A P P R O V A L

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EXTERNAL EXAMINER.

the

birthplace

of

a

newspaper.

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A THESIS

Presented to the Department of Architecture,

Faculty of Environmental Design

of

Ahmadu Bello University

Zaria

in partial fulfilment of the requirements

for the Degree of

Master of Science in Architecture

by

PAUL EKWO UDENYI

on

Newspaper publishing

in

June, 1980.

dedicated to

MY PARENTS,
and
CAROLYNE

for happening to me

at the nick of time.

THESIS ABSTRACT

TOPIC: The Birthplace of A Newspaper.

Preamble/Philosophy:

The newspaper, being a medium within which the level of ignorance is balanced for different parts of the society are panting in their effort to keep pace with the demand for news in our present jet age as technology increases the rate of change in all facets of our national as well as individual lives. Why are the news agencies not meeting up with the needs more comfortably? What are the restraining forces? and are there any enabling forces that one could identify and exploit to offset the inhibiting factors in newspaper publishing?

Scope:

The research program includes the study of an existing social disposition in our news agencies in publication work which analysis will hopefully identify the restraining and enabling forces; an analysis of the structural and services systems; and finally an investigation into how these will be married - leading to a design that will produce a conducive

micro-climatic conditions of the environment involved in newspaper works.

Aims/Objectives

The architectural significance of this thesis will be identified in the statement of my thesis that defines a point where physical architectural hardwares and the social architectural discourse unite to produce functional relevance. Questions may have being raised for future architects to tackle but the immediate aim was not to raise such questions but to precipitate a design from architectural reactions that will eliminate the most obvious ills of the present situation.

Site:

The site chosen to test my thesis is in Kano, the capital of Kano State, precisely, as part of the proposed "Zaria - Road City Centre." My thesis can be tested on any site, so there is no reason to restrict its adaptability to any particular site.

Conclusion:

The success of this design thesis will be an architectural contribution towards achieving the desired goal in newspaper production/publishing; if it is considered a failure

then there is a basis for further investigation and architectural battle in the same search and here also it will be a contribution to the struggle so that where this thesis has failed, posterity will take note.

Critics should deside which.

Udenyi, P.E.

ACKNOWLEDGEMENTS

"In all your ways, acknowledge Him, and He will make straight your paths." - Prov. 3:6.

It is a thing of joy to witness the hand of the Living God in my life during my short stay in the university, especially during the last days when the "temperature" of the draughting work was at its peak. I do acknowledge the Grace of my Lord Jesus Christ which was sufficient for me all through and the "peace of God which passes all understanding" that was mine.

My gratitude goes to all brethren who laboured alongside with me on their knees especially Miss Taiwo Iyabo Ipaye, and my dear Miss Carolyne Gbelee who were both on their knees and hard beside the stove. Others that deserve special mention include S.O. Fatumbi, James I. Ugo, and Godwin O. Onazi with whom we have had times of prayers.

My thanks go to those personnel in the Kano State Urban Development Board who did not hesitate to come to my aid when in search of a suitable site and for the use of their proposed master plan for the Zaria-Road City Centre.

I am indebted to all the Newspaper publishing companies

that furnished me with relevant information by completing and returning the questionnaires that were administered especially the Daily Times of Nigeria Limited, The Plateau Publishing Company - publishers of the Nigerian Standard; and the New Nigerian Newspapers Limited which I visited as the need arose for their co-operation in meeting my needs for further information.

Thanks to Dr. Albert Ikomi for giving me the initial cue along the lines of research method and for introducing me to the Semantic Differential Scale Model which gave me a way of quantifying the architectural experience I wished to effect in my design.

Arc. Shim Adesina, my thesis, co-ordinator deserves a special mention for his well-meaning programming of my work. I am grateful to him.

My thanks further, go to the Professor and Head of Architecture Department for all his contribution to the success of this work in way of letters of introduction and otherwise

All Students of Architecture who helped to do some work should not be left out. I wish to also mention my Studio colleagues, Miss Shade Otiti, Emmanuel Akume, Mr. G.F. Babarinsa, Mr. D.A. Awoniyi, and Mr. M.O. Ayodele for those interesting studio experience especially those facilitating chats and jokes during moments of "tension."

And lastly, but not in the least my fiancee, Miss Carolyne Gbelee deserves my,thanks for standing by me at all times to give encouragement at trying times.

God bless you all.

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INTRODUCTION

The "Birthplace of A Newspaper" is the title given to the architectural design thesis for which this report is being written to convey a parallel with what heppens in connection with the conception, development, and delivery of a child. The news is brought in by reporters to furnish the conception stage in the editorial section. In the composing room, the newspaper is "developed" and finally "delivered" as an end product of the operations that take place in the press room.

The public sees the "newborn" newspaper in the circulation department.

This report is set in three sections ranging progressively from the general discussion on the history and development of newspaper printing over the centuries in Part I through the thesis formulation and conceptual analysis (Part II) being more specific; on to the final specific design considerations and proposals in Part III.

Newspaper printing is an industry that does not develop strickly along the lines of a profit motivated business but is a business concern that has largely been born out of desire to achieve certain societal goals in way of dissemination of information (news). Thus the development has not been very much identified with the private sector but is being of greater interest to government

(at least in this country). The stakeholder system, therefore, will inevitably include the taxpayer though the transactional stakeholder is the government (state or federal).

However, there are some individually owned and sponsored newspapers though few they are compared to government-owned presses. Even, of late, the government has demonstrated keen interest in the private-own newspapers. It is logical therefore to purport "The Birthplace of A Newspaper" as belonging to a state government.

P A R T I

THE NEWSPAPER AND THE PRESS

newspaper as part of the press - the medis through which the public communicaties.

On the other hand the press has taken its name from the printing press whose development fostered the development of newspaper journalism (which includes publications of periodic magazine as well). This is the grounds on which we can safely (safely assuming that people understand without any effort to explain in detail) refer to the newspaper journalism as 'the press'; and for the discussion in this review it is intended that this assumption will be played in very freely.

However, there is a more technical approach to defining a true newspaper. Here also I quote Edwin Emery, (1962),

> "It has been said that the true newspaper must meet these qualifications:(1) it must be published at least once a week; (2) it must be produced by mechanical means (to distinguish it from the handwritten 'newes letters');(3) it must be available to anyone willing to pay the price regardless of class or special interests; (4) it must print anything of interest to a general public, as contrasted with some

> of the religious and business publications; (5) it must have an appeal to a public of ordinary literary skill; (6) it must be timely or at least relatively so, in the light of technical developments; and (7) it must have stability, as contrasted to the fly-by-night publications of more primitive times."*

His reference is Eric W. Allen (1930).

If we are aware of what a newspaper actually is then we will appreciate what role they have to play in the life of the society and thus their performance can be appraised on the basis of knowledge and not ignorance.

CHAPTER

2.00

DISCOURSE: NEWSPAPER AS AN INFORMATION SYSTEM

Edwin Emery, quotes, "Journalism history is the story of man's long struggle to communicate with his fellow men - to dig out and interpret news, and to offer intelligent opinion in the market place of ideas. Part of the story has as its theme the continuing efforts by men and women to break down the barriers that has been erected to prevent the flow of information and ideas, upon which public opinion is so largely dependent. Another aspect of the story is concerned with the means or media, by which essential news and opinion reached the public, from the days of handwritten 'newes letter' to the printed page, radio, and television."[2]

This is one side of the story when we talk of the role of the press. The other side of the coin is expressed by Richard Brimsley Sheridan when he was quoted as saying, "Give me but the liberty of the press and I will give to

the minister a Venal House of Peers....and servile House of Commons....I will give him all the power that place can confer upon him to purchase up submission and overdue resistance - And yet, armed with liberty of the press....I will attack the mighty fabric he has reared....and bury it amidst the ruins of the abuses it was meant to shelter." (a) This is the side of the story that places the press at counterpoints with the government and is probably in line with what the late Pandit Nehru meant being quoted as saying, "Critisize whenever there is any failure, whenever there is any failing off, whenever there is weakness. Criticism will be an incentive to better work" (b)

Alabi followed this up with a discussion of a seven-point role of the press which he stated as follows:

1. "The mass media can serve as a good critic of the government and of the servants of the public who are in the government, being watchful, and vigilant that public work is being handled properly. In order to accomplish t this actions in perspective for the long run needs of the country. It is not a responsible press that criticises just for its sake.

(a) Edwin Emery. "The Press and America P.3
(b) Y.O. Alabi, "Newspaper Printing Works, Ilorin" 1974 P.59

2. "In a developing country, the press can build national awareness, promoting and defining the national purpose to all the people. In carrying out this responsibility the media can explain the priviledges and obligations not only to individuals, but of the nation itself.

3. "The media in developing countries should provide editorial guidance and serve as a general means of education on matters of state, both local and internation. .

4. "The media should serve as an arm of the government in that it can provide a network for news distribution throughout the nation so that people are informed, and can make intelligent decisions as citizens. Especially should the media dispel rumours and defend the truth.

5. "The communication media can assist in the establishment of law and order. It can foster the acceptance of the will of the majority while at the same time being on guard for the rights of minority groups so that violence does not erupt.

6. "The media can provide a bond that emphasizes unity in the people rather than disunity. The playing up of differences in order to develop sensationalism for media sales

is indefensible. The positive aspects of society are often ignored because they are less interesting than negative. The media must be certain that they are providing a true rather than a distorted view of the people.

7. "The media, if properly directed by intelligent and well-trained individuals, can be used to build an atmosphere of trust, respect and understanding, minimising suspicion and emotionalism. This means that all rumours should be effectively and accurately checked out, the facts behind every story substantiated before printing." (c)

It is in view of these roles the press is supposed to play that a further discussion on the press as an information system is necessary.

2.01 The Newspaper as a closed information system

The survival of a newspaper business is solely dependent on the paper's alertness to the feelings and reactions of the society because essentially the newspaper is a means of transmitting information to the readership. So if the paper is used to carrying information that is not useful to a good proportion of the public which it serves, the obvious impact will be on the sales. The newspaper,

(c) Y.O. Alabi, "Newspaper Printing Works, Ilorin" 1974 P.59-60

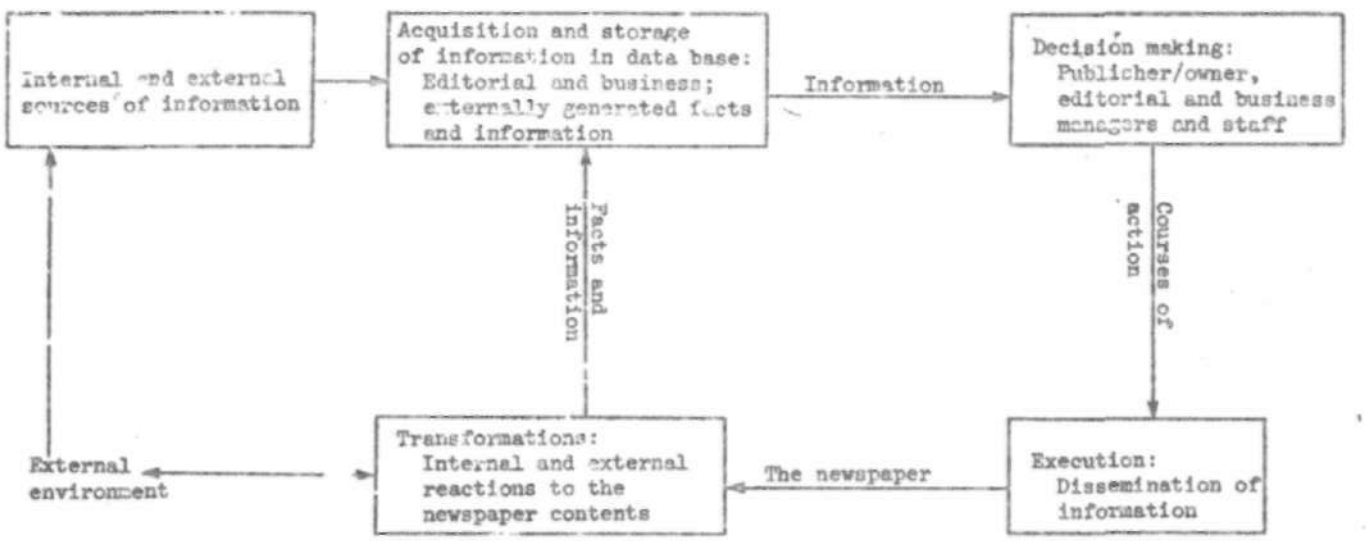


Figure 2.01:
The newspaper as a closed-loop information service.
(Maughdam, p3)

therefore, has to reflect the needs of the community in order to maintain its readership.

As the community interacts with the newspaper a cycle of acquisition of news from various sources in the community, storage of such news item, processing, and dissemination of information which forms an information system results. When the public reacts to the dissemination information by feeding back the system with further information then this system becomes a close-system. This is graphically represented by Fig. 2.01. To illustrate this system with a news item, let us consider a fictitious instance where state government construction project comes to an abrupt hault due to some unforseen circumstances. Mallam Dang, a reporter for a Nigerian Newspaper reports on the progress of the work. Investigations reveal some curious coincidences which imply negligence and shortsightedness on the part of the government officials responsible for the contract in their dealings with the contractor.

Mallam Dang's story is filed at the editor's desk - completing the first phase, or the "acquisition" function of the system. While reviewing the newly store information

on his desk, the editor picks Mallam Dang's story of the government project, and decides to pass it for publication. This "decision-making" on the part of the editor starts a "Course of action". The story then continues from the newsroom through the system to the pressroom. The "execution" of the editor's decision is manifested on the printed pages of the newspaper, which has been "disseminated" through the dirculation department of the press.

It is at this point that many external forces come into play in producing a "transformation" of the information contained in Mallam Dang's story. Letters, telephone calls reveal the reactions of the public either in providing more information or asking for redress. The facts of the public reation may form a follow-up story. The cycle thus closes making the system a close-up one.

2.02 The Open-loop Information System

The newspaper which is usually the end product of our information system may provide information to various members of the community who do the "decision making", the "execution" and the transformation processes themselves. As opposed to the close-up system illustrated in Fig. 2.01

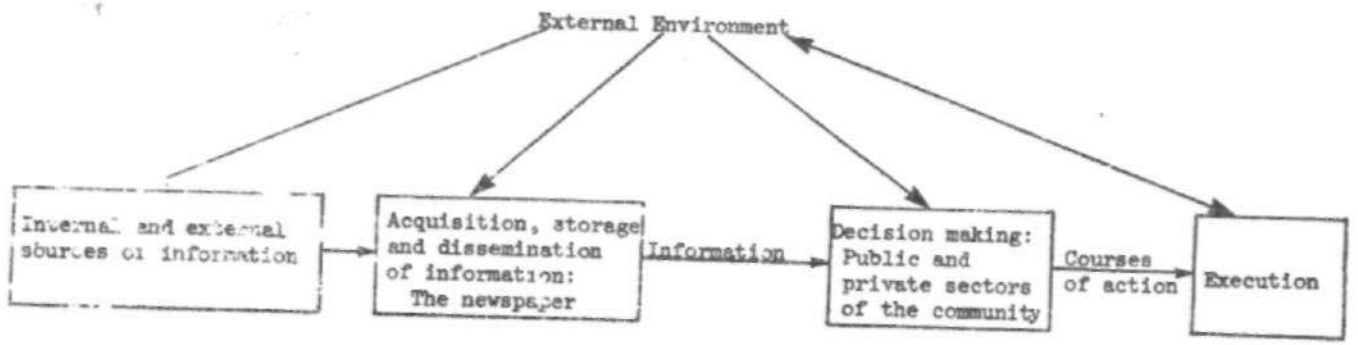


Figure 2.02:
The newspaper as part of an open loop information service.
(Moughdam, p6)

the only characteristic feature of the open-loop system illustrated in Fig. B is the lack of feedback into the information system of the reactions of the leadership. For instance Mr. Okoro has been contemplating on investing on importation of a certain brand of milk. As economic review appears in the Business Times revealing that second brand of milk would attract more market due to a medical report which gives the second brand an edge over the first. Mr. Okoro on the basis of the information in this review decides to change his mind and prefer the second brand. The decision-making and execution may also have been based on other information but the main source is the economic review. Now he may have no reason to report his decision to the press and this may never even be heard of. Thus there is no feedback into the information system to close the loop.

3.01 The First Five Centuries

Before Gutemberg invented his movable type in 1450, newspapers were handwritten as "newes letters". For the period of 400 years after this notable invention and before mechanical implements began to make any impression in the field of newspaper publishing the functions were entirely by manual operations. The reports to be published were handwritten, the type set manually, and the press was run by human labour. Even after the production, it was the human voice that advertised the sales.

The printers of early nineteenth century used the steam engine by adaptation to drive the Gutemberg press. In 1814 Friedrich Koenig invented a steam driven rotary press which made mass circulation of newspaper a reality. In spite of the inventions to accelerate the production of newspapers, there was still a bottle neck because the manual operations of painstakingly settling and sorting individual letters still continued.

Then came the Ottmar Mergenthaler's Linotype machine in 1886 which made the New York Tribune a showpiece. This was where the first line of type was cast on this most revolutionary invention since Gutemberg's movable type. For

For the next 90 years, the Linotype remained the mo2t common machine in the composing room of any newspaper.

3.02 When Electricity came, and Electronic Innovations

Just like good reasons give way to better ones, electromachanical technology came to take the place of the mechanical invention which, though impressive as they were, were still affected by technological advances. Much of the resulting equipments were not 'new', however, since quite a number of them were adaptations and mergers of the technology that were already in existence. Nonetheless there were already far-reaching results. Greater momentum was given to the speed up of news coverage which was created in the 1840s, with the aid of the telegraph and railroad, in the 1880s and 1890s. During those years, telephone lines multiplied, transportation facilities improved and accordingly the publics need of up-to-date information was boosted.

The first teletypesetter came just in time to stop this information "snowball" from becoming an avalanche.

For the first 49 years after the invention of the printed telegraph nobody thought of using this new technology in newspaper works until 1899 when Donald Murray, an Australian

journalist suggested that type could be set by this method. It took Murray's proposal 28 years to get the grips in spite of the fact that the only significant difference between typesetting and the printed telegraph was the variation in widths of characters and line justification. The distinction for having set the first line of type by the teletypesetter goes to Walter Morey of the Teletype Corporation in June, 1927. A couple of years later, 5000 ems per hour were produced by the Gunnett papers of Rochester and New York on their teletypesetter units. Strangely enough the next 25 years still saw many large newspapers without teleptype-setting facilities.

The offset press is another example of the conservative reception given to a new process in newspaper industry. It is a known fact of history that the early offset presses were trouble-ridden machines, which demanded more time for platemaking and outsealed in wastage of ink and newsprint. Skepticism in the indsutry, however, lasted far beyond the infacy stages of this printing technique.

In the United States, the Editor and Publisher reported the first successful use of the offset press as early as

August 8, 1936. The pace was set by Palo Alto's "Peninsular Mirro" for other weekly newspaper which became the most ardent users of the offset technique. The first daily newspaper to record successful printing using the offset method was the Opelousas (La) Daily World, and this happened three years later. Yet the offset printing was not accepted finally as a practicable alternative to the letterpress until the late 1960s.

3.03 Cold Type and Photocomposition

The 1900s brought nationwide expansion of business enterprise in many parts of Europe and America, and, so also grew the need for organised advertisement Campaigns with a corresponding rise in advertising revenues which serve as an incentive for newspapers to experiment with layouts and illustrations as well as with various type sizes. The printing practices of the early 1900s, however, hampered creativity severely. There was no immediate attempt to overcome these restriction, until 1936 when the Boston Herald-Traveler's photoprint system was devised to overcome two of the most common problems met in dealing with display ads: (1) type superimposed on artwork, and (2) revisions requested by the advertiser after the type had been set. The type was

initially set only in galley form, proofs were pasted into panels, and a photostatic copy of the paste-up was sent to the advertiser for approval.

It took a long time to talk the management into experimenting with new processes. An opportunity for the management to be convinced came when, in 1947, The International Typographical Union sustained their strike in Chicago to express their displeasure with the Taft-Hartley Act, for 22 months. The newspapers continued publication, hypassing the typographers and substituting typewritten copy and photo-engraved pages for the hot metal composition.

