environmental conditions is not always a happy one. Hence, for example, earthquake conditions frequently require the casting in of cumbersome bolts and slots, natural ventilation frequently requires the casting of awkward to form pierced screens, while providing the necessary level of insulation can also be a problem. Another problem is the actual production of the industrialised units themselves because of the heavy strain such a factory places on local infrastructure and existing resources and the power it requires.

The biggest problem of all, however, is the finished product - room sizes tend to be very small due to the restricted dimensions of the panels. Furthermore, industrialised building is only economic in three-, four- or even five-storey flats or higher. What must be remembered is that with industrialised building items is that they are economic only if they are working at or near full capacity. This means that they call for a high degree of foward planning.

From this one concludes that modern, industrialised building systems, should not be pushed in developing countries as a solution to all house building problems. If handled properly they can play a useful role. The best way foward seems to lie in assisting and complementing existing techniques rather than replacing them altogether. A semi-industrialised system, such as the BRECAST system, offers a lot of advantages: it is easily operated, requires little skilled labour and initial capital output and the factory is easily dismantled and transported to other sites. Research in this field could provide the answer to producing a house in line with local requirements.

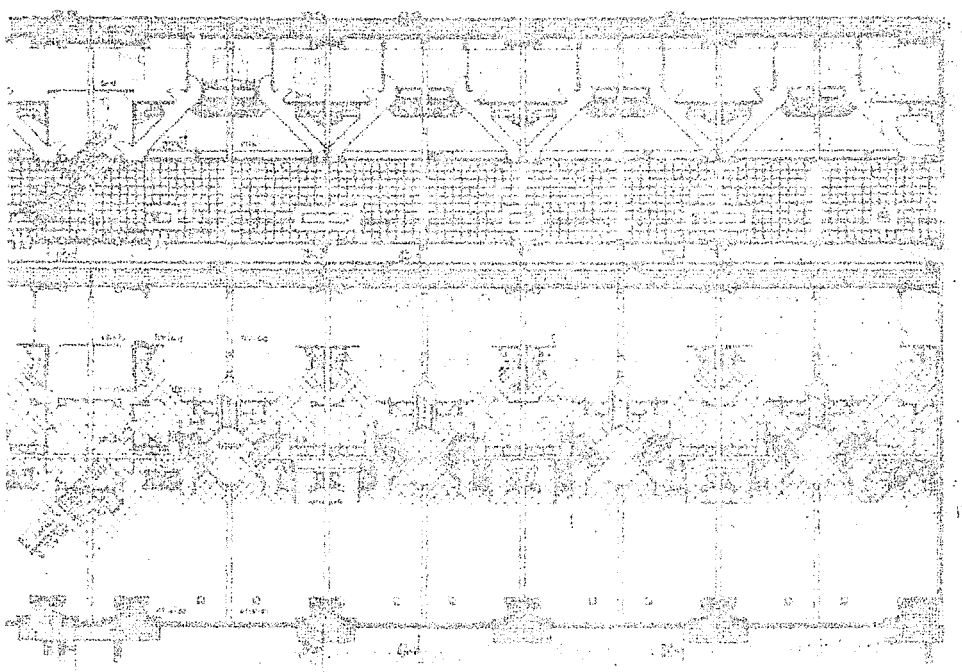
Amongst other articles which should prove of interest in this issue, one finds "Craft Training and Decentralisation", which takes a look at the education of a person from school to company director; "Loanhead's Most Conspicious Object", in which Patricia Cusack discusses the useage of reinforced concrete to obtain architectural effects in the Loanhead Reformed Presbyterian Church; "Striking Design for Concrete Housing", appraises the imaginatively designed all concrete dwelling blocks for the London Borough of Camden that have achieved high density living without resorting to high rise buildings.

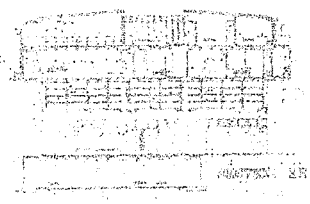
---

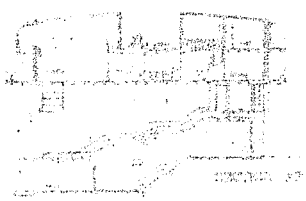
below (upper):
D Ward/Diploma School unit 7

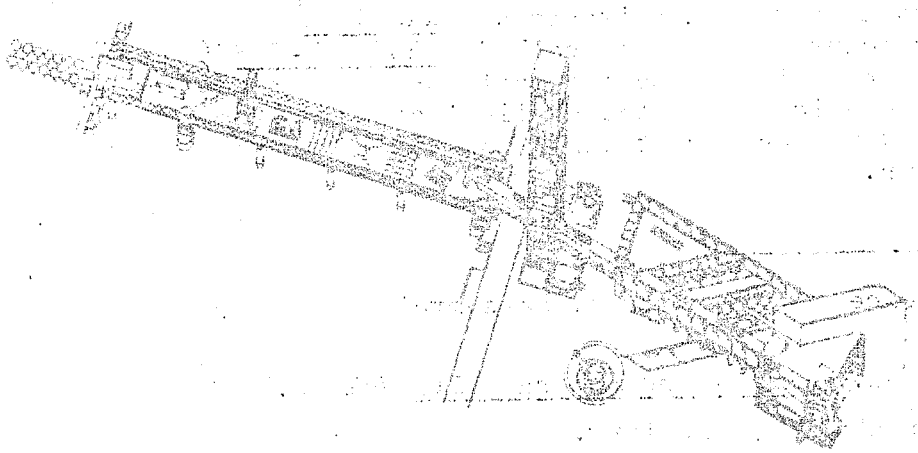
below (lower):
B Chan and K Schimomura/Diploma School unit 9

AA Review 1977
School Projects

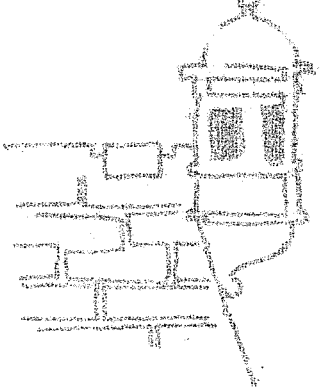








Valletta development



BY CARMEL CACCIAPUOTI

INTRODUCTION

Prior to the Order's taking over Malta from the Holy Roman Empire, a commission of eight Knights was sent over to report on the conditions prevailing in the Maltese Archipelago. The Order had turned maritime, and thus the Commission gave adequate importance to the absence or presence of ports and harbours in different parts of the island:

> "there are no ports, bays or coves on the western coast of the island; ..... but on the opposite coast there are many points or capes, with indentures in the form of bays or coves, in which ships might anchor; there are two spacious and very good ports in the island(1) capable of receiving the largest fleet, but with no other defense than a small castle named St.Angelo, which is partly in ruins ....."(2)

SHEBB IR-RAS

The tongue of land separating the two ports of Marsamxett and Grand Harbour was known to the inhabitants as "XAGHRIET MEWWIJA"(3), and the point of land was called "SHEBB IR-RAS"(4). No doubt, this latter name is due to the fact that the importance of the harbour was recognised from the earliest of times, and a light must have been kept burning at night to guide belated craft into the harbour.

---

(1) This is a reference to the ports of Marsamxett and Grand Harbour.

(2) BOISGELIN Louis de. Ancient and Modern Malta Vol II. p.16.

(3) Meaning: the inhabited promontory.

(4) Meaning: the light of the point.

Before anybody thought of building a city on the tongue of land, the Maltese used to say that:

"f'Xaghriet Mewwija
ghad kull xiber jiswa mija."(5)

EARLY FORTIFICATIONS ON SHEBB IR-RAS

It appears that in 1488, a small fort called "Torre della Bocca" was constructed at the extreme point of Mount Shebb ir-Ras. This tiny fort, surrounded by a moat, had crumbled down when the Order took possession of Malta. This fort was known to the inhabitants as "Tarf il-Ghases".(6)

Grand Master L'Isle Adam who arrived in Malta in October 1530 added to the meagre defenses detached works wherever the nature of the ground permitted. He also repaired the walls of Fort St.Angelo and Notabile.