Although the first patent for phototypesetting was issued in the mid-1800s; and the first photocomposition machine was unveiled in 1950 at the American Newspaper Publishers (ANPA) conference held in Chicago, C.M. Flint, the then director of Research of ANPA was not yet sure of the future. He stated:

"The composing room is essentially a manual operation and I certainly do not know how we can mechanize its to any great degree...The question of where phtocom-position will someday fit into the picture, particularly

for ad composition, is a very complicated one...I do not think it is ready for discussion at the moment". (ANPA Mechanical Bulletin 442, July 20, 1951, P. 222)

Three years later the first photosetter was ordered by the St. Petersburg (Fla) Times from the Intertype Corporation; and the Quincy (Mass) Patriot Ledger was the first to install a Photon in its composing room, in 1954. 27 plants responsible for 53 newspapers installed phtocomposition machines by the end of the 1950s. It would obviously take time and many other factors to convince newspaper owners to invest in the new equipment so the electronic age was far from conquering the mechanical departments of the newspaper. Even at late as 1967 John Goulden, could report a future in photocomposition for only "some newspaper work"* With the same prediction for computer typesetting. Coincidentally, in the same year ANPA published a survey of 135 American newspapers showing a 300 per cent increase in computer use over the proceeding 18-month period.

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*See "Newspaper Management" (London: Heinemann, 1967)

CHAPTER

4.00

THE STORY OF THE PRESS IN NIGERIA

Like any other country that has experienced colonialism and gone through the bitter struggle for independence to its achievement, Nigeria has two eras in her history: the pre - and the post - independence times. The Nigerian press has found its history in both.

The first newspaper, "IWE IROHIN" was the first to appear on the scene in December, 1859, during the pre-independence era. The paper which ran a regular publication of eight pages was published fortnightly by a reverend gentleman, Rev. Townsend who set up his printing press in Abeokuta in 1854. The 20cm x 15cm page sized paper carried its news to the people in both English and Yoruba and boasted of an impressive (then) circulation of three thousand.

Rev. Townsend used his paper to speardhead attacks on slavery and the paper appeared to have survived the fight for eight years.

Closely following IWE IROHIN came about a dozen other papers with their weekly publications at different times in Lagos until 1890.

Then the "Lagos Weekly Record" appeared on the scene and was first published by the Late John Jackson and later by his son, Horatio who lived between 1890 and 1930. He was one of the greatest pioneers in the history of the Nigerian journalism.

The role of newspapers as assets to political achievement became evident when the later Harbert Macauly established the "Lagos Daily News" in 1922 during the formation of the National Democratic Party (NDP). In the same veins several national dailies were established in Lagos. The primary purpose was to put accross the views of the political parties in addition to their other functions as newspapers.

The story was toned slightly differently for the Daily Times. Since the absorption of the original company by oversea interests in 1943, it has maintained a neutral role in party politics, while at the same time attempting to promote economic and social interests of Nigeria as a whole.

Most of the newspapers belonging to the great nationalists are now defunct; only the "West African Pilot" has survived the test of time.

After 1960

The attainment of Independence in October 1, 1960 gave the Nigerian press a new vision, a new purpose, and, consequently, a new direction so the newspaper had to adapt itself to a new role. Political agitation was no longer the primary area of concern. The main problem facing the nation (and they are still the problems today, except, maybe, in different shades) are how to forge a virile and united country out of the conglomeration of ethnic groups in Nigeria; then, we are faced, full height, with the second problem of how to develop the country's economy rapidly enough to give the masses a decent standard of living and in so doing satisfy their legitimate expectation in an independent Nigeria.

In recent times....

To achieve some of the roles of the newspaper discussed by Alabi (1974), the State and Federal governments have decided that direct proprietory would enhance effectiveness especially in areas of projecting government aims, and objectives. So one of the most recent developments has been the establishment of newspapers sponsored by Federal and State governments. These exist side by side with those owned by individuals and corporations (see Appendix 4).

On a memorable day in August 1975, the Federal government announced her acquisition of the total equity of the New Nigerian Newspaper Limited; and through its wholly-owned National Insurance Corporation of Nigeria (NICON), acquired 60% of the equity of the Daily Times of Nigeria Limited. New Boards of Directors for the two leading daily newspapers have since been appointed by the Federal government.

Then, in addition to the existing newspapers owned by the State governments the Benue State Government has set up the 'Nigerian Voice' which is now being printed by the Star Printing and Publishing Company in Enugu. The recent announcement by the People's Redeption Party, (P.R.P.) governor of Kano State, Alhaji Abubakar Rimi, of his governments intention to set up a Newspaper in the state is a further indication of the important role a newspaper could play as an organ of the government.

In more recent times...

In more recent times the political activities that resulted in the voting of the National Party of Nigeria (NPN) into the government have cleared the throats of many national dailies and one or two others were born during the tense period o partisan politics. Such include the Nationalist which was established in 1979 and one that narrowly missed the

period, maybe, by design is "The CONCORD" published by the Concord Press of Nigeria Limited, being launched in March, 1980. It is not categorically clear that they belong to any particular political party.

4.01 The Nigerian Newspaper and Financial Support

When one realises that, on the average it costs about 50k to produce a copy of the newspaper which costs 20k at the vendor's stand, it should be clear that one of the greatest problems the Nigerian Newspaper business faces today is how to survive in the face of such apparent loss of 150%. It is only too obvious to say the when one loses 30k for every 20k one makes, in a business it becomes necessary for financial support to be secured from other sources if, for any good reason, the business must continue, let alone when the proprietors have some gain in mind.

Apart from the financial returns in a newspaper business, there are other major aims involved. Such aims may be political - to be used for electioneering propaganda; administrative - as an organ of the government to be used in diseminating government information. For such aims it might be worth the price and the proprietors pay the price

in many cases; but a wiser thing to do is let the business sustain itself.

Advertisements

This forms the main source of income for the newspapers. Advertisements are highly necessary to promote sales and thus foster commerce and industry. In fact much of the life of an industry hangs on its advertisement programme so much so that many industries and business enterprises have advertisement sections with full time officers who will not leave any stone unturned in search of opportunities to blow their trumpets. It becomes highly necessary for each producer to attract the attention of the consumers in a competitive market. There are several advertisement agencies in Nigeria which include advertising companies like Afromedia, the radio commercial services, the T.V. and the newspapers and magazines.

To have an idea of the advertising business in the Nigerian newspaper, a full page advertisement in the New Nigerian Newspaper costs about ₦300.00. It costs more in the Daily Times and even more in the Sunday Times.

The cost of advertisements in the papers is proportional

to the circulation of such newspaper which in turn depends on the reputation the newspaper has built for itself. So this is where the gain comes from in the press business, and the life of the business so depends on the advertisements that the materials to be considered for each issue is dictated by how much space is left after the advertisements have been put on. This is not to say that other important features of the papers are not considered but it is a matter of priorities. Advertisements are given prominence, sometimes, to the neglect of some other news items. In fact up to 50% of the paper could be devoted to advertisements, obituaries, and announcements. The justification of this practice is another matter.

The other source...

One could see one or two newspaper houses today owning tall office blocks in their premises. Apart from their need for more office spaces due to expansion which might not have been taken care of in the initial design, these offices are to let - another financial buttress. Examples include the Nigerian Standard, Jos, and the New Nigerian Newspapers, in Kaduna.

4.02 Crisis point - The Newsprint

The main physical raw material for newspaper production is the newsprint. Whatever, then, happens to the source of this material is of grave importance to the newspaper business.

The fact is this, the world is running out of paper! The crisis affects the world over. That the production of newsprint is not meeting up with the demands for the fast increasing number of newspapers (The largest single consumer of newsprint) being set apart, the disposable culture of our modern technology has worsened the situation. Diapers, paper napkins, tissue papers, paper towels et cetra are a few examples.

In 1973, the newsprint consumption went up by about nine per cent in the United States of America, and Japan having consumed all it can produce now imports newsprint - up to as much as 30 per cent of its growth requirements

An idea of how much the consumption is all over the world will help us to understand how insatiable the appetite newspaper organisations have. The Evening Standard of London for instance uses an average of 140 tons* of newsprint daily

*Newsprint is measured in tons or 'tonnes' (1 tonne is 0.9842 of a ton.)

while the Daily Times of Nigeria Limited uses 900 tons a month.

The only reason for the subdued increase of the cost of the newspaper is the increase in advertisement but this has its limit because advertisement take a lot of space and without care the news-circulating, and educative aim of the newspaper could easily be lost.

The major producers of Newsprint basic material, pulp, include, Canada the United States of America, Japan, Finland, the Soviet Union, Sweden, and Norway - from the greatest producers to the least.

Gradually their forests are being exhausted so their attention is being directed towards producing for home consumption -- thus putting countries like Nigeria which depend nearly solely on importation (though happily enough Nigeria is investigating seriously into possibilities of using "GMELINA" found in Kwara State) in some serious trouble.

Just over a decade ago, newsprint was in surplus so producers did not consider any anticipated expansions a realisable idea and some even closed down some of their plants. So the sudden rise in demand was surely unforseen

and therefore unprepared for - and it takes three to four years to get a plant going!

Prospects for news expansion was v ry dim and highly uninspiring. The greater discouragement comes from tree owners who would prefare to sell their wood in form of cut logs and for purposes other than paper because they get better prices for it. Further more paper companies like the Bowater U.K. Paper Company which produces some 250,000 tons of newsprint a year does not have any further expansion in mind. The Chairman, Mr. Tony Gammie was quoted as saying, "we are running at the maximum economic level. We do not intend to invest in new plants"

The prices of newsprint quoted (1973)* from the British mills is in the tone of ₦148 a ton, for Scandinavian mills it was ₦154 a ton while if stood at ₦139 a ton in Canadian mills. Since then the prices have gone steadily up.

Solution

The idea of closing the newspaper business is not in our interest so something must be done to curb the situation. An alternative raw material to replace wood is necessary.

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*Evening Standard, London, Tuesday September 4th, 1973

There has been some attempt by scientists, though, sadly enough, with limited success on a number of things. In Japan, they are thinking about plastic - experimenting on very thin films. The Swiss on their own part intend to synthesise some form of paper from such fibres as nylon and rayon.

However, it is unfortunate that the developing countries in the Southern hemisphere do not seem to be making any attempt at paper production or its alternative.

One would have thought that their natural handicap of not being blessed with pulp trees (the pine and other canivers which produce the best paper are found in the Northern half of the globe) would drive them to thinking of other ways and methods.

In Nigeria however, there are some promising raw materials. The gmelina in Kwara State has been mentioned. Another plant is the KENAF which, incidentally, can be cultivated without much force, in most parts of the country especially in the deciduous zones.

The kenaf has a particular advantage over the pine. While it takes the pine 15 years to mature and ready for use,

the kenaf can be harvested every year.

4.03 Newspaper Distribution I: UNESCO (World Press Survey)*

The last UNESCO survey of about two decades ago (i.e. before 1960) reveals the general picture of newspaper publication in the world press.

The Federal Republic of Germany was credited with only 623 newspapers, and not 1,464, which, in fact appeared. This was because only the main editions were considered. The survey did not include the Soviet Union and its sta Satalites for lack of relevant information. The free world was revealed as having some 7,520 daily newspapers with a total circulation estimated 217 million copies. This means on a world basis, an average edition per paper of 28,900 copies showing that each day 88 papers appear per thousand persons.

The UNESCO survey team's calculations reveal the following results of registered main editions:-

United States of America	1,865
China	776
West Germany	623

*ALBERT DVESENBERG, "The Press in Germany" M. Scholl, publishers, Bonn. 1960. pp. 27 - 28.

At the time of the survey 13 million was given as the total number of newspapers printed in the Federal Republic of Germany which figure, however, had increased by 4 to 5 million by 1960. At that time, too, the United States had a total of 53 million copies while Great Britain had 31 million.

There had been an astonishing increase in the number of papers which appeared in Red China. In 1951, the estimate was 3.4 million while about twenty years ago the figure was given as 15 million. (The population then was about 600 million).

According to figures published by UNESCO in 1959 the total figure stands at 35,000 of newspapers appearing throughout the world, and they appeared in a total edition of 250 million copies. At about the same time of the publication of these UNESCO figures, Moscow announced a total of 10,088 newspapers in existence, having a total edition of just under 60 million copies and published in 67 languages. Approximately 800 periodicals had a total annual circulation of 466 million copies. From these figures the number of newspapers published in Russia had increased ten-fold since 1913.

Readership

The readership revealed by the UNESCO figures quoted Great Britain first place with 611 daily newspapers per 1,000 inhabitants; while the Federal Republic of Germany came after quite a number of countries, even sparsely populated countries like Iceland, Australia, and New Zealand, with a 262 papers per 1,000 persons.

Language

It is noteworthy that at this time 11 percent of the newspapers appearing in the free woeld were published in German. Comparatively English language has figures for all papers as 31.3 percent and 44.4 percent for all world editions.

4.04 Newspaper Distribution II: Back home in Nigeria.

(two case studies)

The essence of newspaper printing works is for distribution to the readers for whom it seeks to serve. The aim is to circulate the copies in such a way that the readers have their copies made available in such a way that everyone could read the same news at about the same time. This is because news which is the factor of commerce in this business

loses its value with the passage of time. It is most valued when it is "hot" and thus has greater influence on the people the closer the time of the report to the time of occurence.

The two largest newspaper business will, therefore, be discussed in regard to their circulation.

The mode of transportation services employed for the circulation purposes in all the newspaper houses depend on two factors, speed, and cost. The airplane would have been ideal for its speed but the cost is too exhorbitant and the train which is very cheap is too slow. So the motor transport system has been adopted and is being used extensively (in fact almost solely, except for pedal cycles and powered cycles employed for local circulation, and, of course, the foot).

(a) The Daily Times of Nigeria Limited

Being the largest newspaper house in Nigeria (and, in fact, in Black Africa), the Daily Times should be expected to have the most efficient and organised circulation strategy.

"Founded in 1925 and developed in partnership between the Daily Mirror of London and Nigerians, it now (as at 1974) publishes:

The Daily Times - 200,000 copies daily

Sunday Times - 350,000 copies weekly

Lagos Weekend - 23[illegible],000 copies weekly

Sporting Record - 71,000 copies weekly

Evening Times - 25,000 copies daily.

In addition to these, it publishes periodicals such as 'Home Studies, Woman's World, Headlines, Spear and other trade journals." *

The publishing house being in Lagos with a distance of over 1500 kilometers from Maiduguri, one of the farthest circulation points it would be interesting to take a look at the details of the distribution program.

The journey begins every day of the year between 3.00 p.m. and 12 midnight when six laden lorries take off from Lagos (See Fig. 4.04a).

One leaves for Kaduna (898 kilometers away) at 3.00 p.m. arriving there 16 hours later at about 6.00 a.m. next day. The Kaduna office supplies Kano (253 km in 3½ hours) and Jos (320 km in 4 hours).

Another lorry (5 tons), this time, heading for Benin (328 km) leaves an hour later at 4.00 p.m. and reaches there

*ALABI, 1974, the words in paranthesis are mine.

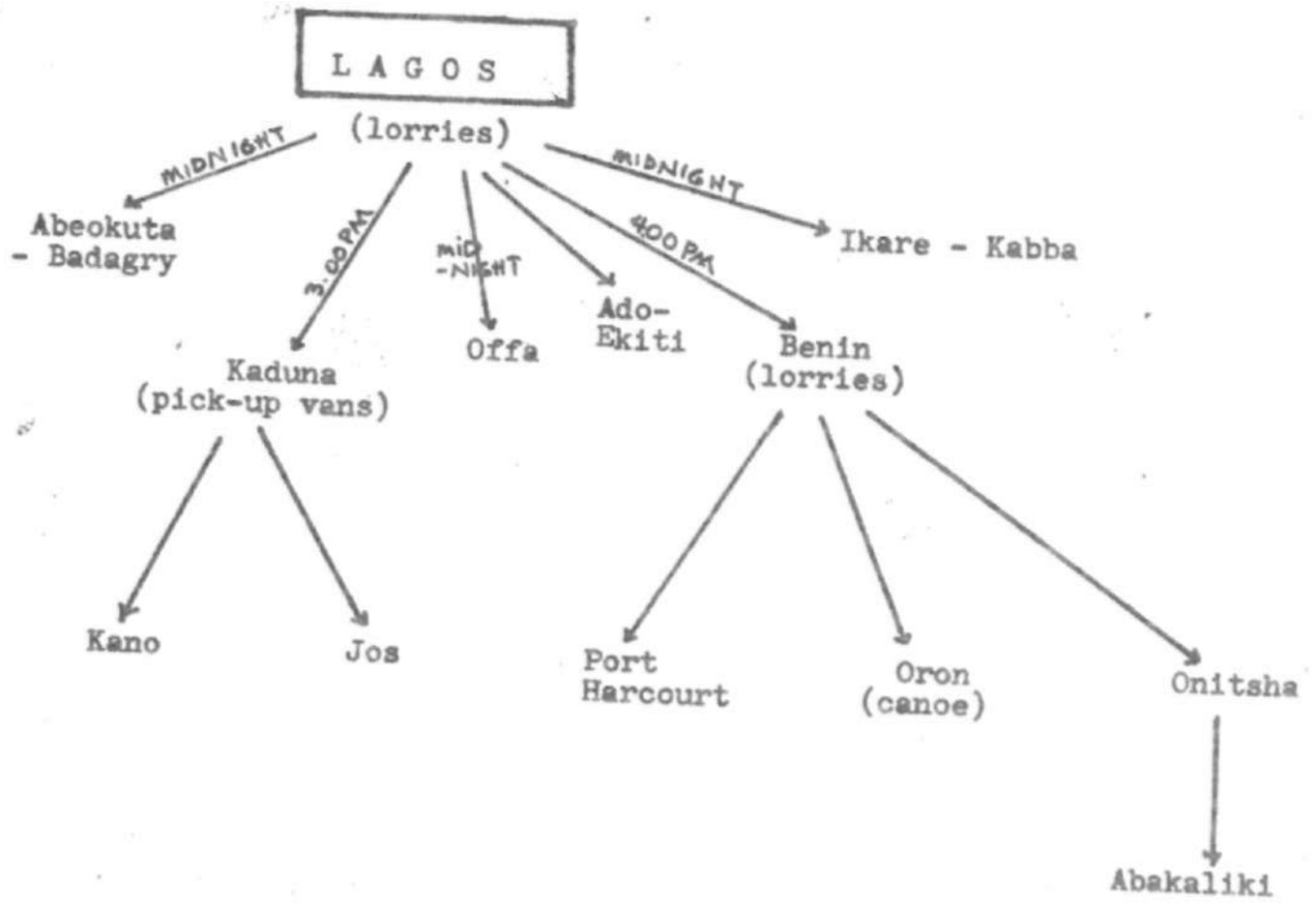


Figure 4.C4:
Distribution network of the Daily Times of Nigeria Ltd.

there after seven hours where three others take over the relay: one for Port Harcourt (225 km in 4 hours), one for Oron (320 km in 5 hours), From Oron at a point the load is transfered into canoes which take the papers to the creeks. The third lorry leaves Onitsha for Abakaliki (208 km in 5 hours).

The remaining four 5-ton lorries at Lagos leave for other points of Nigeria like Offa (368 milometers in 8 hours), Ado Ekiti (685 kilometers in 7 hours), Abeokuta, then on to Badagry (365 kilometers in 7 hours) and the last one for Ikare, then to Kabba (462 kilometers in 9 hours)

These lorries have about 44 reception points (Offices) which the company itself owns and from where more detailed distribution is carried out to about four hundred readside agents. With a total of sixty six drivers permanently on the wheels each day of the year, each of the lorries cover an average of 150,00 to 200,000 kilometers over one and half years. After this eighteen month operation, a lorry either becomes irrepairable when it breaks down or uneconomical to maintain so it is written off.

With such organisation one could get his paper as early as 4.00 a.m. in such places like Jebba.

The company then takes advantage of public transportation from these 44 offices they maintain for purposes of continued distribution to other localities as far as 640 kilometers away. Other magazines not necessarily published by the company, which are imported from Europe and America (about 1000 titles). On days when the company's weekly publication is out some special provision has to be made for extra vehicles to be provided to carry the magazines and other imported titles.

One could see, then, that bad roads as there exist in our country, so exist as economic jeopardy to the company whose economic interest is in the efficiency of this network both in terms of timing and the effect on the vehicles.

Then came another problem in August, 1973 when, in Lagos, the Evening Times to be distributed daily at 2.00 p.m., was launched. There was (and there is still the remains of the problem in spite of "necessary measures") traffic problem. How was the circulation going to be achieved when in one and and half hour's time the distributors would be held up in the traffic jam of closing hours.

Two methods were developed.

One was the use of poneered cycles which in such situation beat speed cars to the race. The cycle riders distribute the papers to shops and kiosks on the basis of how much money the shopkeeper pays for the previous day's supply (so in effect he is paying for the supply delivered to him).

The other method (an old method in Europe) is the use of school boys. With the parents' approval, the boys would distribute the papers after school hours along theirs streets. The day's supply is picked up on their way home from school or the scooter rider delivers it to him, while he (the supplier) dollects the money for the previous days sales less the contractual commission.