The practised eye of L'Isle Adam was not long in perceiving the advantages of the position of Mount Shebb ir-Ras, dominating as it did over both harbours, and owing to its formation secure from attack except from its landside. Here he thought of establishing his convent, and of erecting sufficient works for its protection: but this was just an idea. Two main reasons withheld this idea from becoming a reality. The first is most obvious: funds were not forthcoming. Another reason was that L'Isle Adam, and the Order, had not yet lost hope of recapturing the island fortress of Rhodes which they had lost some 8 years previously to the Turks.(7)

In 1541 Grandmaster Juan D'Homedes asked for the assistance of a military engineer to advise the Order on improving the defenses. The Emperor Charles V sent his military engineer Antonio Ferramolino. Ferramolino did not consider that Fort St.Angelo or Birgu were capable of a lengthened defense: he suggested that both should be evacuated and the Convent moved to the North

---

(5) which means: time will come when at "Xaghriet Mewwija" every foot of ground will be worth the price of a hundred.
ZAMMIT T. Valletta. A Historical Sketch with plan and Illustration, p.6.
Bosio gives a slightly different version:
"Iegi ẓmien en fel uardie / col sciber raba iesua uquie (time will come, when at the observatory, every foot of ground will be worth an ounce of gold).
BOSIO G. Istoria della Sacra Religione Militare di S.Giovanni Gerosolimitano. Vol.III. Liber XXXV, p.746.

(6) Meaning: the extreme outpost
ZAMMIT op.cit. p.7.

(7) PORTER W. The Knights of Malta, pp. 23-24

side of the Grand Harbour, on the high ground called Mount Shebb ir-Ras. This is the first time that this suggestion was made by a military engineer, a suggestion which was many times repeated but not carried into effect until 1566. The great expense, and the fear that this new fort should not be completed in time, caused the Grandmaster to turn down Ferramolino's proposals.(8)

Homedes considered the exigencies of the moment and instructed Ferramolino to strengthen the existing works. This he did by raising a cavalier (1541) on Fort St.Angelo to as great a height as possible, so that the guns might bring effective fire to bear on the entrance to the Grand Harbour and the point of the Shebb ir-Ras peninsula. Ferramolino left Malta in 1550 and was replaced by the Spanish engineer Pietro Pablo Pardo, who carried forward the work of preparing the island to withstand a prolonged siege. He was advised by Count Strozzi, the prior of Capua, who made two suggestions of paramount importance. He proposed the building of a new fort to protect the peninsula(9) which lies parallel to Birgu and St.Angelo, and so protect the southern flank of these positions and the front of Senglea peninsula. This fort was designed by Pardo in the form of a star and was quickly built. It was called Fort St.Michael.(10)

A second proposal of Strozzi was to replace the watch tower which stood on the point of Shebb ir-Ras peninsula with another star-shaped fort, in order to defend simultaneously the entrance to the two harbours, i.e. Marsamxett and the Grand Harbour. Pardo speedily undertook the work and between 1551 and 1552 the fort, named St.Elmo, was built.(11)

Fort St.Elmo was constructed in the form of a star with four angles, and the landfront broken into a bastioned form. At the suggestion of the Viceroy of Sicily, a ravelin was added to Fort St.Elmo on the side of Marsamxett(12), whose guns were

---

(8) HUGHES Q. Building of Malta, p.15
PORTER op.cit., p.484 (Appendix no.19).
SCICLUNA H. The Building and Fortifications of Malta, p.219.

(9) Now known as Senglea, but then known as Mount St.Julian, and later as Fort St.Michael.

(10) CROCKER J. History of the Fortifications of Malta, p.16.

(11) HUGHES Building of Malta, p.16
PORTER op.cit., p.56.

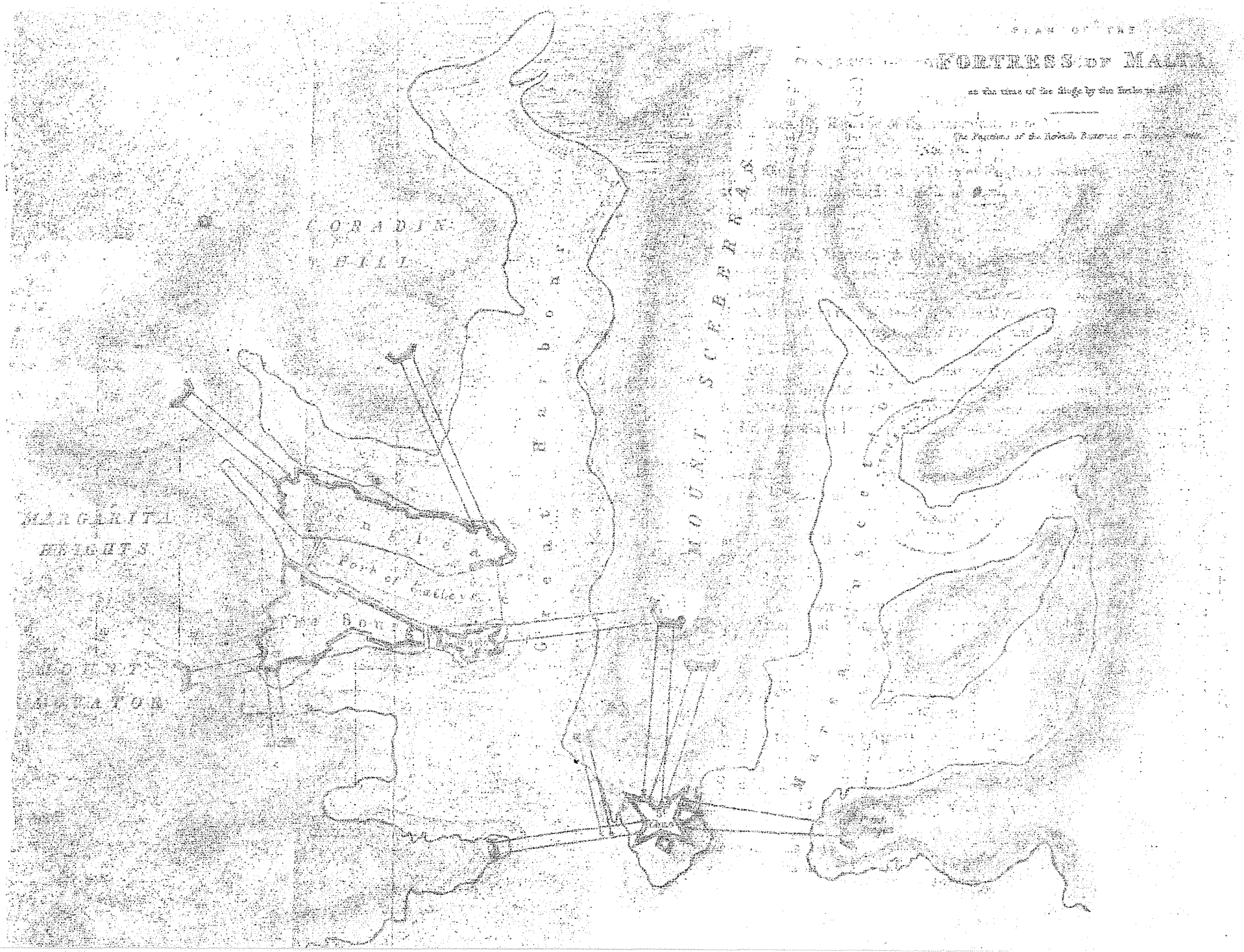
(12) PORTER op.cit., p.486

PLAN OF THE

FORTRESS OF MALTA

as the same stood at the time of the Siege by the Turks in 1565

The Positions of the Turkish Batteries are shewn thus



supposed to give additional fire power over the narrow stretch of water which lay between the peninsula and what is now Tigne'. As it turned out, this ravelin was a tactical error. It was captured by the Turks in the Great Siege and provided them with a secure stronghold from which to pour fire into the fort itself.(13)

The design of Fort St.Michael was similar to that of Fort St.Elmo, with the exception of the bastioned front and the ravelin.(14)

On March 11, 1558, the Italian military engineer Bartolomeo Genga arrived in Malta and after examining the island's fortifications repeated the proposals made earlier by Ferramolino. He suggested that both Birgu and Fort St.Michael were too low to fortify adequately, and the only reasonable way of securing these positions was by building a new city on Mount Shebb ir-Ras. He made a model of his plan for the city, which included a larger area than that later laid out by Laparelli.(15)

In the year 1563 a plan entitled "Melita nunc Malta"(16) was published in Rome, probably by the cartographer Nicolo Beatrizet. It shows the "harbours of Malta with the new city where those who now live in the Borgo will live", a city whose landfront occupies the neck of the Shebb ir-Ras peninsula, approximately on the line of the present Floriana defenses. The other end of the city is terminated considerably short of St.Elmo, leaving a strip of unfortified land between the two. This drawing might show the design of Quinsannai, but it is much more likely to have been copied from Genga's model for the new city. The Maltese historian Bosio, writing later, states that Genga's city was larger than the city which was built and its guns could have fired into Corradino hills (17). It is unfortunate that the plan gives no indication of the layout of streets and buildings, it only shows the circuit of the fortified walls.(18)

Genga died in 1559, his place being taken by another Italian Baldassare Lanci, who also proposed that a new city should be built. Lanci's new city was to be very much in line with

---

(13) HUGHES Fortress, p.38.