(b) The New Nigerian Newspapers Limited

With an average daily publication of about 100,000 copies daily of its newspaper, the New Nigerian Newspapers Limited is next to the Daily Times of Nigeria Ltd. (with an average circulation of 200,000 daily).

Being much younger then than the Daily Times, the Company has not yet developed a circulation system as comprehensive but had a very limited circulation. Due to this many

parts of the country read the paper a day or two later so the financial returns was seriously effected.

Something better had to be developed. Though the system the Daily Times had adopted does work effectively, the New Nigerian decided to try something else.

Just over seven years ago, the decision to establish another press was implemented - the second one being situated in Lagos. Until this time, the only press the company owned was in Kaduna. The anticipated effect of this two-press, simultaneous publication system is two-fold. One, it enhances greater distribution because the capacity of each press is greater than half of the original single press (See Table 4.04); and, secondly, since the distances are now limited for the individual presses, the distributions would now be more efficient and with generally shorter distances, the maintenance of the vehicles would not pose an economic threat.

The Northern edition takes care of the northern half of the country while the southern half is provided with the southern edition. However the two editions are not exactly

Table 4.04:

Sales forecast, New Nigerian Newspapers Ltd. (Alabi, p69)

States	Before the simultaneous Printing	First 6 months of Lagos Project	1 year
North-Central	13,215	14,200	16,215
Benue Plateau	8,950	9,625	12,950
North Western	5,380	8,200	10,380
Kano State	8,450	10,600	12,800
Kwara	3,830	6,200	8,300
North Eastern	5,640	8,500	9,500
Mid Western	400	1,950	2,850
Western	1,750	2,800	3,980
Lagos	6,050	8,600	12,000
[illegible]	2,010	3,000	4,500
Rivers	405	1,000	1,800
South-Eastern	680	1,200	1,600
Subscribers Overseas	600	1,000	1,500
Subscribers Nigeria	500	1,000	1,200
Grand Total	56,160	76,975	100,175

the same. With the exception of the Editorial comments, the middle and back pages, which are usually of the same contents, most other contents are slightly different. A proper investment into the use of teletypesetting system, the situation can further be improved.

CHAPTER

5.00

MY PROPOSAL

With the role of a newspaper discussed in an earlier chapter (see chapter 2.00) at the back of one's mind; and viewing Nigeria, a developing country, with more than 235 ethnic groups and noting that these numerous groups have sharp differences in language and culture, one could clearly see that the newspaper cannot just remain a "watchdog" of the society. There is a greater task of educating Nigerians on what Nigeria stands for and what it means to be a Nigerian. When we address ourselves to this socio-political, and socio-cultural problems, we would begin to see the great difference that there is between identifying one's self as a Nigerian from one of the ethnic groups, on one hand; and identifying one's self with a tribe which happens to be within the Nigerian geographical boundaries. The difference is that of loyalty.

This is why I would support the efforts of any government that sets up a newspaper for the purposes of educating Nigerians about Nigeria and other Nigerians; and projecting the common grounds on which we are all Nigerians rather than playing our harsh differences into the limelight.

This is why, inas much as I am not proposing the establishment of a newspaper, I would like to register my support for the efforts made by the Peoples' Redemption Party (P.R.P.) governor, Alhaji Abubakar Rimi of Kano State to establish a government owned paper in the State by addressing myself to the problems in designing a newspaper printing complex with a particular reference to Kano as my site.

It is encumbent on any State government, as a duty, no matter how literate the citizens of Nigeria in that State are or "developed" the State is, to educate, enlighten and keep them informed.

The proposed newspaper surely does not have it as an intent to surplant but to supplement the existing ones in the fight against ignorance by their dissemination of highly subsidised news both in the national language (English) and the vernacular.

Thus Nigerians, rather than being manipulated due to ignorance will be liberated from the hideous teeth of ignorance and illiteracy. This to my mind, is what the United Nation's Commission on Human Rights mean when they included information in the charter as one of the basic rights.

The government should, therefore, stipulate their aims and objectives as regards this newspaper in such a way as to enhance adequate communication between herself and the governed so as to avail herself with one of the most effective tools in educating the "masses".

In addition to the daily newspapers, I would recommend that any government owned paper also publish magazines and gazettes. To begin the printing will be in black and white but the design will be such that when there is the need for colour printing, there will have been an adequate provision made to cater for it.

5.01 Volume of Publication

If the last national census is anything to consider with the remotest benefit of the doubt one can assume the population of Nigeria to be about 80,000,000

Five years ago, Alhaji Babatunde Jose, the Chairman and Managing Director of the Daily Times of Nigeria Limited, projected an increase in the Nigerian newspaper readership by 50.75 per cent.by this year, 1980.

Then, only about 5% of Nigerians had access to the newspaper, making the readership figure to stand at,

$$\frac{5}{100} \times 80,000,000$$

$$= 4,000,000 \text{ Nigerians.}$$

so today the readership should be

$$\frac{150.75}{100} \times 4,000,000$$

$$= 6,030,000$$

Now in five years time (i.e. by 1985), if Alhaji Jose's projection remains constant (and in five years it should have changed appreciably), the readership will increase to:-

$$\therefore \quad \frac{150.75}{100} \times 6,030,000$$

$$= 9,090,225$$

Using UNESCO's standard of one copy of the newspaper for every six people in developing countries.

No. of Newspapers to satisfy this standard in 1985 will be:

$$9{,}090{,}225 \times 1/6$$

$$= 151037.5$$

$$= 151038 \text{ copies}$$

No. of existing newspapers = 17

Assuming these existing newspaper works will only expand and the proposed one will be the only one added to the number by 1985, each press will have to, in five year's time from now print

$$\frac{1515038}{17+1} = \frac{1515038}{18}$$

$$= 84168.78$$

$$= 84169 \text{ copies daily.}$$

So the proposed newspaper should be geared towards a production of about 90,000 copies daily by 1985.

5.02 Volume of Magazines

Assuming that the volume of monthly magazines to be produced will be about 25% of the figures for the newspapers, Magazine production will be:

$$\frac{25}{100} \times 84169$$

$$= 21042.25$$

i.e. 21043 copies per month.

PART II

TOWARDS A THESIS DEFINITION

CHAPTER

6.00

(MY) CONCEPT OF ARCHITECTURAL THESIS

A thesis is defined by The Shorter Oxford English Dictionary on Historical principles a "A position laid down or stated especially as a theme to be discussed and proved, or to be maintained against attack," and the Chambers Mini Dictionary says that a thesis is "...a statement of a point of view."

From both definitions one gathers that a thesis is a stated standpoint on any issue for which a prove or defence for mainteining is necessary. It, therefore, by implication has to generate some controversy to a certain extent that would required sound consideration before acceptance.

An architectural thsis is no different. It consist of a design proposal based on a statement of a definite standpoint in design considerations. Usually, however, all design considerations could be considered basic principles of making provision for functional demands, aesthetic appeal, economic satisfaction within a prevailing cultural and legal systems.

An architectural thesis, therefore, is expressed in individual leanings and points of emphasis.

There are two* points within the marriage of which an architectural thesis is born. They include the social content of one's architecture and the physical hardwares with which this, social aspect is fulfilled. A thesis therefore is the tool and method with which the express problem of the social architecture is solved. This is a function of the architectural philosophy and the architect's background which necessarily includes his training and architectural experience.

An example...

An architect desiring to determine and solve the problem of an office accommodation would first of all discover for himself what the problems are in maybe existing solutions. One of the tools that could be used is the Semantic Differential Scale Model (SDSM) (see Appendix I). From this he may discover that occurence of such an office are not afforded the flexibility they require by the existing design or he arrives at a conclusion, from his study of the essence of such an accommodation, that the optinium solution to their

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*See Fig. 6.00

problem would be maximum flexibility. Then he goes on to select the hardware system that would afford such a solution. His thesis, then, would be a statement that expresses this problem, and the tool and method that would achieve the proposed solution (i.e. a marriage between the social and physical architecture).

6.01 Problem Definition*

There are four main methods (models) of approaching architectural problems and/or solutions:

Model One

In the model the architect accepts the information he is completely and this forms the basis on which he draws up his brief without questioning it. Thus the model one architect "beiins his development process with minimum uncertainty" about what the architectural problem is. His concern then is not "what" the problem is, but "how" to solve it. He then goes straight into the different stages of architectural problem solving.

In this model (one) the interaction between the architect and the stakeholders (the developer inclusive) is a coercive one. Only the architect needs to understand the

*Dr. Albert Ikomi ( ) p.

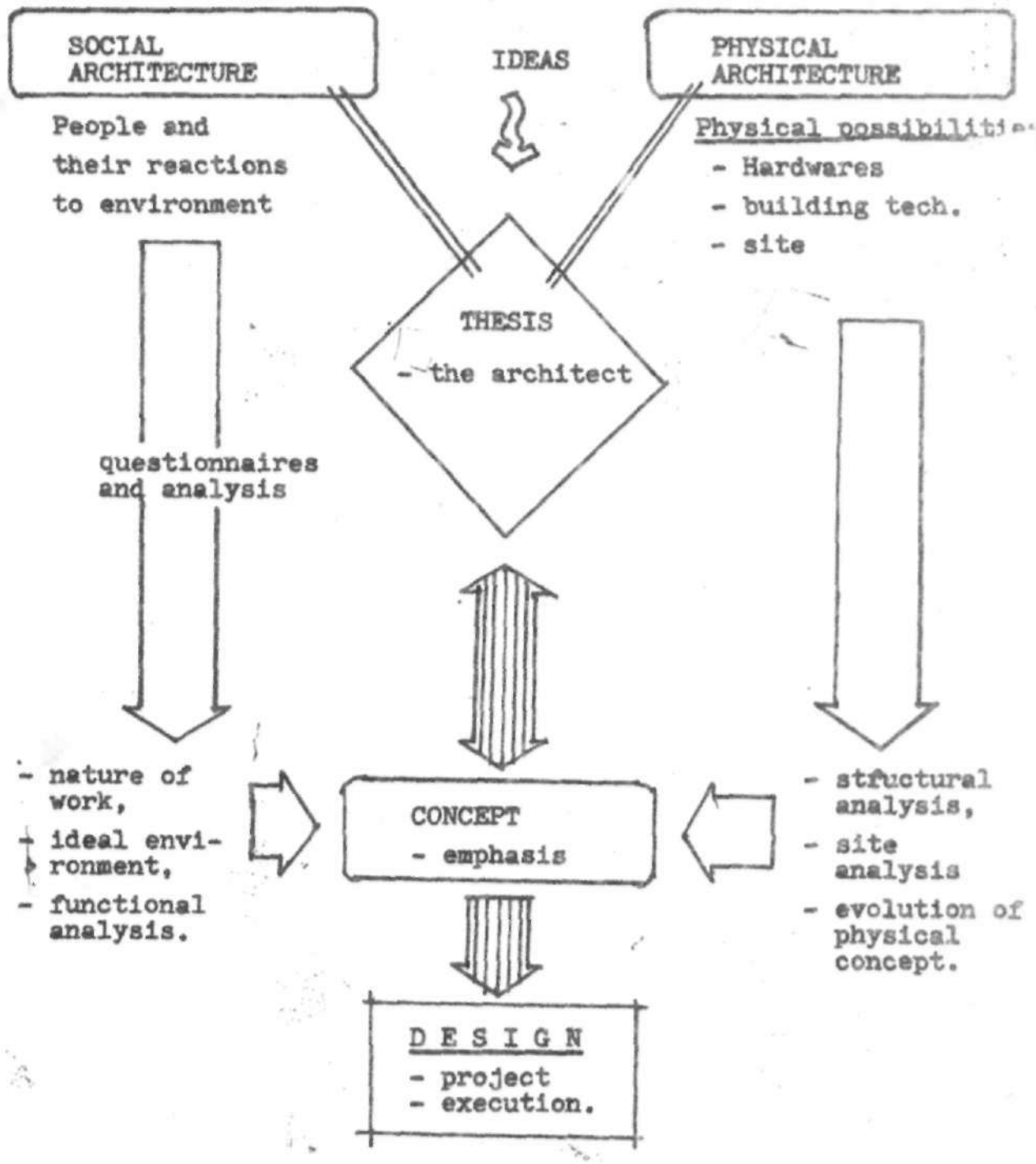


Figure 6.00:
Concept of Architectural thesis
(Udenyi)

idea the developer has on the basis of which he prepares his proposal(s) so there is minimal shared understanding.

Model Two

The Model Two architect is very much like the Model one architect except that he "begins his problem definition with minimal uncertainty and proceeds to adopt higher uncertainty in the problem solving stages." He begins like in Model One by accepting completely the information (brief) he is given and goes ahead to establish a physical architectural viewpoint. Differein, further from the Model One architect the Model one counterpart he is concerned with the "how" of the problem solving and does not ask the question "why" at the stage when the problems are being defined.

Some feedback systems have to be established so that the cyclical process narrows to an acceptable architectural solution which satisfices the fixed design criteria established at the problem definition stage. Thus in this model the interaction of the Architect with his client is a bargain system in which the transactional stakeholder tries to trade off or persuade the architect to swarp some design attributes

of the project idea for a higher advantage in a business-like or contract-like manner.

Model Three

There is a sharp difference between this model and the two above since the architect in this model adopts maximum (explicit) uncertainty, from the onset, what "the casual texture of the project's constituency" is. He first of all goes in search of how best to represent the stakeholder system. His goal is to minimise the uncertainty in the description of the design problem and in the identification of the appropriate response in the problem solving stage.

The problem definition in this model, therefore, has direct link with problem solving as well. It is only after the agreement has been reached among the stakeholders to a sufficient extent about what the dominant (and challenging) ideas of the casual texture of the project constituency is that development resources are committed to describing any physical solutions for the architectural problem.

In this model the level of discourse is persuasion. The architect tries to persuade the stakeholders to see the design consequences as he does see them so that they both (with other stakeholders) will agree on a dominant idea.

Model Four

There are many characteristics that are common to models three and four. The operational difference between these two models is that for the model four architect, there is no difference between problem-definition, and problem-solving. He adopts explicit (or maximum) uncertainty for both. He has to describe "the casual texture of the project's constituency and the rival ideas of the development"; and to describe "the shared idea or additional competences that the developer must acquire through joint venturing to realise success".

In this model the architect has to engage himself in active experimentation with rival ideas and abstract conceptualisation of his view points. Therefore, in his work research in terms of dialogue goes on hand in hand with his design (or problem solving) process so as to afford him the establishment of the necessary information system that enables him to improve his products.

The architect-stakeholder interaction is such that the cooperation element of the persuation becomes dominant (dialogue) thus creating an atmosphere in which both parties are readily instrumental to progress by being alert to expose the logical fallacies of the different stages of the problem-solving

process. Even when there is a comflict, each party in trying to make explicit, its ideas and to defend them may expand, confirm, or question their very standpoints. This weakens the chances of hardening rival positions.

While models one and two architects concern themselves with only the physical architectural solution which satisfy the "how's" of the problem - thus being effective only in simplistic work settings, the models three and four architects tend to be effective in both simple and complex problematic situations because they ask the right questions. But unlike model Three, the model Four architects tend to find more innovative solutions to problems where the others fail.

The choice of any of these four models in the proposition of an architectural thesis depends on the architect - how he plans to approach the architectural problem before him - and the situation of the problem.itself.

CHAPTER

7.00

SOCIAL ARCHITECTURE: A LOOK AT SEMANTIC DIFFERENTIAL SCALE MODEL (SDSM)

The purpose of any architectural project is to cater for the facilitating microclimatic conditions and functions of the social behaviour for which the project is being carried out. These behaviours may be determined by the societal role to which the occupants of such buildings are committed. Examples include living (as in a house), administration (as in offices), business (as in shops and other commercial buildings), etc.

Since this is the case the best solutions must be those that have significantly taken into consideration such behaviours in as much details as information is available in regard of; and such details (or information)to determine them are best gathered from "the horse's mouth".

In the research for the design of "The Birthplace of A Newspaper" the tool used to gather the necessary information in terms of social behaviour and conditions from the on-the-job personnel is the Semantic Differential Scale Model (SDSM)

developed by Hershberger, R.G., Vielhauer, J.A., and Canter, D.V., which is a set of bipolar adjectival scales. Their work seems to have been a follow-up of, and developed from Osgood's work (with two other coleagues: Suci, G.J., and Tannen Baum, P.H.): "The measurement of meaning"(1957).

Canter comments on Osgood's work:

"The interesting discovery that you could organise descriptions into fairly simple groupings was first shown consistently by Osgood et al. Osgood himself did not really think of his categorisation as groupings but rather as arranging the descriptions according to underlying dimensions. The easiest way of coming to understand "underlying dimensions" is by considering Osgood's early idea about the meaning of words. He says when he was still quite young he thought of Roget's Thesaurus as 'a vivid and colourful image of words as clusters of starlike points in an immense space'. This idea seems to have re-emerged in a more scientific form following his study of synesthesia".*

In defining what Semantic differential stands for Canter argues:

"If then, we take a series of bipolar adjectival scales which have seven point divisions and ask people to rate a

*see Canter (1974) p.76.

series of concepts or objects then we have what is sometimes referred to as a 'semantic differential'. Technically, however, it is only really appropriate to refer to sets of scales derived or descended directly from Osgood's work."*

And again Canter gives reason for the bipolar nature of the scales:

"The reasons why we might expect to present the adjectives in this bipolar form would be more valid relate both to the fact that if a person knows what both ends of the scale he is using are, then he is more likely to use that scale in an intelligent and consistent fashion, and to the fact that dealing with things in an either/or way (e.g. dealing with them as either good or bad) is quite common".*

In using this tool, the user of an existing spaces asses the space's contribution to his efficiency. This tool can be used also in assessing different building though in this research it was used to get information about the internal environments only.

The procedure suggested by Hershberger for using this semantic differential scale is that:

"We first obtain from the user group, or a random sample of the user group, their assessments of a representative sample of buildings presented by colour slides and using the

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* See Canter (1974) p 78.

Hershberger - Cass Base Set of Semantic Scales. The sample of buildings are selected by the architect to include (1) a variety of building types and styles which represent a range of approach to the solution of the particular design problem, as well as (2) a number of unrelated buildings which might reveal the extremities of judgement of the user group. It is felt at this time that a standardised set of buildings could not be selected that would adequately reflect the diversity of architectural commissions possible and, furthermore, to be most effective as a practical research tool, the building selection ought to reflect the particular architect's preferences and non-preferences in order to convey the most useful information to him. In this regard it should be pointed out that individual architects might wish to add one or more bipolar scales to the Hershberger - Cass Base Set in order to obtain ratings of particular interest to them. Factor analysis of the result will, of course, reveal if they are actually tapping new dimensions of meaning in so doing, or if the scales established in the previous studies actually represent these areas of meaning as well"*

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* Ikomi (1979) p.73.

Commenting on this usage Dr. Albert Ikomi quotes: "If the architects predictions are very close to those of the user group, then, the architect's intuition about the user group is sufficient to predict the user's responses. If the architects' prediction about the user group are quite different from actual user responses, but his personal responses are quite similar, there is no need to proceed further. In this case the architect will have seen that the user is really quite a lot like himself and that he need only let his own judgement be the guide. He can essentially design the building for himself. If the architect's predictions about the user are quite different from the actual user responses for some or all the buildings, then, a systematic prediction/learning process is in order, otherwise, the architect is likely to design the building with erroneous ideas about how the user will respond to it."

"Under this circumstance Hershberger proposed three alternative approaches to the prediction and learning process:

"(A) The architect should engage in an interactive educational process:

"'The first, most obvious, approach is to show the architect the results of each building comparison so that he

can observe the magnitude and direction of the differences between his prediction and the mean user responses. In this way he can gain a better understanding of the user group, himself, and his ability to predict. If some differences are particularly disturbing to the architect, he can make contract with representatives of the client/user group to begin an interactive educational process to discover why the differences occur, to try to establish a mutual understanding of the differences, and to try to determine if they are important enough to cause problems'".

"(B) The architect could train himself to assess buildings in the same way as do his clients:

"'The second approach is more of a behaviour modification process. In this case the architect actually trains himself to assess buildings in the same way as do his client/users. The architect will first be shown the prediction-user profile for the building, in which the overall magnitude of differences were greatest, After studying the results he will be asked to re-evaluate his predictions for one of the other buildings. The re-evaluated predictions will then be charted over the earlier user responses and architect predictions, and shown to the architect. He will again study the results, noting on which scales he has come closer to the

client/user mean, those on which he has gone further away. The same procedure is continued through the remainder of the buildings, or until the architect learns to predict the user responses with considerable consistency and accuracy. Upon completion of this procedure it is, of course, possible to contact representatives of the client/user group, as in the first procedure, in order to establish a mutual understanding of the differences'"

"(C) The architect would need to establish criteria of successful prediction and strive to realise them:

"A third approach to learning how to predict user responses, more closely related to concept formulation theory* would be conducted somewhat as follows. An associate of the design architect would analyse the results of the several building/scale predictions and develop a dimension learning experience. The architect would be presented with slide representations of two buildings which were assessed by the client/users as differing widely on one factor analytic dimension (i.e. potency) while being more similar on all other dimensions. The architect would assess the two buildings on the scales most representative of that dimension (i.e. delicate) and be given immediate feedback on the user's res-

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* L.E. Bourne, Jr., Human Conceptual Behaviour, Boston: Allyn-Bacon 1966.

ponses to that scale. The procedure would be continued on the same dimension for various scales until the architect is successful in making sufficiently fine, consistent, and accurate discriminatious amongst the buildings. After the criteria of successful prediction (i.e. within one-half of a standard deviation from the mean) have been achieved on one dimension, the process would be repeated for the remaining dimensions until the architect performs satisfactorilly on each. Having obtained success with unidimensional discrimination the architect would be asked to assess each building on all of the scales with an expected large degree of success. The criteria of successful prediction will, of course, depend on the architect's determination and those traditional limitations of architect-client interaction: time and money, Again with the third procedure, either one or both of the previously described procedure could be applied to further refine the architect's ability to predict correctly and accurately. And comparisons of user responses could be made with the architect's predictions of user responses to his design solution and to the building itself in order to confirm his understanding of the client/user.'".

Dr. Albert Ikomi's coment on these methods is that "Hershberger's concept of predicting user's response to archi-

tectural facilities is essentially a tactical method."

7.01 What the questionnaires say

The way in which the Semantic Differential Scale Model has been used to gather information, for the design of The Birthplace of A Newspaper is slightly different from Hershberger's suggestion. They were used to find out the users response to the internal environment and actually little attention has been given to the whole complex as one piece. The integration of the complex was studied separately without the use of the SDSM.

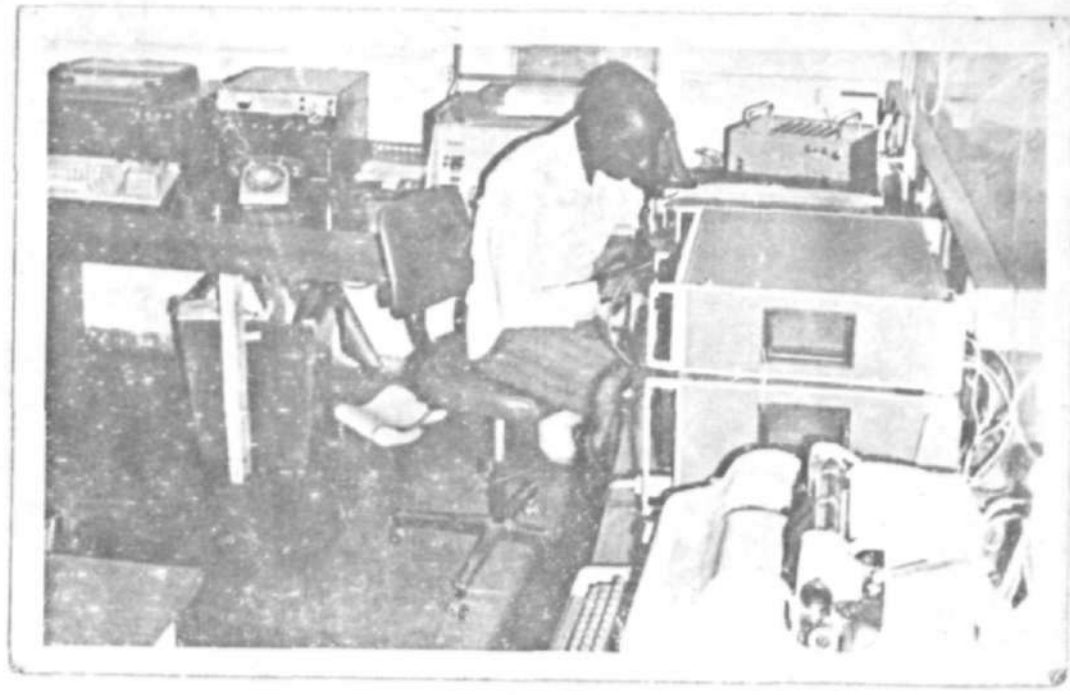
The users were to use the scale to express how they feel in their working space. After plotting the graphs on the scale the architect went back to interview the users about what they actually desire/require to carry out their role or function in the establishment. The graph of this too is plotted on a condensed set of scales (see Appendix 1C) as well as the graph of the existing conditions. Several photographs* were taken to show some structural features of such spaces that were studied.

Where there is disparity or the graphs do not coincide, a careful study is made of the structural features, the openings, the height of ceiling, size of space etc and the sizes of

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* Plates 7.01

Telex room:

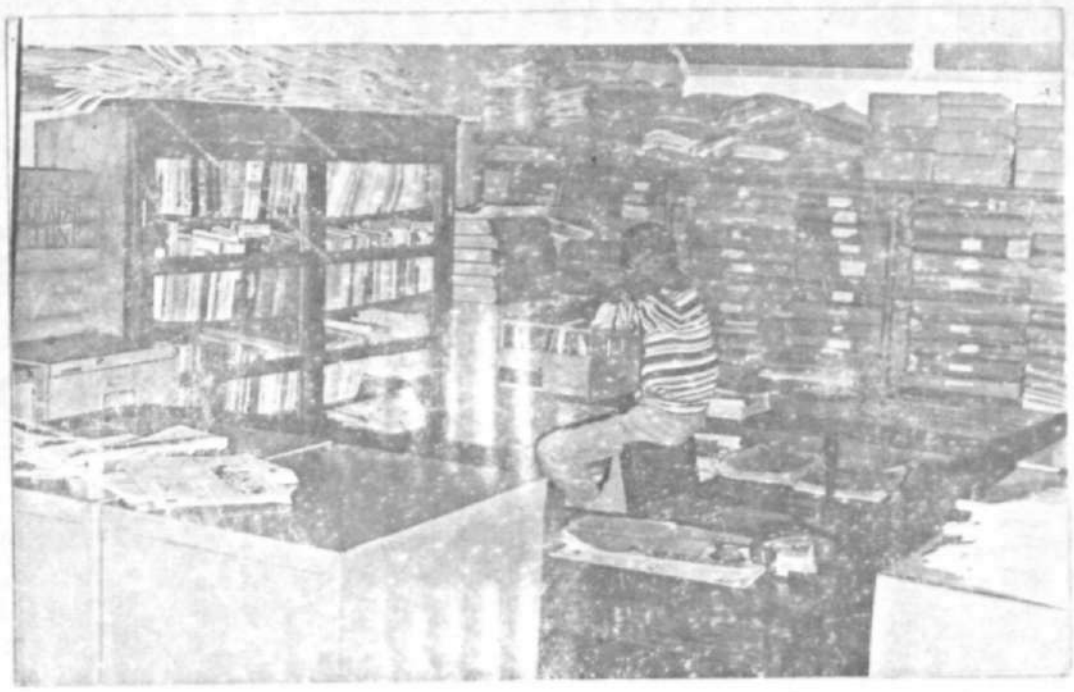


Reporters' room:



PLATE 7.01 News department.

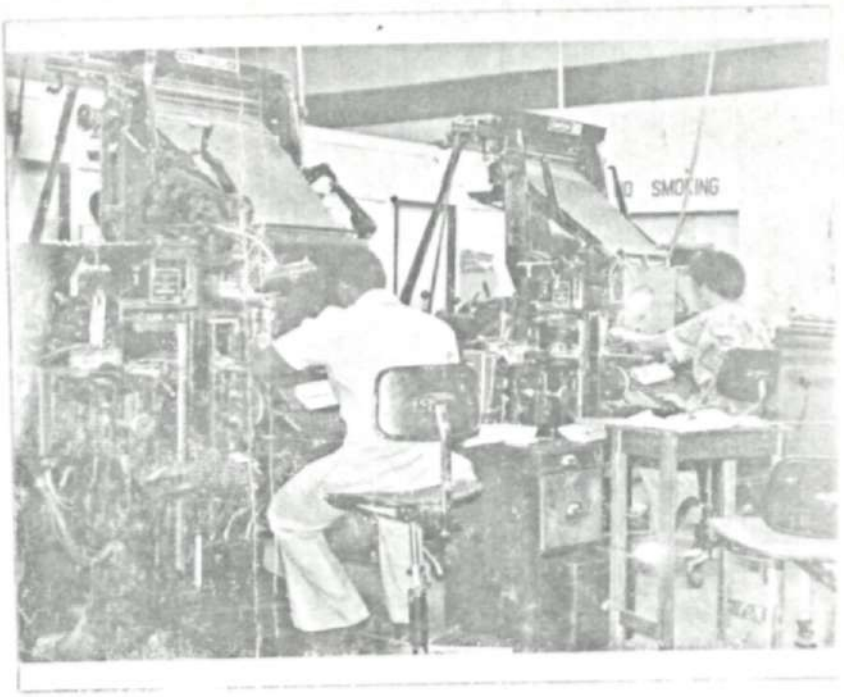
Library:



Multi-editors' room:



Linotype machine:



Graphic art department:

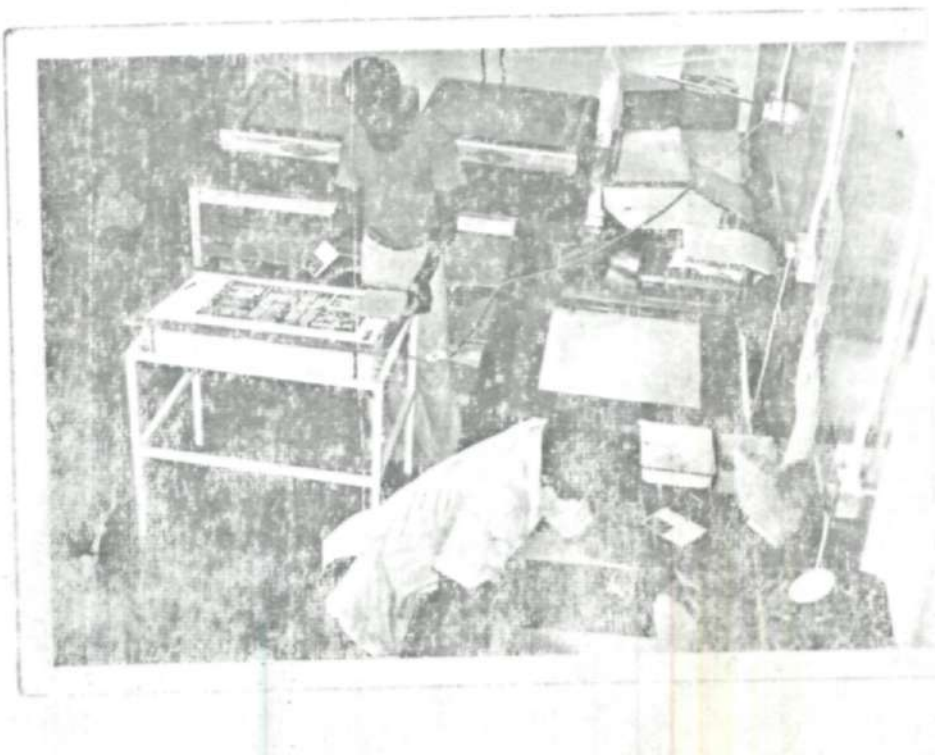
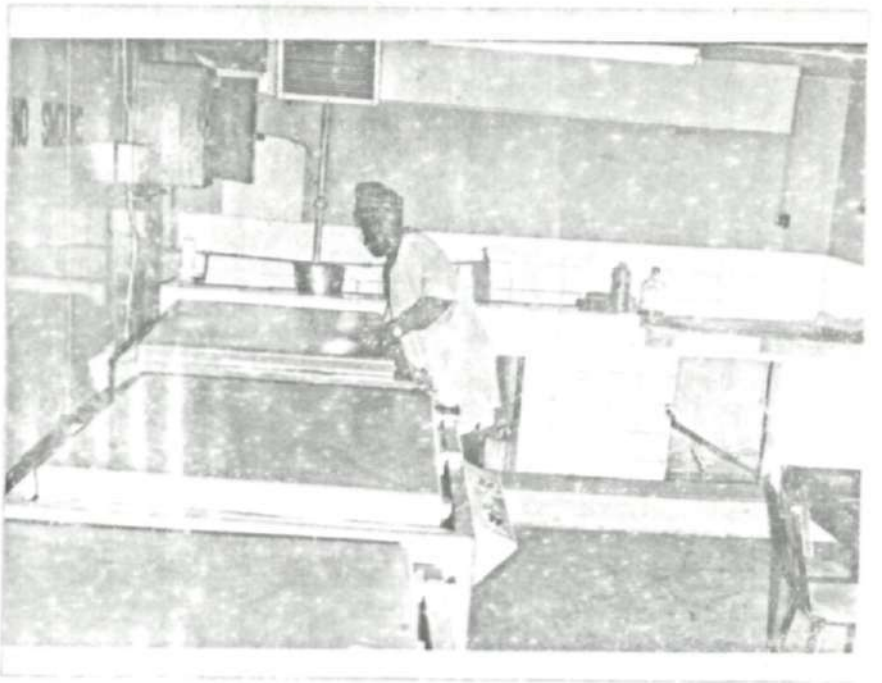


Plate making:



Press machine:

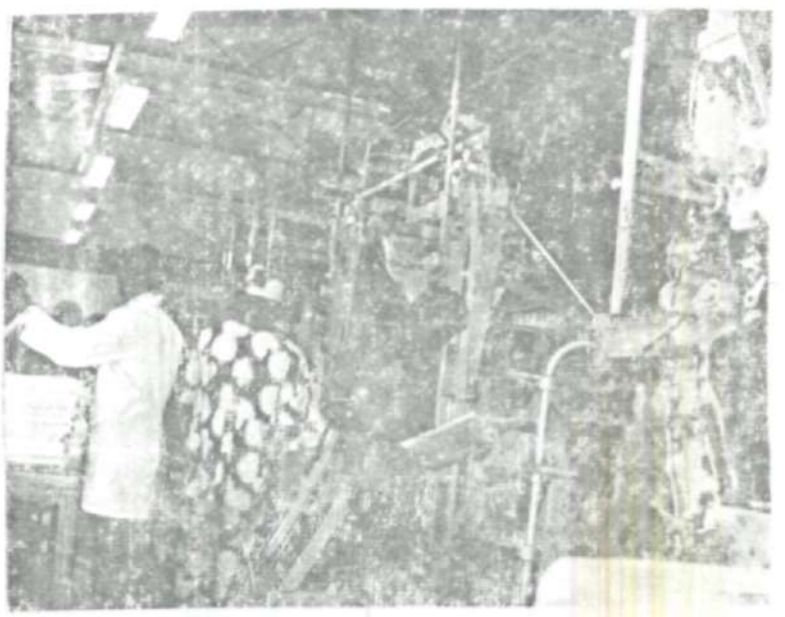


PLATE 7.01 (d) Production.

space etc. and the sizes of machines and equipments being used should reveal the reason for this disparity. This is noted and taken care of in the design.

The set of scales were condensed in order to focus attention on such adjectives that could be physically realised in the design and those that maximally cater for the more abstract and relative ones.

Results.

In determining the most logical and useful conclusions attention is focused more on the areas of divergence particularly where there are extrimities on the scaled responses.

The following discussion of results is based on responses to the questionnaires administered to the three major and oldest newspaper publishing agencies in the country (viz, The Daily Times of Nigerian Limited, The Nigeria Standard Newspapers, and the New Nigerian Newspapers):

1. There are many results in which the desired/required conditions coincide with the existing situations or one very close. Such exist mainly in the administration. This is probably because the major determinant of the desired conditions is human comfort which is a single variable and the fact that human

beings adapt very freely to conditions within bearable limits; so much so that even at the Kakawa office of the Daily Times of Nigeria Limited where the building was converted, with minimal physical adaptations, the personnel feel relatively comfortable. The solution was to air-condition the spaces.

2. The greatest deviations occur in the editorial section, the composing room and the pressroom. The reason could be identified with the fact that in addition to human comfort the present conditions do not cater adequately for the specifications required for the working conditions of the modern equipments in use in these sections. Here there are two main variables.

3. In summary the results of the 'sturfy-drafty' 'flexible-rigid', 'formal-casual', 'dull-bright' scales seem to be most at the extremities. A careful look at these scales would reveal that these are the adjectives that describe what human beings would require to facilitate their job and they are

general conditions. Other conditions can be derived from the specifications of the machines and equipment. They include scales that define temperature and size of spaces. These do not change eratically but changes here are determined by the change in technology which is tending towards the need for finer details in specification.

Conclusion:

From these results it was concluded that for the purposes of the design a general concept of flexibility, unification, and adaptability were adopted to form the underlying design idea.

CHAPTER

8.00

PHYSICAL ARCHITECTURE: DEVELOPING THE HARDWARE SYSTEMS

Just like it was necessary to carry out an in-dept study of the social role of the user group in order to come up with any useful and functional architectural solution, such solutions would still be in the abstract if the architectural hardwares are not developed accordingly.

Developing the architectural hardwares involves all the physical structural systems and other systems which when integrated would make the solution work as a piece of architecture to provide the required/desired conditions, that would facilitate the function of the building.

Success, therefore, depends on the selection of the tool and method of achieving ones architectural goal in any one project.

Architectural hardwares are categorised into the structural; the envelope; the channel (in and out); and the filter (in and out) systems.

8.01 The Structural System:

The structural system is the 'skeleton' that makes an architectural idea a reality. This includes, as component parts, the foundation, the superstructure, (or the superstructural loadbearing systems), and the roofing systems.

The Foundations:

There are different types of foundations used here and where which is used depends on the type of superstructure and hence on the load to be supported.

For the clinic, the cafeteria and the changing and clocking rooms strip foundations are used. For the other buildings where columns are used, combined or single foundation footings are used depending on the grid system. For instance the editorial block is designed with a four metre square grid pattern so the single foundation type footing is used while at the administrative block where a cantilever structure is used with a span of 2 m between the supporting columns a combined column footing is used for each pair of columns, (see design drawings). For the newsprint store and the pressroom the four columns at the edge of the grid units (and they are grid units in themselves, too) have a common footing (see drawings).

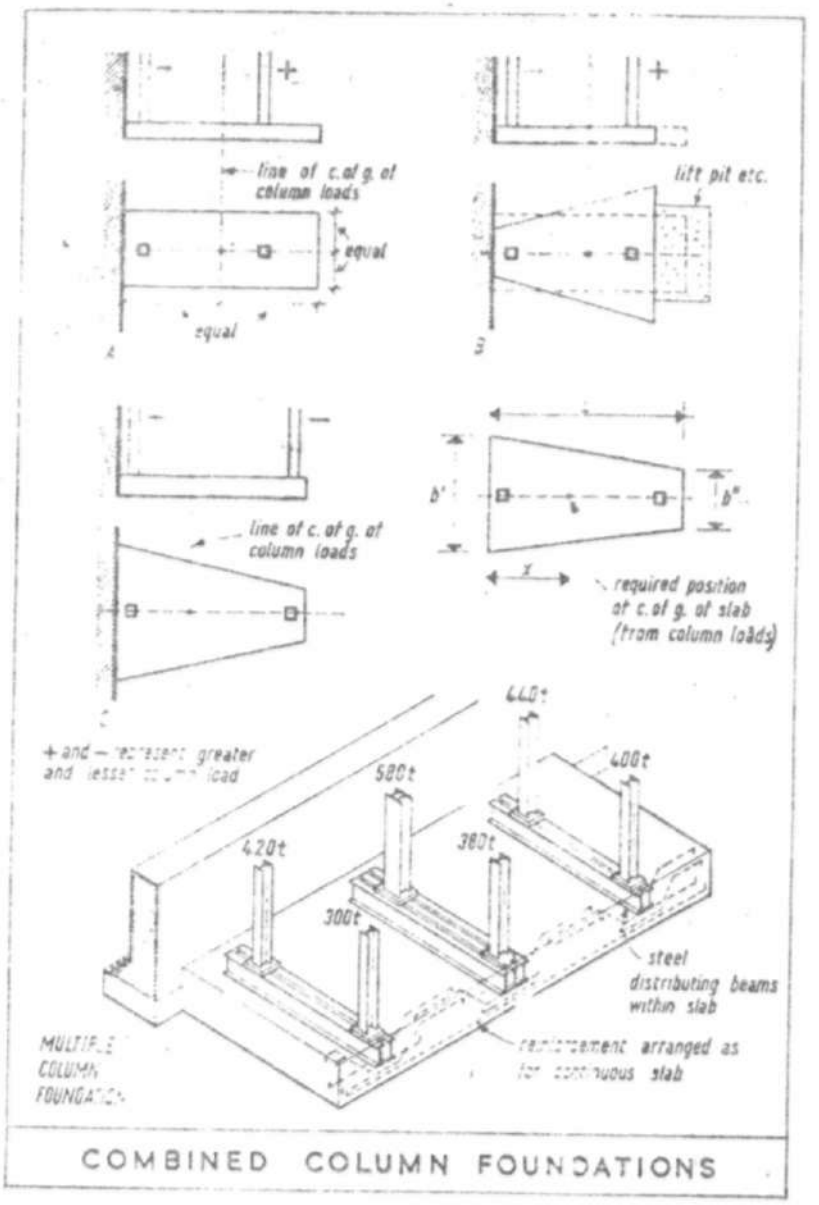

line of c. of g. of column loads
equal
equal
A
lift pit etc.
B
line of c. of g. of column loads
C
b'
b''
x
required position of c. of g. of slab (from column loads)
+ and − represent greater and lesser column load
440t
400t
580t
420t
380t
300t
steel distributing beams within slab
reinforcement arranged as for continuous slab
MULTIPLE COLUMN FOUNDATION
COMBINED COLUMN FOUNDATIONS

Figure 8.01 a:

The principles of combined column footing are illustrated in Figure 8.01a.