(14) HUGHES Building of Malta, p.20.

(15) BOSIO op.cit. Vol III, pp. 398-455.

(16) HUGHES City of the Knights, p.70.

(17) BOSIO op.cit. Vol III, pp.398-455.

(18) HUGHES The Planned City of Valletta, p.309.

current theory and practice, a theory which stems from ancient Greece, from the regular town planning layouts of Hippodamus and the writings of Vitruvius. Not only would his city be impregnable - Lanci maintained that it would also be more healthy than Il Borgo as it was situated on higher ground and would attract cooler breezes. The city would be guarded on three sides by deep water, and the fourth, the landfront was comparatively short. His model now lost, must have been detailed, for it showed the trace of the fortifications, the roads and squares, the divisions of the houses, - though not their detailed design which would be left to others - and the disposition of palaces, churches, the hospital, and all the other main buildings.(19)

He described the trace of the fortifications in some detail. There was to be a 70 foot parapet behind them, and a further wide space containing a circuit road, before any houses could be constructed. From the Place of Arms, behind the main gate of the landfront, a main road 45 feet wide was to go over through the spine of the city to be a central square, approximately 70 yards square, around which would would be disposed the Palace of the Grand Master, the Church and the other main public buildings. The minor roads were to be 20 feet wide.

We do not know why Lanci's plans were not accepted.(20)

Grand Master La Vallette, elected on the 22nd August 1557, desired much to fortify Mount Shebb ir-Ras. For this purpose he called in the engineer of high reputation Antonio Quinsani de Montalin with whom he minutely inspected the locality. Genga was also involved.(21)

La Vallette, wishing to raise money for the new city sent a delegation to the Council of Trent composed of Giuseppe Cambiano, Nicolo de Villegagnon and Martin Royas de Portabiubio, requesting aid "per l'edificazione della nuova citta' sopra il Monte di Sant' Elmo"(22). Although the mission was successful, the proposals were shelved until after the Siege of 1565.(23)

The problems to be faced did not consist solely in the building of the new defenses: in addition time had to be left for the walls to harden before they could be brought into operation against an

---

(19) BOSIO, op.cit. Vol III, p.453.
HUGHES, Fortress p.54.
CODEX LAPARELLI, p.22 as in HUGHES, The Planned City of Valletta p.315.

(20) HUGHES, The Planned City of Valletta, p.315.

(21) ibid, p.325.

(22) BOSIO, op.cit. VOL III, pp. 453, 459.

(23) HUGHES, The Building of Malta, p.21.

enemy. Freshly cut stone must be left to harden and to consolidate itself on exposure to the air. There was also the difficulty that some building work could not be done on the hot summer months. The lime mortar dries out too quickly and does not have time to grip the masonry, so that the lime soon powders away.(24)

(24) HUGHES, Fortress, p.39.

IN FORTHCOMING ISSUES .....

Valletta Development - Part II (C. Cacopardo)

The author continues to thread his way through the development of our unique city from after the Great Siege. The decision to build Valletta was reached at this time, i.e., 1565, and as engineer in charge, Pope Pius IV chose Francesco Laparelli. Laparelli arrived in Malta on the 28th of December 1565 and presented his preliminary proposals to the Order's Council six days after his arrival. These proposals cover four main aspects: the extent of the city, the design of the fortifications, the layout of the streets and buildings and the utilization of labour and material. Working on these proposals, the foundation stone of the new city was laid on the 28th March 1566. Laparelli's proposals found a lot of opposition. He continued to work here till 1568 when he was succeeded by Malta's most prominent architect Girolamo Cassar.

For a full account of the reasons behind the birth of Valletta and Laparelli's design, read Part II of Valletta Development in the May/June issue. Book your copy now. You would not be disappointed.

talkabout.

R. FARRUGIA & A. BAILEY.

No.3 - MELLIEHA HOLIDAY COMPLEX (Part 1)

The Mellieha holiday centre was a beehive of activity one fine Tuesday morning. Work was in full swing, and the great number of workers spread around the vast site, seemed rather busy. (We had come here to compile this 'Talkabout' feature, so we thought of coupling it with a site visit for second year students). We were first given a brief of the proposed project at the site office. The project is being financed by a joint agreement between Danish and local Workers' Union Representatives and March of 1979 has been set as the deadline for finalisation of the project.