The Superstructural Supports

For the buildings that do not go higher than one floor, loadbearing external walls are used for the structural supports The others are provided with reinforced concrete frames (see the illustrations in Fig. 8.01b).

For the administrative block the cantilever beam frame (Fig. 8.01bC) is used but with slight modification. The space between the supporting column which defines the width of the corridor is 2.0 metres while the cantilever is 5.0 metres. The pairs of columns, and therefore the frames, stand at 4.0 m centres. One of the outstanding features of this method of construction is flexibility of space which it affords the internal space. The editorial section and the composing room are design using types A and E (of Fig 8.01b) column grids with the grid spans of 4.0 meters square. Flexibility and space adaptability was the aim.

The newsprint store and the main production area (the press room) is designed with a different type of grid system in which 2-meter square grid units are sandwiched between a set of bigger 10-meter square grid units, (see drawings).

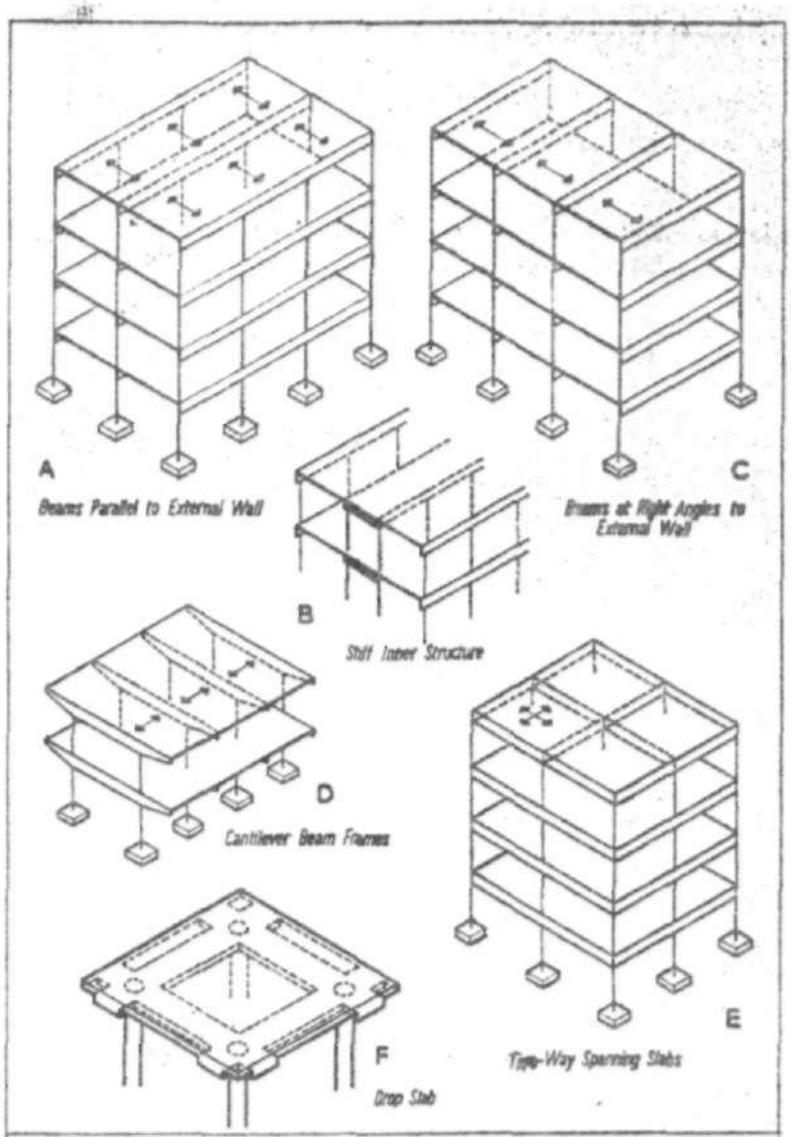

A
Beams Parallel to External Wall
B
Stiff Inset Structure
C
Beams at Right Angles to External Wall
D
Cantilever Beam Frames
E
Two-Way Spanning Slabs
F
Drop Slab
REINFORCED CONCRETE FRAMES

Figure 8.01 b

This allows for the achievement of the main area of attention to which this thesis is addressing itself: flexibility, adaptability, and ease in expansion. This building can be expanded by adding the units in any direction.

Floors:

The ground floor is treated in the same way for all the buildings. The slight differences come in the other floors which some of the building do not even need.

The buildings that need higher floors include the administrative block which has four floors, the composing room and the editorial section which are one on top of the other (the later on the former) and a small section of the commercial printing building.

The usual flat plate reinforced concrete floors are used for the administrative block, and the small part of the commercial printing block. The principle is illustrated in Fig. 8.01ci, and (Fig. 8.01cii with reinforcement method). The waffle or pan floor is used for the editorial/composing room block. The grid deck could also be used for this floor. (See Fig. 8.01cii).

For floors which are intended to host services, an illustration of construction methods is in Fig. 8.01ciii.

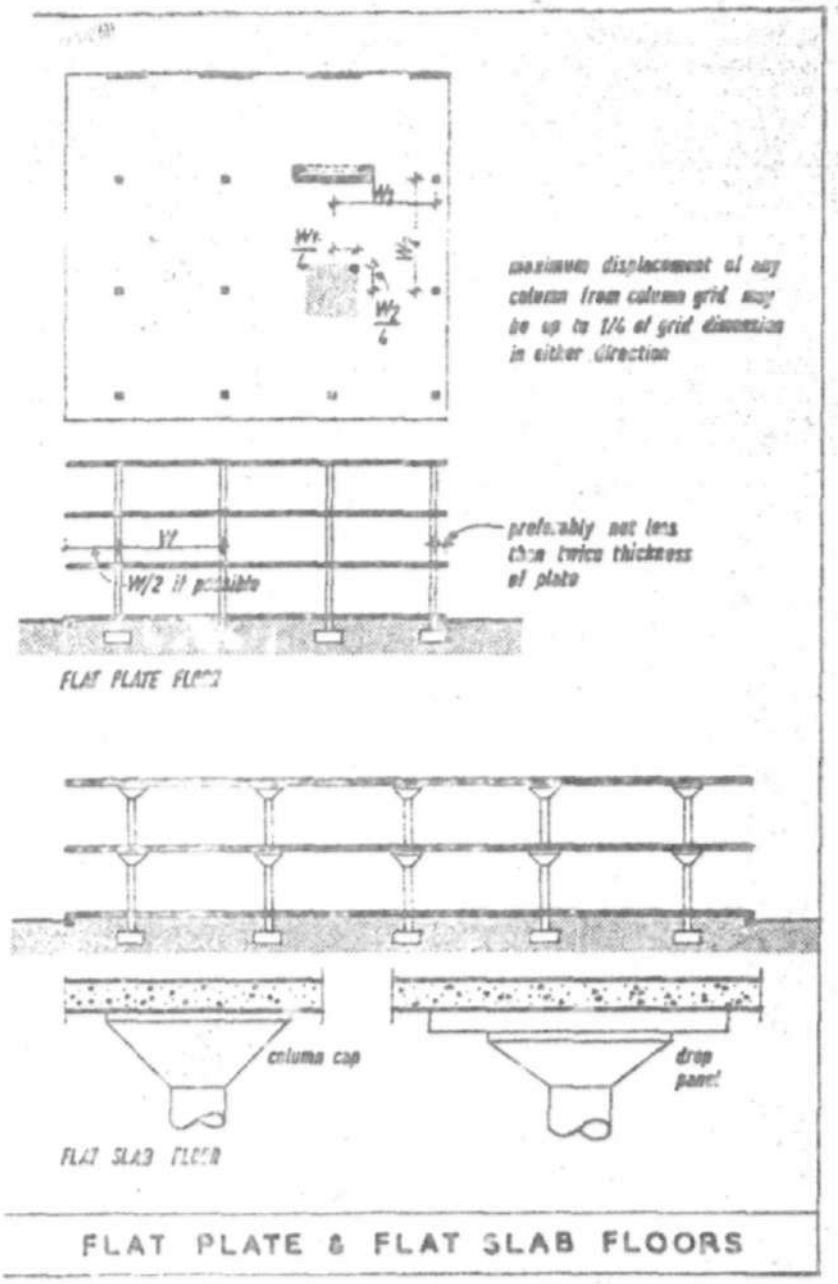


Figure 8.01 c (i)

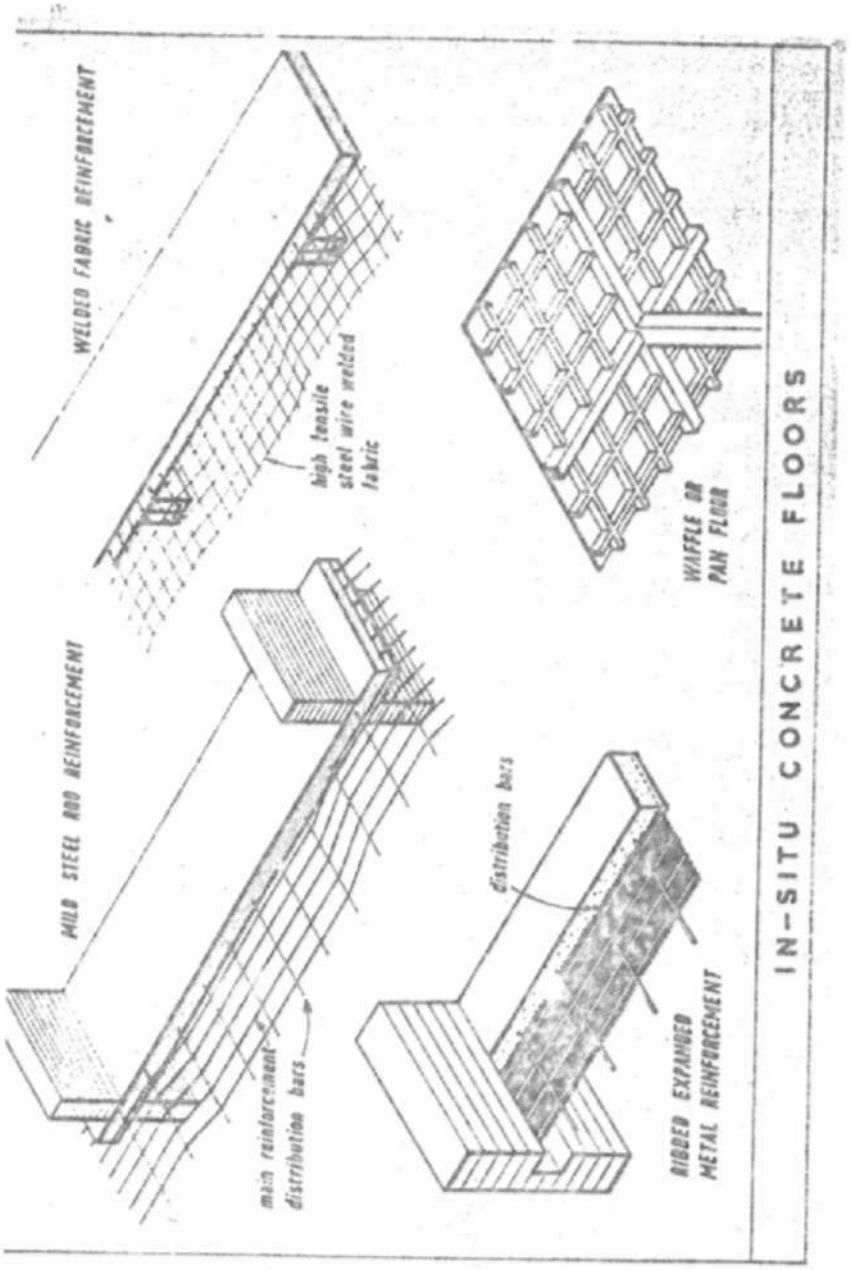


Figure 8.01 c (ii)

The Roof

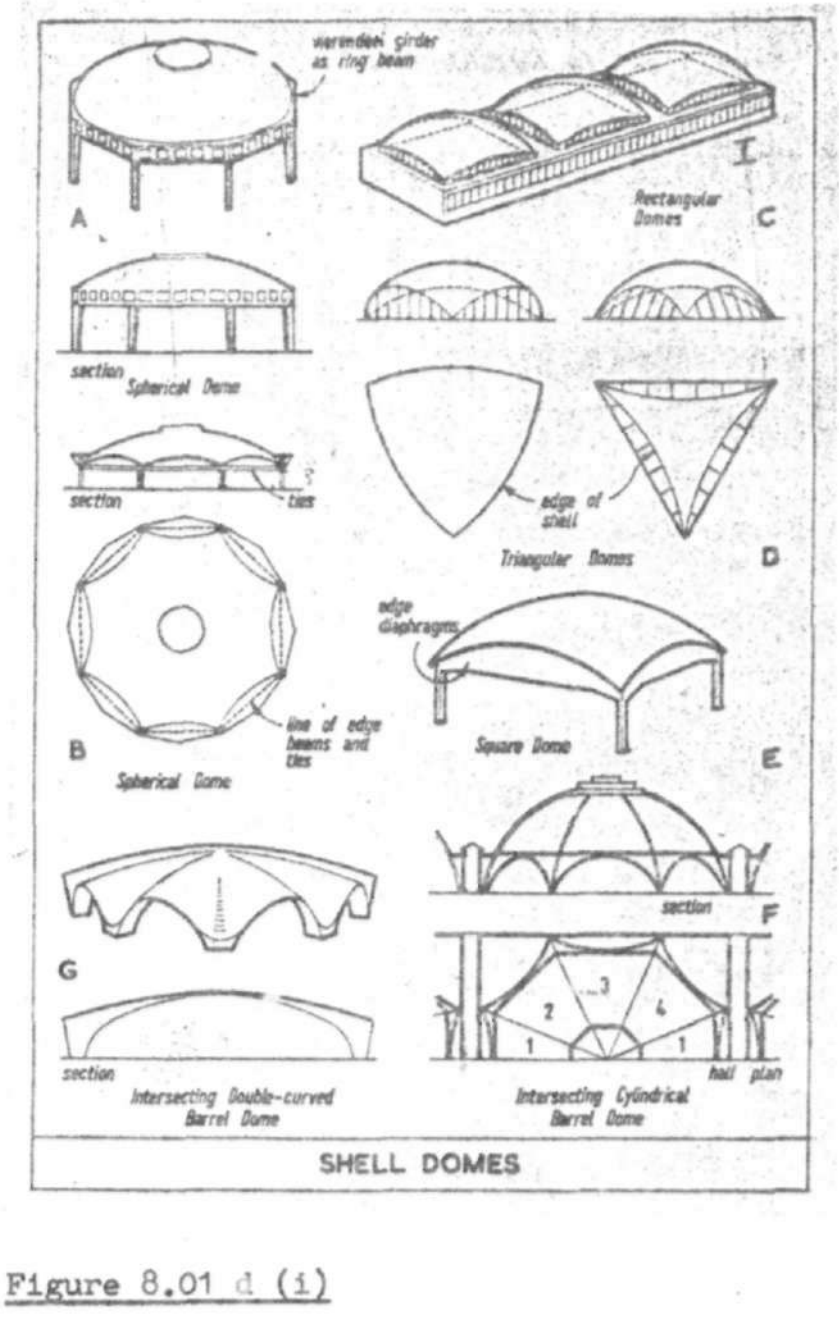
There are several types of roofing systems used here depending on the span to be protected, the nature of the supporting structure, and lighting needs.

The single storey buildings have longitudinally pitched roofs (outwards) to drain into ring concrete gutters. The administrative block has and inwardly pitched roof that drains into a central longitudinal gutter which spouts at one end of the building.

The maintenance building has three types of roofing. The administrative part of it has its roof inwardly pitched to drain into a U-shaped drain concrete gutter. The small repair room has a flat roof while the main maintenance workshop which is much taller than the other parts has two sets of outwardly pitched roof. The sides of the upper part of the roof has the glazed opening for north lighting. (See drawings. Appendix 4).

The only roof that needs some details in describing is the roof (or roofs) protecting the newsprint and the press machine in the press room.

Here each set of four columns at the corners of the 10 - metre square grid carries the roof that takes care of that unit area of the floor. The two metres between these



SHELL DOMES

Figure 8.01 d (i)

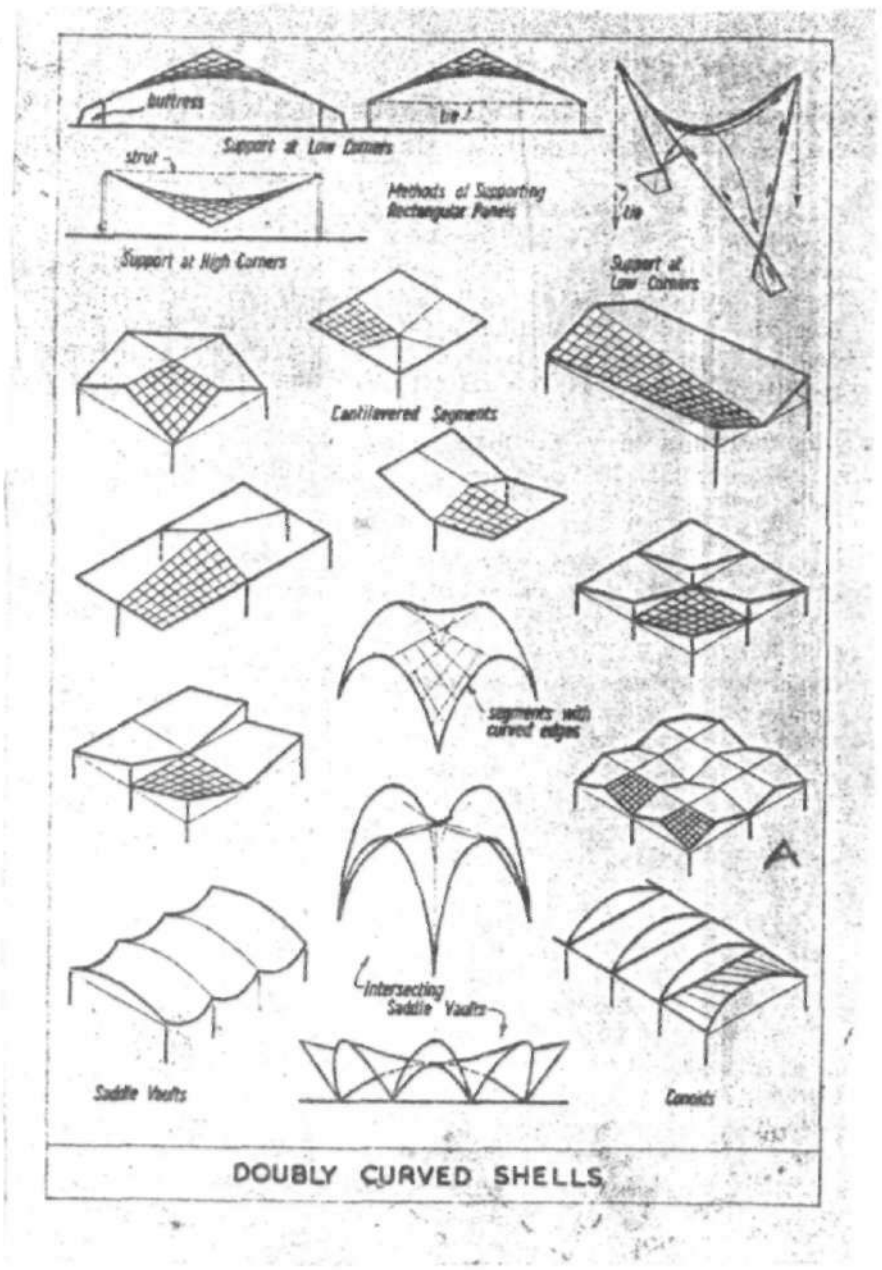


Figure 8.01 d (ii):
Doubly curved shells.

four columns is taken care of by the drainage gutter which also serves as the binding between the two pairs of columns (see design drawings - Appendix 4).