First Impressions

The first impression, as one approaches the site from the winding Mellieha to Ghadira road, is of the local Maltese village set up. This impression is further strenghtened once one gets closer to the actual site itself. Essentially the project consist of a number of clustered houses, (that will form a number of 'neighbourhoods'), that sit clean on a rather sloping site adjacent to Malta's number one summer spot - 'L-Ghadira' (Mellieha Bay). Presently the project has reached an advanced stage and there is great optimism among the site administrators that the March '79 deadline will be met successfully.

Work is being carried out by a number of sub-contractors and each has been assigned with a number of houses to construct. The designer of the project is a Danish architect by the name of Mr. H. Jannsen and the local architect in charge on site is Mr. J. Saliba assisted by Mr. P. Gauci. In the finished complex such amenities as a cafeteria, two swimming pools, boutiques, shopping areas, etc. will be available apart from the 150 apartments that will be available on a rent basis to members of the Danish Workers' Union behind the project from March 1979.

The Individual Dwellings

The dwellings are essentially all similar in plan with little variations on elevation. It has been remarked that on one of his frequent visit, Mr. Jansen had asked for the inclusion of masonry arches on the elevations to further enrich the 'vernacular' aesthetic of the set up. A typical plan (a version of which is being reproduced) is very much in the spirits of the good old Maltese farmhouse. Entrance is through a spacious courtyard rendering the living space L-shaped. Living room, kitchen and one bedroom all have direct access to the courtyard. Noticeable is the fact that only one room (bedroom with no direct access to courtyard) does has a window opening to the outside. The rest get natural lighting from the courtyard. All courtyards have a direct view of the sea. As to ventilation, this may not be such a problem since each dwelling will have mechanical means for cooling or heating the internal spaces, as may be desired. The bathroom in turn is lit up by a skylight.

Use of Local Stone

Greatly noticeable is the wide use of the local stone. This is quite extreme and this "obsession" for exposing local stone led the Danish architect to order the covering up of any concrete that may otherwise have been exposed. Also there was a great concern on ensuring a continuous supply of the stone all year round even in the worst wintry conditions. For this reason it was decided that stone be transported to the site uncut in large stock-taking consignments. A number of stone dressing plants were assembled on site. The stone being used on site is in fact not of the normal dimensions as the Consultants firmly favoured 25cm block height. We were lucky to enter in the one finished prototype and here the unlimited use of local stone was evident throughout. The floor finish, apart from the bathroom, is stone slab. The beds in both bedrooms have stone made bases on which a comfortable sofa cushion overlies. The same can be said for the principal furnishing unit in the sitting room where an L-shaped sitting stone ring is covered with a soft green cushion and on the same theme one finds a stone bench in the dining room. Also quite noticeable is the fact that there is a great control on the use of colours in both furnishings and things like doors and louvres. It is planned that each cluster of dwellings will have its own different colour scheme, and in the end will help to enhance the aesthetic pretentions of the design. Olive green was the dominant colour in the dwelling we visited. This colour 'control' is taken to the extreme that even the moveable partition to the bathroom is olive green!

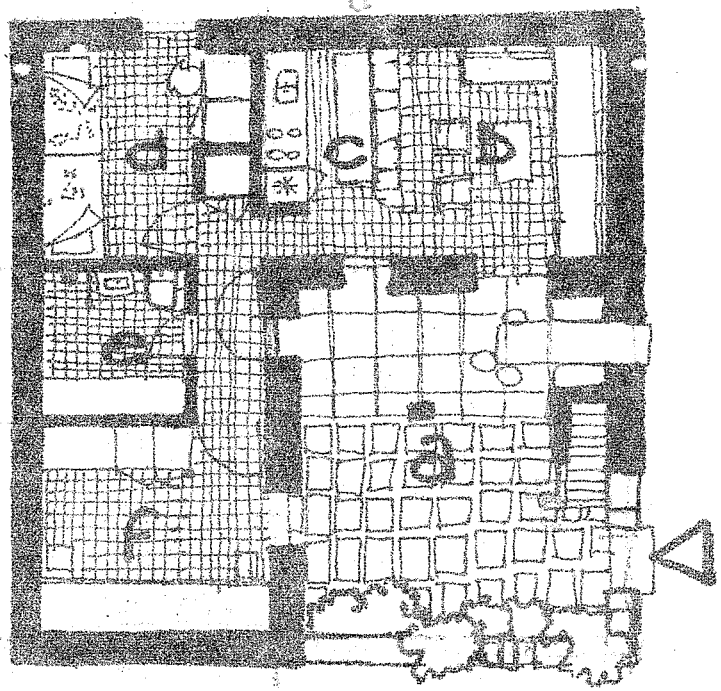
(To be continued)

IN FORTHCOMING ISSUES .....

Curious Methods to Speed Up Building Construction in Russia
(N. Debattista)

As all readers are aware of, here in Malta construction projects take such a long time and are so expensive because of the wastage of time and material. Such a situation is not exclusive to Malta, although we Maltese seem to excel in it, but is common the world over. To counter such particular situations, a system was introduced in Russia known as the Autonomous Finance System. As a result the efficiency of the construction industry in general has increased immensely while the workers are getting better pay.

If your interested in this system, make sure of reading this well detailed feature. Who knows? You might decide to give it a try. It might be worth it.



a..... yard.

b..... Living room.

c..... Kitchen & Dining.

d..... Bedroom. I.

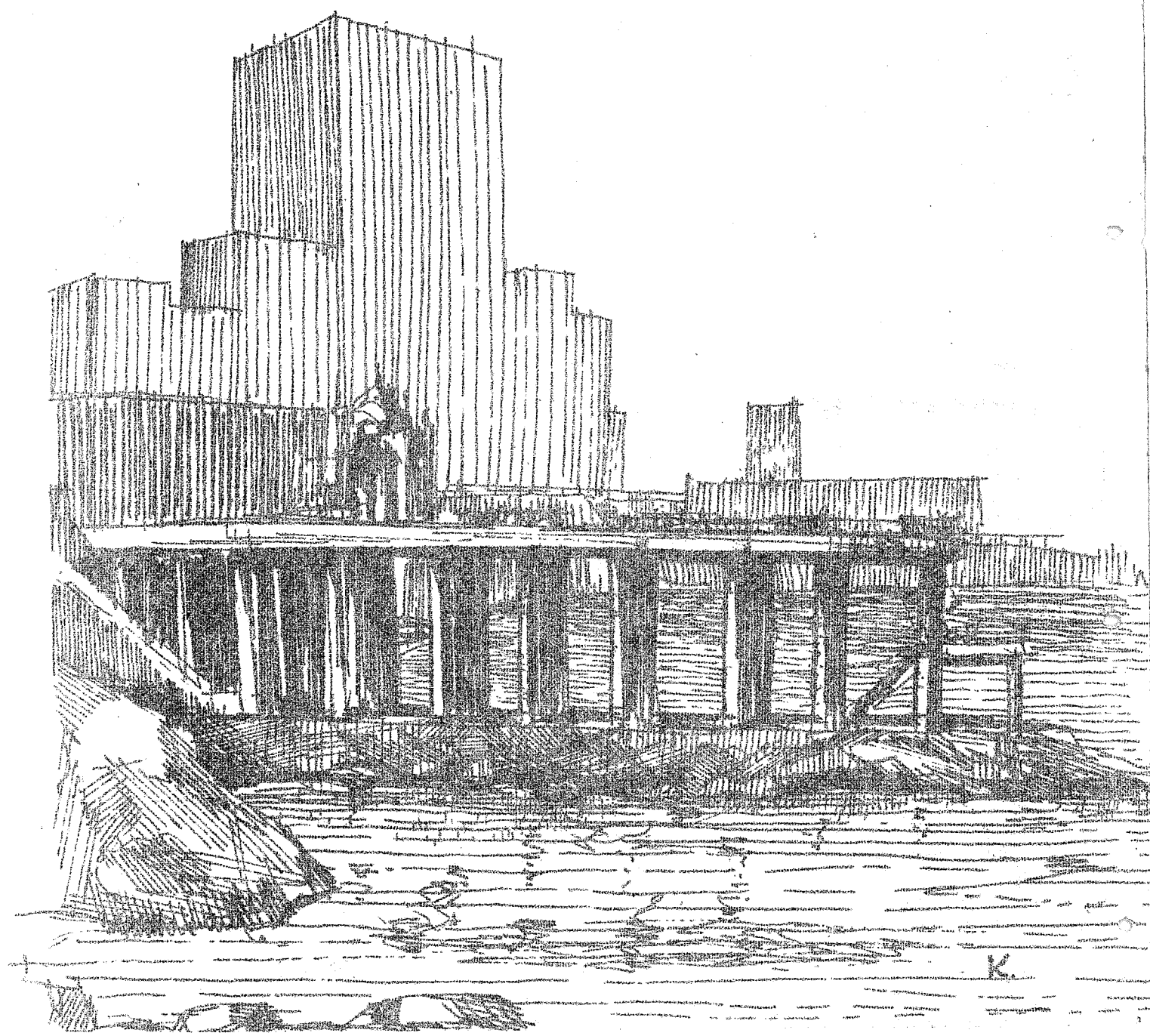
e..... Bathroom.