The Cast-in-situ concrete roof is actually two roofs in one. There is an upper part which has the north light glazed openings at two sides. The great compressive strength of concrete is being utilized here in designing all the supporting roof members (reinforced concrete strutting beams and the binding inner ring beams) all acting in compression.

This roof could be constructed using precast triangular and trapezoidal members but due to cost in method of construction; since precast assembly would need the services of special cranes for so few units, cast-in-situ method is preferred for economy.

The principle behind the design of this roof is illustrated in Fig. 8.01di and Fig. 8.01dii showing shell domes and doubly curved shells respectively. The idea was to combine the rectangular dome CI of Fig. 8.01di with type A of the doubly curved shells of Fig. 8.01dii.

Stairs

Simple types of stairs are used in this design and the principles are illustrated in Fig. 8.01ei and Fig 8.01eii. They are all cast-in-situ stairs.

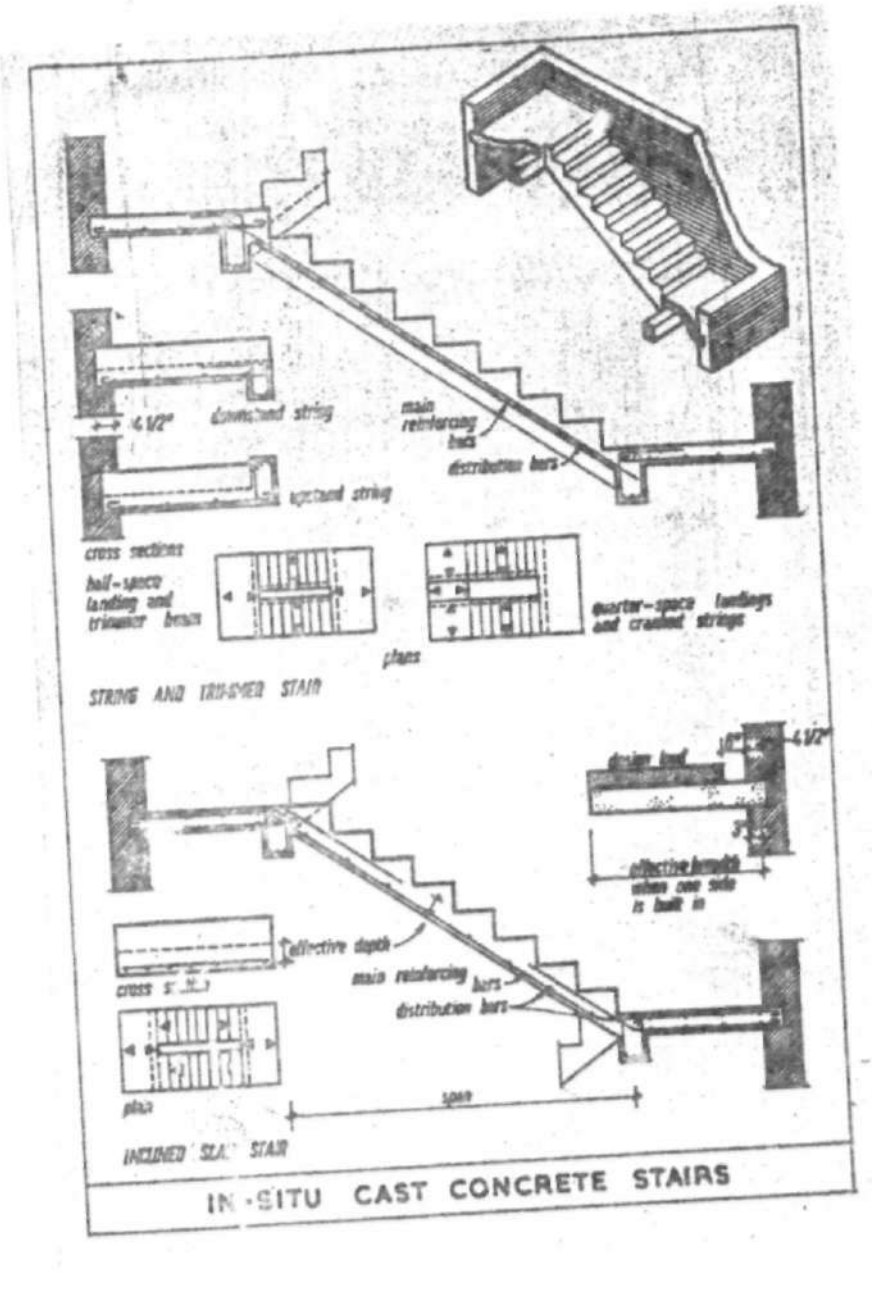


Figure 8.01 e (1)

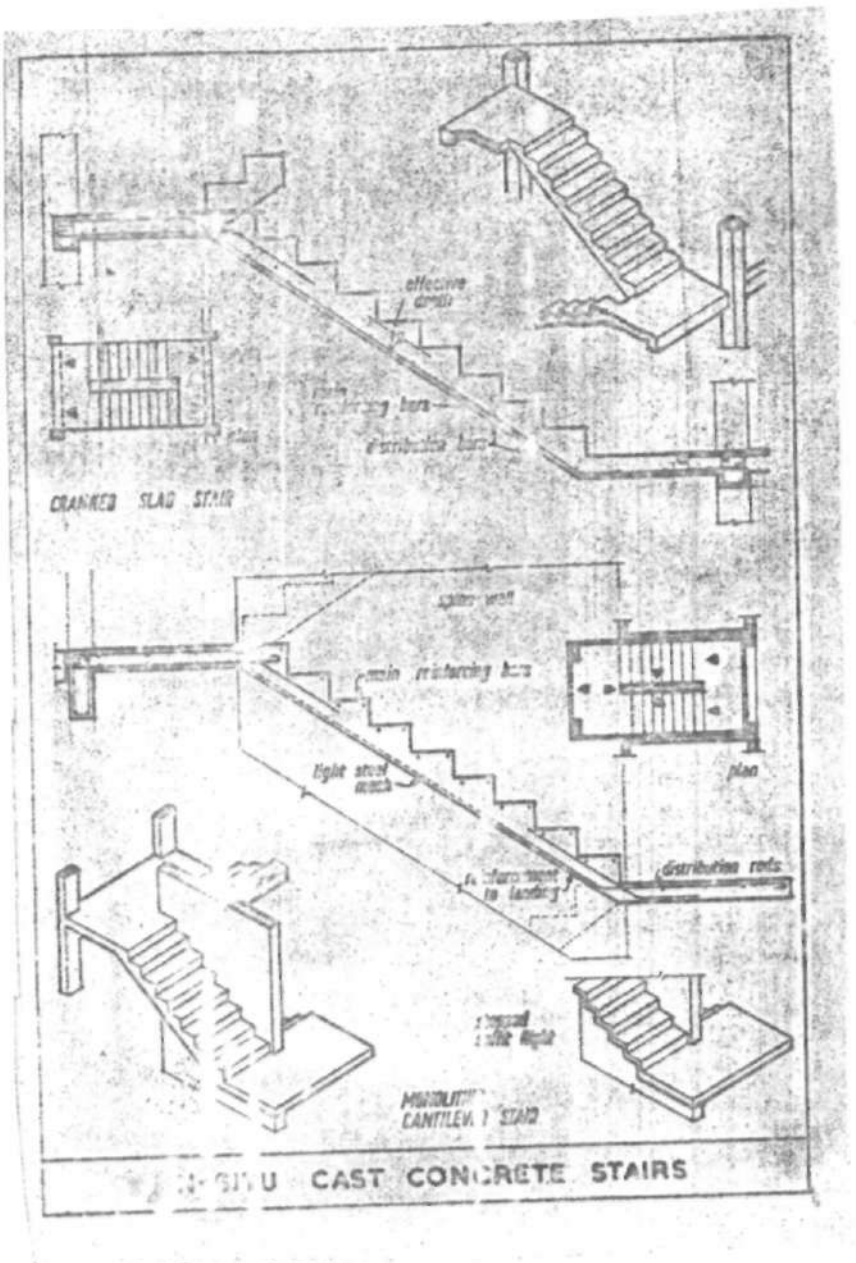


Figure 8.01 e (ii):
In-situ cast concrete stairs.

8.02 The Envelope System

This consists of the hardwares and methods of cladding that make the spaces enclosures.

The main permanent cladding structures are the external walls which are not the loadbearing structures except for the cafeteria, the clinic, the changing/clocking rooms, and the commercial printing division.

For these exceptions also the partition walls are permanent including the maintenance section. The partition walls in the main storage unit into which the pressroom is incorporated is semi-permanent being not so flexible but could be demolished for adaptability purposes.

The partition walls of the administrative block, the composing room and the editorial sections are designed to be most flexible. The SYMA system of the G.M.P. partitions is proposed which could be dismantled and reconstructed within hours of no dirty job (being a system of dry construction).

The external walls, however, is designed for concrete hollow block (wet) construction· the thinner permanent partition walls are also constructed this way.

8.03 The Channel System

The channel system includes all the services such as the drainage (sewage), the electrical services, ventilators (mechanical) and airconditioning system. The channel-in systems are those services systems that provide the space with what is necessary while the channel-out system include those that take out the noxiants - used air, sewage disposal etc.

Here mention will be made of only those services systems that have been employed in this design thesis.

Sewage Systems

The sewage disposal needed here are only for the conveniences provided at the office WC's and lavatories; those at the changing rooms; those at the clinic and the ones at the cafeteria. They will be constructed as individual units with their own septic tanks and soakage pits. Those that are close may have combined soakage pits; such include the toilets at the end of the administrative block and the ones at the clinic.

The nature of the materials used and produced in a newspaper production premises do not necessitate a big disposal program.

Electricity

This falls into the channel in system in which electricity which is the main source of power for the machines is brought into the complex.

The source of the power needed is the National Electric Power Authority. But in case of failure (as is usually unpredictably the case) a big power generating plant is provided for. The amount of power needed will be computed by the electrical services engineer.

Normall internal conduit system is used for the power distribution as opposed to external surface conduits or direct surface wiring.

It is suggested that in the main production hall and the storage socket outlets be provided at all the columns. This allows for adaptability index of the total space in terms of production machine location and any other necessary appliances to approximate to unity.

Air Conditioning

The aircondition acts as both a channel-out and channel-in systems at the same time due to its nature because as it introduces the conditioned air into the space, it also pumps out the used air in that space, reconditions it and introduces

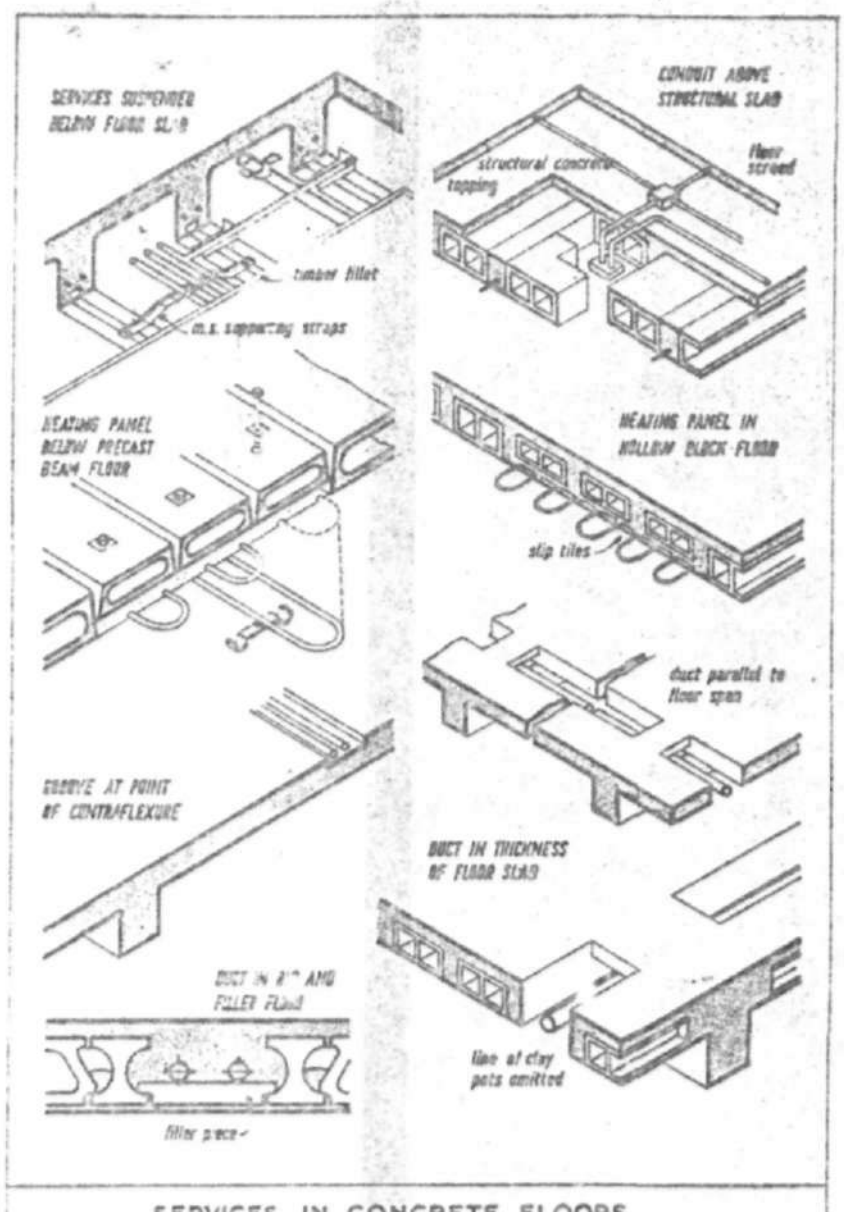

SERVICES SUSPENDED BELOW FLOOR SLAB
timber fillet
m.s. supporting straps
HEATING PANEL BELOW PRECAST BEAM FLOOR
GROOVE AT POINT OF CONTRAFLEXURE
DUCT IN 8" AMG FILLER PLANK
filler piece
CONDUIT ABOVE STRUCTURAL SLAB
structural concrete topping
floor screed
HEATING PANEL IN HOLLOW BLOCK FLOOR
slip tiles
duct parallel to floor span
DUCT IN THICKNESS OF FLOOR SLAB
line of clay pots omitted
SERVICES IN CONCRETE FLOORS

Figure 8.03

it back into the space as conditioned air. Thus it keeps the same air in circulation hence it is necessary to keep the space to be so airconditioned as air-tight as is practicable.

There are two types of airconditioners: the industrial air-conditioner, and the comfort airconditioner. As the name suggests, the comfort air-conditioner is for provision of comfort to human being working in the air-conditioned spaces while the industrial air-conditioner is to provide the specific conditions for the machines, equipment and materials to be preserved in such air-conditioned spaces.

The sizes of the air-conditioning plants needed will be computed by the mechanical services engineering consultants but it is proposed that there are two main central air-conditioning plants. One plant to cater for the newsprint store (industrial) and a central comfort airconditioning plant for the administrative block. The comfort airconditioning plant should have unit variable controls at all rooms so that individuals could regulate the temperature to suit their individual responses.

In such other spaces like in the editorial, the clinic, the composing room, the cloakroom, and the cafeteria unit

air-conditioners should be installed. In the editorial and composing sections because some of the equipment used do need specific temperatures while human beings who work here (and there are many of them) need the temperatures to be within comfort zones. The other places will be provided for as and where it is deemed necessary.

Water

The water services include provision of fresh water for drinking, washing, and flushing of water closets, as channel-in and the disposal of used water. The amount of water necessary for use will be computed by the water services engineer but since the need for water is not more than normal human consumption rate for domestic situation the figure for domestic rate could be assumed. The other section where fresh water (clean) is needed is the dark room. A storage tank with sufficient capacity is provided for on top of the main staircase leading up the administrative block.

The distribution is by steel pipes whose sizes and selection will be done by experts. However, there are three types of piping: one for bringing in fresh water for use; the other two for disposal (channel-out) include one for disposal of soil water (foul) and the other for water from the sinks and basins.

8.04 The Filter System

This system includes all openings in the complex, the most important being the doors and windows. Like the channel system there are filter-in (filtering in the good or desired conditioning agents) and filter-out (noxiants). The doors act as both filter-in and filter-out systems as it lets in people, goods and useful materials as well as letting people out and waste products from the indoor spaces, while the windows let in natural fresh air and used air is let out (where the air conditioner fails or by choice). The type of doors and windows fitted depends on the spaces to be ventilated and the types of materials that have to be moved in and out of the rooms. For instance, over and roller shutter doors are used at entrances where bulk materials are moved into the storage spaces, rubber swing doors are used in production spaces where trolleys and fork lifts are mobile while normal 80 - 120 cm wide doors are used for human circulation except for main entrances where double swing glass doors or sliding doors are suitable.

Glazed openings for north light are provided at the roof of the storage unit. There are two of such for each unit module of 10 m x 10 m. There has been further discussion of this under the structural system.

Both external walls of the administrative block has been designed to be completely open at window level from one end of the building to the other. The window glazing is designed to fit into a one-meter grid unit. This is to allow for flexibility and maximum adaptability of the office space.

CHAPTER

9.00

MY THESIS

In the process of defining my thesis I have made one fundamental assumption, that I do not know the problem I want to solve (Model Four).

The tasks of the thesis therefore include:

(1) Defining the architectural problem in newspaper publishing.

(2) Defining the optimum conditions for the operation of the press, and

(3) Defining the tools and methods of achieving these conditions.

Problem Definition:

In defining an architectural problem, the most important factor is the social discourse of the created environment - how the environment affects the productivity of the user and how the user affects the environment within which he operates.

From the responses gathered by the SDSM questionnaires (see Appendix 1B) it could be inferred that minus the basic

requirements for the conditions individuals react to environments individually. This is most pronounced in the administrative accommodation. The desired sizes of rooms vary from individual to individual but there was a fair agreement as to conditions with regard to temperature (though, even here, reactions can be sharp outside certain ranges).

In the other sections the specified working conditions of the operating machines and equipment have a prevailing determining factor. However, if human beings (workers) are considered (as they are) as a working component of the operating system, then a compromise has to strick even in these sections.

Desired Conditions

Appendix 1C summarises the desired conditions in the various sections of the press. In the administration the prevailing desired condition has been spelt out as a cool environment, with average brightness, with internal maximum adaptability (i.e. max flexibility). These conditions also go for the editorial section except for certain equipment like the telex machines and the compugraphic machines which require some special conditions of lower temperature and a high degree of rigidity of space.

The newsprint store is a very delicate space which requires a constant condition of a specified temperature and humidity. The temperature is low but this is not as important as the humidity which has to be maintained at a range of 50% to 70%. This will keep newsprint at a specific size which will fit into the press machine. Outside this range the newsprint will either expand resulting in high percentage of wastage or shrink resulting, on the other hand, in the newsprint wabbling in the machine during the printing process with the effect that the lines of the printed page in various directions.

The press room only needs to be maintained at such levels of temperature and humidity that will afford human comfort.

Tools and Method

The achievement of a successful design depends on the physical realization of these environments. This in turn depends on the choice of materials and structural systems; and herein lies the thesis.

In an attempt to achieve the conditions mentioned above this thesis defines an open office design for the administration using the SYMA system of partitioning. This affords maximum flexibility within the block framework of a row of pairs

of columns carring cantilevering girders (e.g. Department of Architecture, A.B.U., Zaria); and a variable central comfort air conditioning system with the ducts running between the pairs of columns. There are individual controls at modular spaces.

There is an industrial air-conditioning system provided for in the newsprint store to maintain constant conditions of temperature and humidity. For this concrete walls and roof are use with a four-column system between which are circulation routes. This system also allows for additive expansion without effect (in way of demolition) on the existing structure.

Different forms of modular grid system are employed in different aspects of the design as they are required, for flexibility and ease in expansion.

So "What is your Thesis?"

My thesis could be expressed in three statements:

1. That there can be no success in an architectural proposal without a clear definition of the architectural problems;
2. That methods of solving a particular architectural problem should be determined by the nature of the

problem (e.g. the use of different modular grid systems in different sections of 'The Birthplace of A Newspaper' because of the different characters of the problems)

3. That in this thesis, I have addressed myself to the problem of flexibility, and I do submit that flexibility in an accomodation for a corporate institution should be within a rigid structural framework to adequately solve the express problems.

In this thesis the problem definition process has been identified with problem-solving thus representing the express view of the Model Four architect.