f..... Bedroom. II.

SITE IMPRESSION

eyesore

In its present dilapidated condition, the Chalet mars the Shima promenade. It should either be demolished or better still, restored or rebuilt.



book review

BY ROBERT NAUDI

This is a feature which will be appearing in each issue of this magazine. In each issue two or three books which have just been acquired by the libraries of the University of Malta, M.C.A.S.T., or the Government Public Library will be reviewed. The reference number of each book will be indicated alongside other details which make for easy reference. At the end of each year an index will be compiled listing the various books according to subject-matter.

1. Basic Concepts of Structural Analysis

By Fred W. Beaufait, published by Prentice-Hall (1977) - Civil Engineering and Engineering Mechanics Series. Ref.No. TA 645 B36 (University Library)

The book is written in a modern up-to-date method and involves modern aids in the solution of forces in structures by the use of electronic digital computer and matrix algebra.

The book is intended for teaching, and the student aimed at is assumed to have a basic knowledge of strength of materials and computer programming.

The text can be used for a two course sequence in structural analysis. The first course includes various methods of analysing determinate structures while introducing indeterminate structures. The second course is concerned mainly with statically indeterminate structures.

The author first gives an introduction to models used, types of structures and their analysis. Then he goes on to the details of analysis using various modern updated techniques of analysis: the flexibility method, the stiffness method and the method of moment distribution.

The book will be welcomed as a valuable addition to a modern approach on the subject of structural analysis and it is hoped that the introduction to Malta of digital computers will not be long in coming. As shown by the author, with the availability of digital computers to perform mathematical operations, the solution of simultaneous equations is no longer the constraint it once was in analysing a structure.

2. Hampstead Garden Suburb - A Conservation Study

Consultants' report to The New Hampstead Garden Suburb Trust Ltd., published by Shankland Cox and Associates (1971). Ref.No. HT 169 G72 L6 (University Library).

The book is a study of conserving the "rustic" character of Hampstead Garden Suburb - a suburban area, five miles north of Central London, accommodating 16,000 people.

The aim of the study was to formulate a local plan for the area. The study first defines the contents, character and qualities of the garden suburb as conceived, built and now inhabited.

The study took place in two stages. First the social and physical characteristics of the present-day Garden Suburb were analysed and proposals were drafted. The second stage involved extensive work on historic buildings, traffic problems, landscape and development control. Refinements were then made to the original proposals.

The book, besides making very interesting general reading, is a stimulation to urban designers, indeed, to anyone who has conservation of urban character at heart.

The study is comprehensive and the importance of surveys and plans in such conservation work are duly emphasised.

The book should serve to create a public awareness to the threats which modernisation can bring about and the decay that can ruin our national heritage.

3. Architecture Drafting and Design

By Donald E. Hepler and Paul I. Wallach, published by McGraw-Hill Book Company (1977). Ref.No. NA 2700 H4 (University Library).

Written by two architects well versed in drafting and design techniques, the book is an excellent work, well suited to students in their first years of an architectural course as well as to architects wishing to brush up their drafting techniques.

Profusely illustrated with colour and black and white photographs as well as thousands of illustrations. This volume deals in great detail with every aspect of architectural drafting and design. The first part of the book deals with the design process and includes such topics as living area, service area, sleeping area, etc. Part two deals with basic architectural plans - drafting, drawing floor plans, etc. Part three is concerned with detail drawings or technical architectural plans such as location plans, sectional drawings, foundation plans, electrical and plumbing plans, etc. Part four deals with architectural support services - cost analysis, methods of checking etc. A comprehensive appendix, which includes an architectural glossary, brings this valuable volume to an end.