KASHIM LIBRARY
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ZARIA-NIGERIA
Ahmadu Bello
279003

PART III

CONCEPT DEVELOPMENT AND DESIGN

CHAPTER

10.00

SITE ANALYSIS: The theory

A physical architectural solution has to relate to a physical site to make any relevance to its necessity; and the way it does fit into the social and structural content of the site is of great import.

This makes a concious analysis of the site of a project necessary to the accomplishment of an architectural problem-solving process.

The formal site planning process begins with an understanding of the persons for whom the site is being planned (the stakeholders) and a definition of what their role will be in creating or deciding the features of that plan. This is because site planning is the art of arranging the external physical environment to support human behaviour Armed with this understanding the planner goes into the enalysis of the situation: a study of the site itself and the whole power structure, value, and the technology within which the work must be carried out.

Any particular site can be seen quite differently by a

quarryman, an ecologist, a botanist, etc. It is the sum total of their views of the site that gives the complete picture of what the site really contains, The character of the site is determined by the dynamic lines that are its bounding roads, the insistent lines of pedestrian approach, the area of the sun, the prevailing breeze, the good and bad views, the sculptural land-forms, the springs, the trees, the rock outcrops, the useable areas, the features to be preserved etc.

A checklist*, therefore, of the site data therefore includes:

(1) Initial personal reconnaisance - notes, sketches, photos - apparent characters, problems and possibilities;

(2) Collation of existing data: base and contour maps, aerial photos, geological soil and water surveys, climate records, ecological studies, engineering reports etc.

(3) Summary description of the off-site context and its changes: geographical location surrounding population, and social and political structure, land-use patterns, access system etc.;

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*Arc Shim Adesina, (1979) Handout.

(4) Data on the site and its environs, which include:

(a) Physical data:

- geology and soil,
- water,
- topography,
- climate,
- Ecology
- Man-made structures
- Sensuous qualities

(b) Cultural data:

- Resident and population statistics
- On-site, and adjacent behaviour setting
- Site values, rights, and restraints
- Past and future.

(c) Data Correlation:

- Classification of site by areas of similar structure, quality and problems
- Identification of key points, lines, and areas
- Analysis of current and likely future changes;

- Identification of significant problems and possibilities.

One effective way of studying the site is by the use of a site analysis diagram which is simply a graphical representation (in the architect's own symbols) of all that map is mentioned above on a scaled map during a site visit.

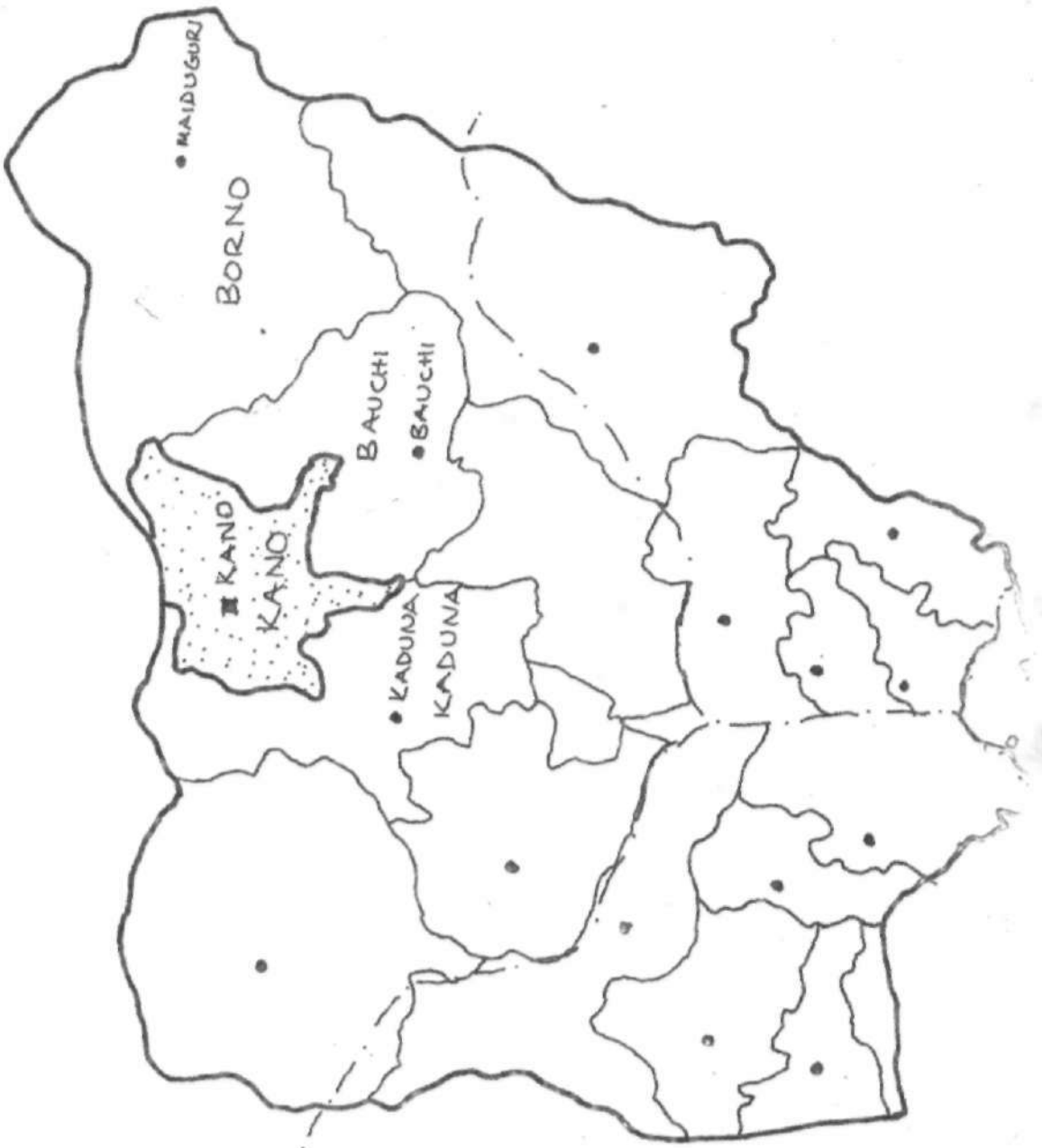
10.01 SITE LOCATION AND GROSS ANALYSIS

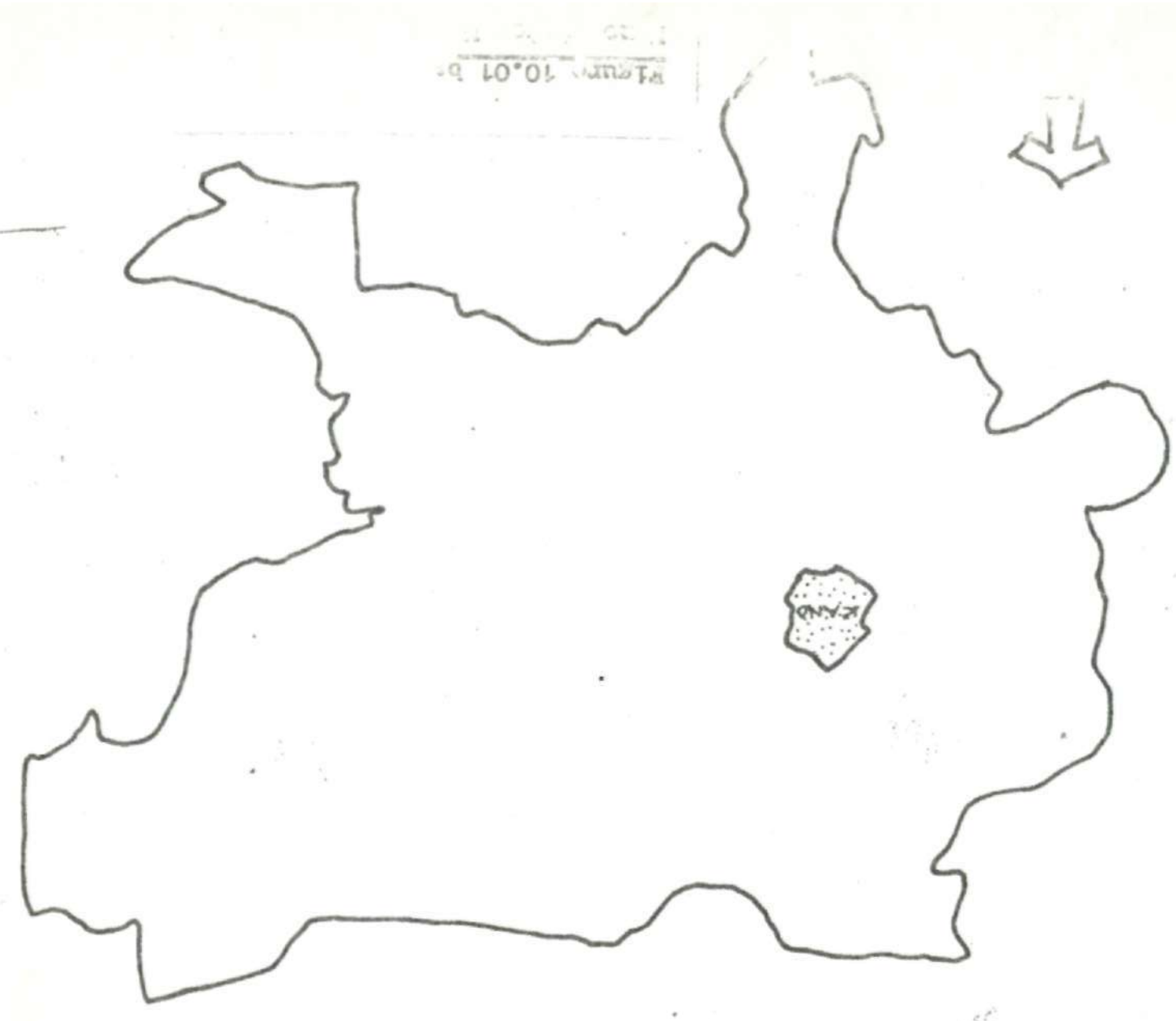
It is proposed that "The Birthplace of A Newspaper" be sited in Metropolitan Kano, the capital of Kano State. Kano is the primate city of its economic region, and the third largest city in the Federal Republic of Nigeria. The geographical location falls on latitude $12^{o}03'N$ and longitude $8^{o}32'E$ and is 1,5 4 9 ft (472 m) above sea level.

A. Geography:

Kano State falls within the Sudan vegetation zone with the southern part within the northern Guinea vegetation zone. The state is bounded by Kaduna state (west), Bauchi State (East), Borno State (north-east) and the national boundary on the north.

The state capital, metropolitan Kano is some 4,900 kilometers from the perimeter of the Sahara and 250, 1122, 138 kilometers by road to Kaduna, Lagos, and Daura res-


MAIDUGURI
BORNO
BORNO
BAUCHI
BAUCHI
KANO
KANO
KADUNA
KADUNA





pectively, Daura falls on the northern boarder of the Federation.

The state "consists of gently undulating plains sloping north-eastwards and physiogeographically has a uniform park appearance. The metropolitan area follows this pattern though the urban area is relieved by two prominences, Dalla Rock and Goron Dutse at the heights of 535 and 518 meters above sea.level respectively. The larger rivers rise in the central plateau to the south of Kano, draining eventually north-east towards Chad about three hundred kilometer away."*

B. Geology:

"Over half of the (state) is underlain by granites, schists, and gneisses of the basement complex. Ancient pre-Cambrian rocks are seperated from the younger sediments of the Chad basin, to the east and north-east by a line through Kiyawa, Dutse, Gaya, Damberta, and Yankwashi. Smooth, rounded inselbergs are seen in the southern and western parts of the state and are formed of coarse porphyritic granite. Basement rocks are often covered by thin sheets of lateritic iron stone. The chad sediments are concealed by soil and wind blown sand and there

* B.A.W. Trevallion (1963).

are no surface exposures. The sandy beds confined by inpervious clays of the Chad group form the main acquifers and are the chief source of water supply during the dry season."*

C. Climate:

The climate in Kano is somewhat arduous and the changes in temperature and humidity are relatively wide and rapid. Humidity could be high at times in such areas which could be considered as characteristically dry; the highest relative humidity (percent) is at about seven O'clock in the morning and the lowest is at six. Noise which presents problem in house design is encouraged to travel considerable distances by the dry still air. This problem also affects the sitting of industrial zone- climatic conditions during the hot season justifies the use of air conditioners to improve productivity depending on technical and economic feasibility.

"Rainfall is concentrated during the months of July to September and the rains are preceeded by violent dust storms followed by tornadoes mainly during the month of May and again at the close of the rains in September and early October. Monthly averages of rainfall based upon

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*B.A.W. Trevallion (1963).

Table 10.01:
Climatic studies of metropolitan Kano.

Temperature (F°)

	J	F	M	A	M	J	J	A	S	O	N	D	Yr
Highest daily maximum	100	101	105	107	106	102	96	92	95	99	100	97	107
Lowest daily maximum	57	66	76	82	81	80	72	73	74	76	79	62	57
Highest daily minimum	79	78	88	91	91	86	82	80	81	79	76	70	91
Lowest daily minimum	41	47	54	59	62	64	64	65	62	57	52	46	41
Mean daily maximum	86·3	91·3	98·5	101·2	97·9	92·5	86·7	84·6	87·6	93·0	92·6	86·7	91·6
Mean daily minimum	54·7	58·9	67·1	72·9	74·8	72·5	69·9	69·5	69·6	67·6	60·8	55·7	66·1

(observations 1951 to 1960)

Relative Humidity (% month)

	J	F	M	A	M	J	J	A	S	O	N	D
0700 hours	45	39	38	52	72	83	91	94	94	83	58	50
1600 hours	16	14	13	17	33	46	61	68	59	35	18	18

(observation 1951 to 1960)

Rainfall, monthly averages (inches)

	J	F	M	A	M	J	J	A	S	O	N	D	Total
	0·00	0·01	0·07	0·35	2·66	4·65	8·21	12·34	5·46	0·51	0·00	0·00	34·26

(observations 1905 to 1962)

Rainfall, annual totals (inches)

1953	[illegible]	1955	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1961	1962
20·12	[illegible]	[illegible]	[illegible]	29·[illegible]	[illegible]	40·19	[illegible]	60·03	44·03

fifty-eight years of records give an average annual total of 34.26 in (87 cm) of which 20.55 in (52.2 cm) falls in July and August, and 30.66 in (77.9 cm) between June and September.

D. Trends of Growth:

The focus of the urban settlement around the tenth century were the Dalla Rock and the primitive iron industry.

Physical growth became introversive when in twelfth century the city walls were completed. This did not encourage expansion outwards. By the mid fourteenth century, the great city market had established itself as an object of primary focus while the camel station which developed at Fagge later that century was the first positive focus to the east and outside the city walls.

Then the British administration was established in 1903 and its location in Nassarawa added a second, but mild, attraction to the development outside the city.

The introduction of foreign trade posts the following year, 1904, also to the east of the city in what is now

the township commercial area, the development of Sabon Gari market in Waje, and the gradual expansion of the government services formed a strong positive focus which by about 1930 had surpassed the historic market in importance.

The Ibos came up from the eastern part of the country to establish business centres and trading companies. Coupled with the growth of trade by foreign companies, attention was directed southwards to the coast and north the European countries instead of the north with the Sudan and the Mediteranean Arabs which was in the decline by the mid nineteenth century.

The Bompai industrial estate was opened in the early post-war years to the east and a parallel development occured of housing on the eastern perimeter of the government residential area (G.R.A.) up to the limit of the best building land. These parallel developments were, probably, the last possitive natural trend of development to the east.

"In more recent years a mild but growing trend has begun in the City and in the Township, extending commercial development southwards towards Kofar Nassarawa.

The increase of traffic approaching urban Kano from the south, facilitated by the construction of an all-weather road from Kaduna entering the urban area in the vicinity of Kofar Nassarawa, might intensify this trend."*

E. Population Trends and Projections

The reliable population figures available are that of 1962. Then, Metropolitan Kano had a population of approximately 383,000 of which roughly 250,000 (ie. 65.3%) fell within the urban area of the remainder 69,400 (ie. 18.1%) were in Ungogo District and 63,000 (ie. 16.6%) were in Kumbotso District. Since 1952 Urban Kano has been subject to rapid growth and an exhorbitant growth from 1958 onwards. During the ten-year period between 1952 and 1962 there was an increase rate of almost 100 per cent. It was not a normal demographic phenomenon for the current national rate of increase to support such magnitude of urban increase.

The rate of growth (in population) in the urban centres throughout the northern parts of the country is high for this period but other than Kaduna which had benefited from an unusually high rate of investment in

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*B.A.W. Trevallion (1963) p.5.

government and industrial development, Kano shows the highest rate of population increase. (see Table 10.01 E1).

Table 10.01 E1

Rate of Population Increase in some of the towns in the northern part of Nigeria between 1952 and 1962.

Towns	% Increase 1952 - 1962
Jos	60
Kaduna	118
Katsina	30
*Kano	97
Maiduguri	57

In making projections for a 20-year plan period the population figures used are reasonably reliable and are for over a period of fifteen years. The calculations are based on the true mean annual percentage increase over the following periods:

(a) 1948 to 1962

(b) 1952 to 1962

and (c) 1958 to 1962

(a) represents the period over which reasonably accurate population figures are available, 1952 and 1958 in (b) and (c) were years at which population started increasing in an appreciably higher rate than in the preceeding period. The figures for 1952 were from the national census and the 1962 estimates which are considered accurate, and have been used as controls.

The geometric mean of the three true means gives the population totals for up to 1982 (see Table 10.01 E2).

Table 10.01 E2

Population totals for urban Kano for the period 1952 to 1982.

Year	Population	Source
1952	127,000	National Census
1962	250,000	Estimates, tax returns and sample census

Table 10.01 E2 (contd.)

Year	Population	Source
1967	380,000	Projection
1972	560,000	Projection
1977	820,000	Projection
1982	1,200,000	Projection

F. Criteria for future expansion*

"The criteria for the selection of the main town expansion area include the following:

(1) That the area should permit the most economic provision of public utilities;

(2) That the topography and physical features within the area should permit compact development;

(3) That the expansion area should link closely with the present urban development and draw the presently seperated sections, that is city and Waje plus Township closer together;

(4) That the expansion area should be located to permit

*B.A.W. Trevallion (1963) ; p.6

the development of a cultural and commercial zone in the geographical centre of the expanded town and leading off, as far as possible, existing commercial and central area uses;

(5) That emphasis should be on development not redevelopment."

These criteria are met by land to the south of urban Kano between the railway line to Kaduna and the river Tatsawarki from Kofar Nassarawa in the north-east and the river Challowa in the south-west.

This land offers economies in detail design; enables the most convenient use to be made of the railway for industrial purposes without the construction of extensive and costly spurs; offers economies in the electricity distribution network; enables progressive cheapening of water supply costs as development proceeds southwards towards the present and future source of supply and the water works.

10.02 Micro analysis

The site of this project is within the proposed Zaria - Road City Centre in Kano and is located at the space defined for commercial structures which includes shops, light repair works as opposed to the heavy mechanical or industrial work, and printing works. From the discussion on the nature of

industry the Birthplace of A Newspaper is designed to house in Chapter 11.00, this site is the most suitable.

Other reasons for the choice of this site include:

(i) That the site is very conspicuous being situated at the "entrance" to Kano,

(ii) There are access major roads from Kaduna/Zaria and Maiduguri to facilitate easy distribution of the newspaper and collection of news.

(iii) Being at such a strategic position there are facilities available which could be employed at minimal expenses. Such facilities include electricity supply, telephone services and man-made drainage along the road.

The Site

The site generally is level with a very gentle slope which could be term flat. The site is very open with very few trees (See site analysis diagram, Fig. 10.02a and Plates 10.02).

Site Structure Diagram

(See Fig. 10.02b)

From the analysis of the site areas could be identified to which certain facilities and structures are attracted.

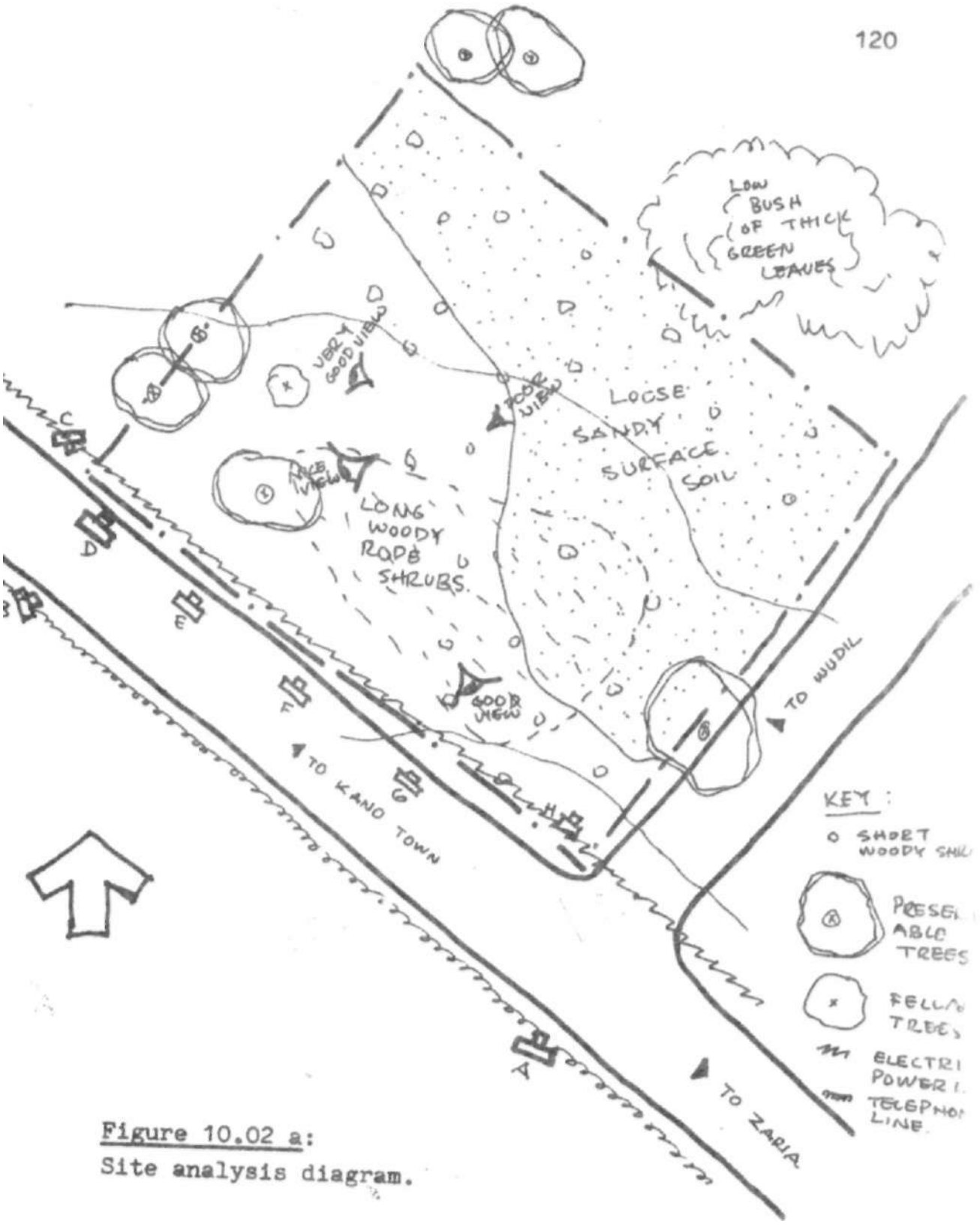


Figure 10.02 a:
Site analysis diagram.

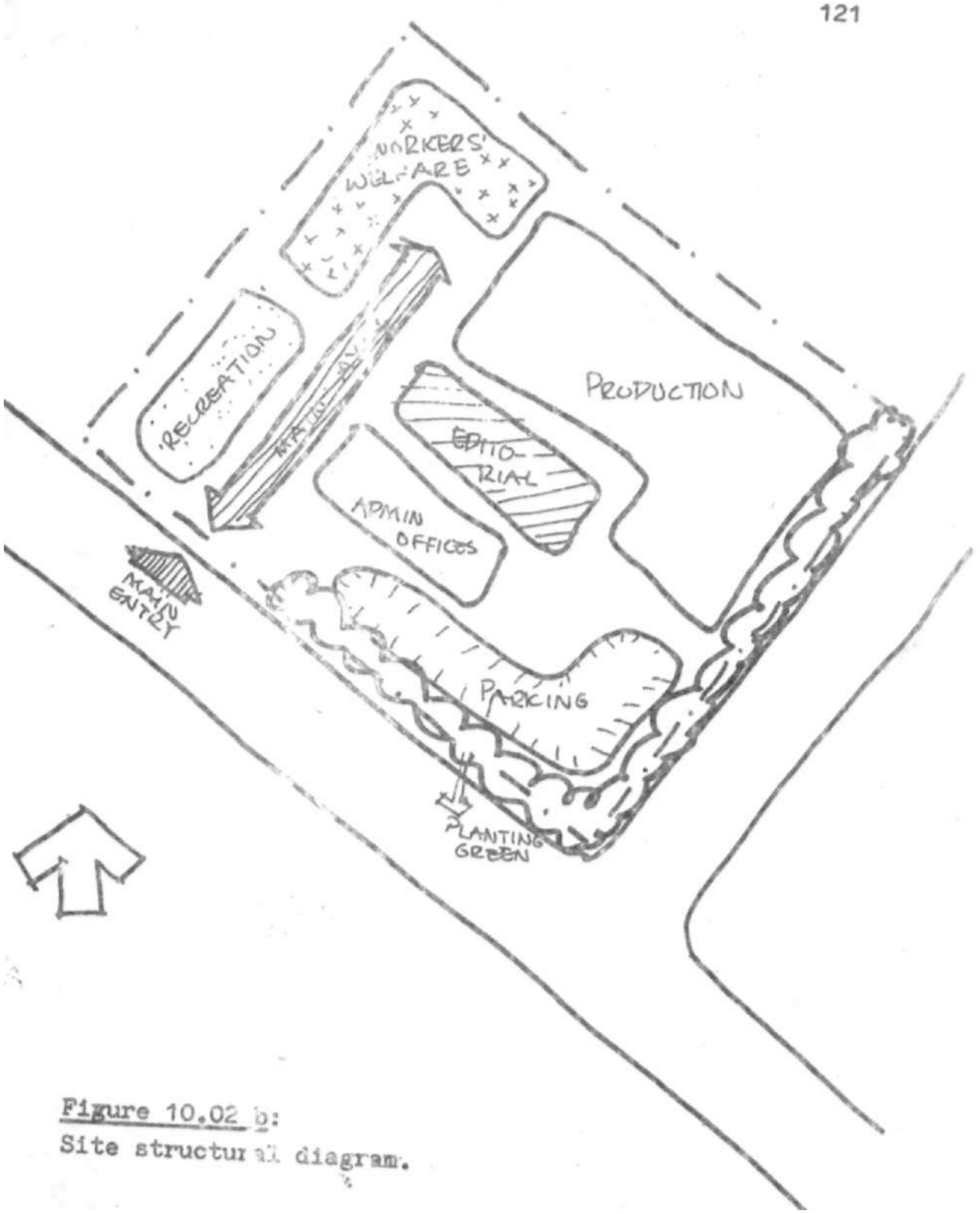


Figure 10.02 b:
Site structural diagram.

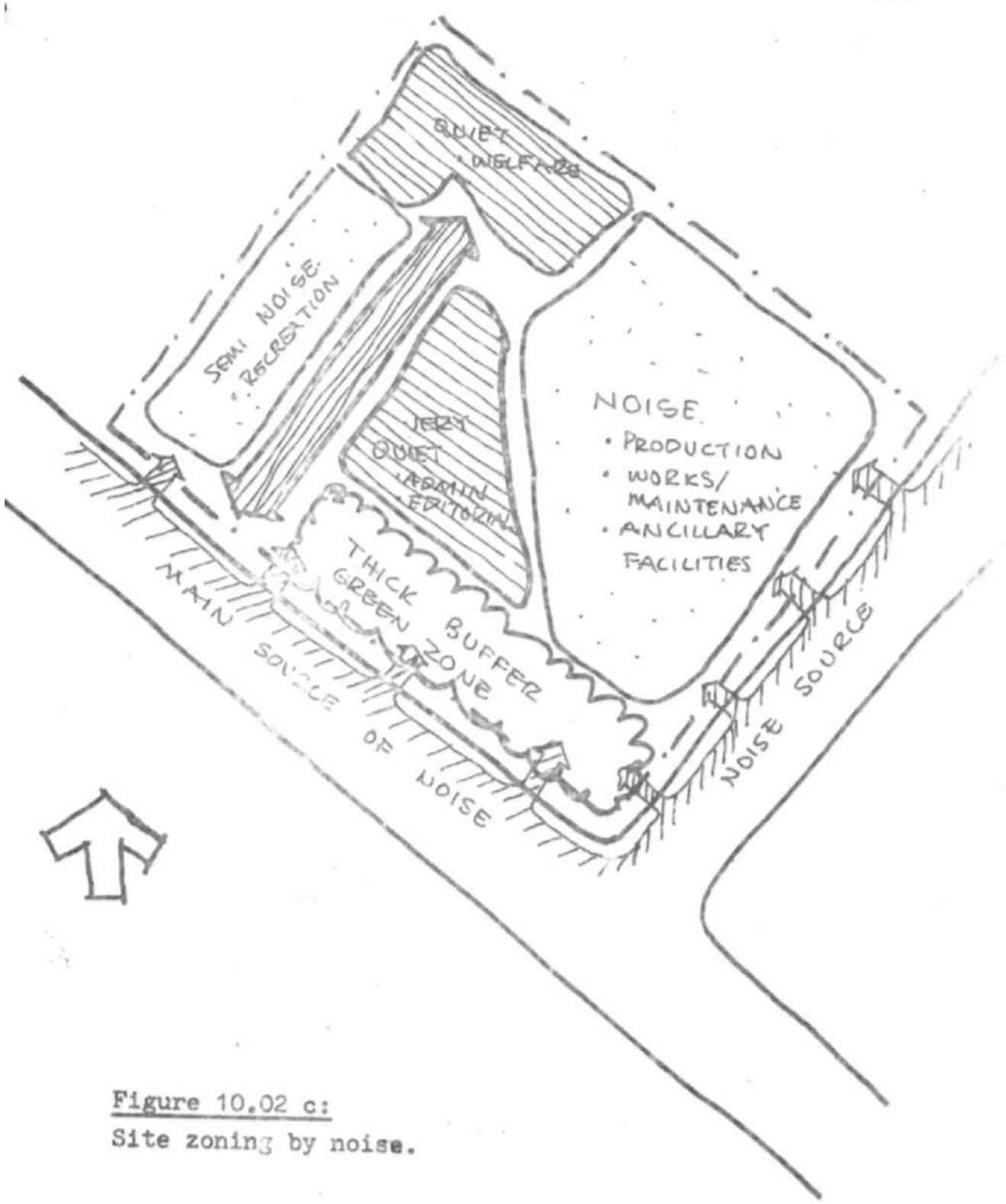


Figure 10.02 c:
Site zoning by noise.

Coupledwith a good analysis of the noise zones especially the unavoidable sources of noise a workable site structure could be proposed.

Zoning could also be by facilities of similar functions* like the pressroom, newsprint store and circulation facilities are related to the circulation and workers' cloakroom; and the editorial section is a link between the adminstration (quiet) and the production area (noise) via the composing room. The site zoning by noise is illustrated by Fig. 10.02C.

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*See discussions in Chapter 12.02





PLATE 10.02 ... views of the site

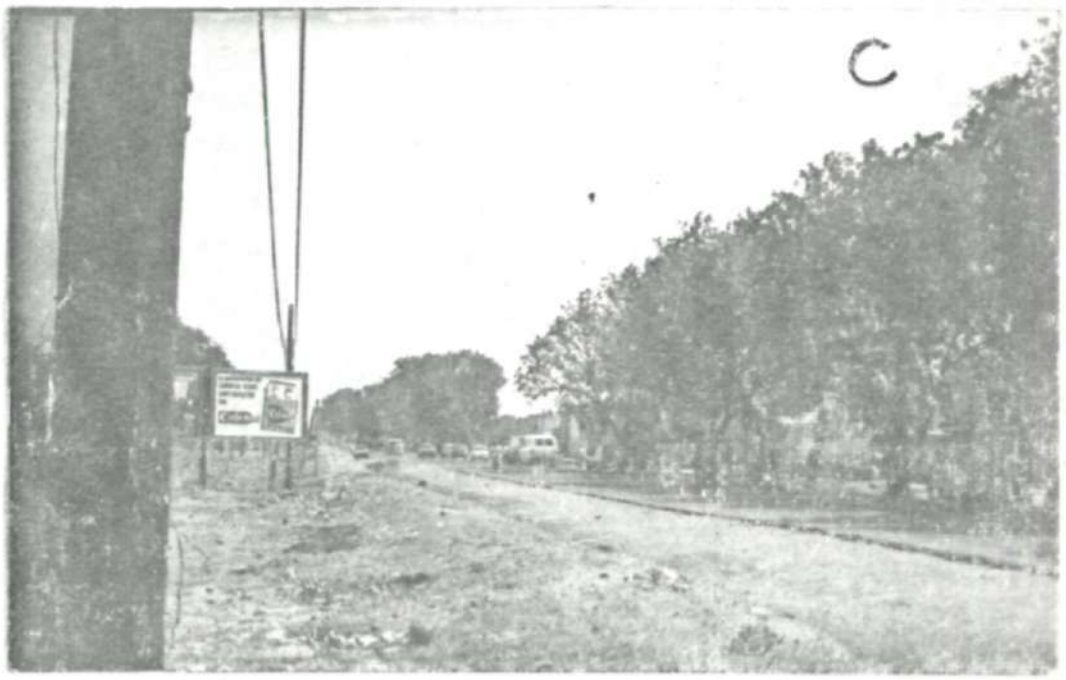


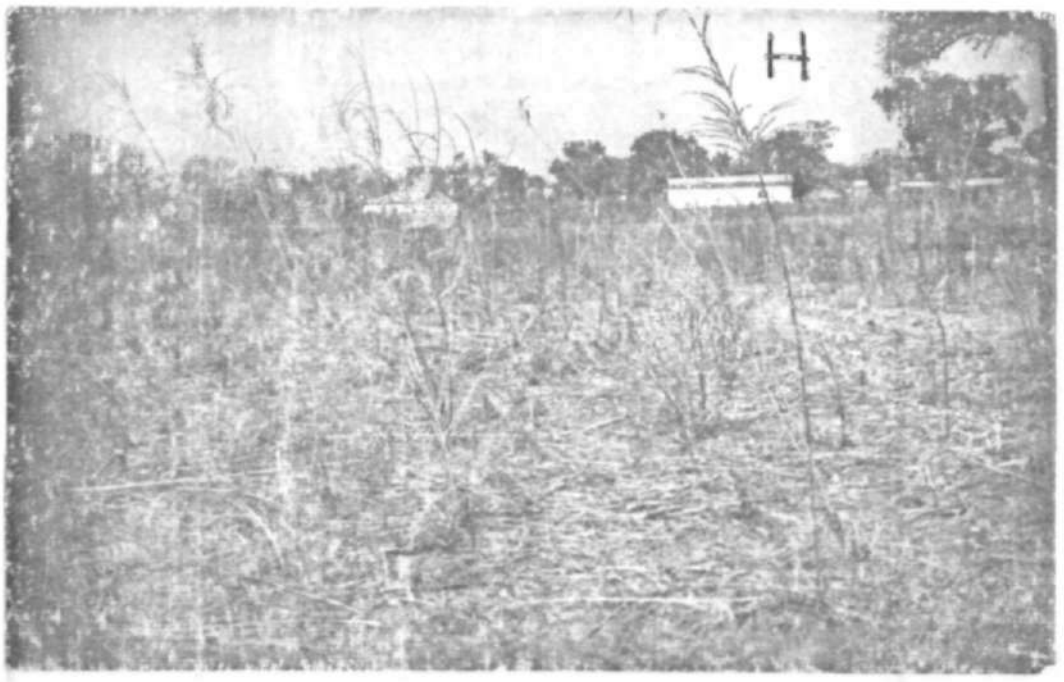


PLATE 12.02 cont'd


E


F


G


H

NOTES NO SITE PHOTOS.

(Plate 10.02)

(1) The site is a flat one.

(2) The ground water drainage gutter is very shallow (Photos A, and C).

(3) The land has been used for farming for a long time so it is clear and level after the recent harvest. (Photos E,F,G,H).

(4) The predouinant vegetation is the woody rope shrubs. (Photos E - H).

CHAPTER

11.00

NEWSPAPER PUBLISHING, AN INDUSTRY? - A DEFINITION

It is almost too obvious that newspaper publishing is taken as an industry. Maybe it will not be as obvious as it has been taken if one attempts to define its category from a negative standpoint. What is meant is to look at newspaper printing as stationary work that goes on in any office (not an industry!) with an enlarged duplicating machine and the stationery is the newsprint. Is this analogy strong enough to declare the newspaper business a non-industrial enterprise?

A look at Jolyon Drury's definition of an industrial building would throw much light on this problem. He said,

> "An industrial building means a building (other than a building in or adjacent to a quarry or mine and other than a shop) used for carrying on any process for or incidental to any of the following:
>
> - the making of any article or any part of any article;
> - the altering, repairing, ornamenting, finishing, canning, or adapting for sale or breaking up or demolition of any article or;
> - without prejudice to the foregowing paragraphs, the getting, dressing or treatment of minirals, being

> a process carried on in the course of trade or business other than agriculture, and for the purpose of this definition the expression "article" means any article of any description including a ship or a vessel."

The outstanding words that give character to this definition are, "process" and in the course of trade or business." The "making" of a newspaper is a process that goes on from the editorial section through the composing room to the press room and the main motivation behind it is trade (even if only for the purposes of sustaining the business).

So newspaper publishing is an industry.

But into what category of industrial process do we classif this business?

Drury went on in his definition:

"Light Industrial building means an industrial building (not being a special building) in which the process carried on or the machinery installed all such as could be carried on or installed in any residential area without detriment to the amenity of that area by reason of noise, vibrations, smells, fumes, smoke, soot, ash, dust, or grit."

Considering the newspaper industry in the light of this definition it could clearly fall under light industry and will be considered as such having no repugnant smells, producing nothing in form of smoke, soot, ash, dust or grit and the machines installed being such that of no detrimental consequences to the amenities that there exist in its vicinity.

It should be noted, however, that Jolyon Drury's definitions have been stated as relevant throughout the United Kingdom.

11.01 Plant Layout Problems

The planning of any industrial plant in effect is governed (and could even be synonymous with) by the layout problems. Because of the effect this has on the turnover of any plant all those that are party to any industrial organisation are in one way or the other connected to this problem, and one in a definite way interested - especially the stake holders. The workers are interested in the location of their work stations - how far is it from the cloak room?, does he have to shuttle a lot thus expending too much energy unnecessarily to do the same amount of work he should have done in a one way continuous process instead of moving to an fro?

Good plant layouts, therefore, are ones which provide for maximum satisfaction to employers, management, and the

stakeholders. Keeping this interest in mind, the major objectives in a good layout planning should achieve the following:

i) overall simplification;
ii) minimal material handling;
iii) provision for high work-in-progress turnover;
iv) provision for effective space utilization;
v) provision for worker's convenience and the promotion of job satisfaction and safety;
vi) Avoidance of unnecessary capital investment; and
vii) Stimulation of effective labour utilization.

11.02 EMPLOYEE WELFARE

The welfare of the employees is highly instrumental to the functionality and economic returns of any industrial organisation. Though in an institution immediate financial profit is not the focus, the conditions of service of workers has a great effect on the effeciency of such a set up. This, it is considered very important for the management to be up to date with the problems (social or otherwise) of the employees and the care being taken of them.

Ivestigating into the facilities provided in some of the existing newspaper premises in Nigeria, using Questionnaire

I*, it was discovered that the provisions provided was minimal.

From the questionnaire ...

Out of the 260 questionnaires administered in various presses all over the country, 84 were returned completed.

Upon analysis, with particular reference to welfare facilities, it was discovered that the workers were categorised into two groups - the Intermediate and Junior Staff, and the Senior Staff - which formed the basis of their treatment and conditions of service. The following results were got:

1. Intermediate and Junior Staff:
   - i. Live in rented houses which are low income in standard.
   - ii. Provide themselves with personal furniture.
   - iii. The only work motivations exist in off-duty days and free copies of the newspapers.
   - iv. Have some freedom in discussing their problems.
   - v. No recreational facilities except for some cases of press clubs - not provided by the management.
   - vi. Enjoy send-off parties probably organised for a senior staff.
   - vii. Working space not usually airconditioned.

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*See Appendix 1A.

2. Senior Staff:

i. Some live in their personal houses, otherwise they are accomodated in company houses. (Owned or rented)

ii. Where they live in their own houses they have their own furniture but company houses are furnished.

iii. Work motivation include, among other things, In-service training courses.

iv. Welfare facilities include free medical treatment.

v. For recreation there are Cafes in some cases.

3. i. Generally there are no company-owned restaurants or canteens and no individual company staff clubs.

ii. There are some cases of first aid rooms but no clinics to the standard of catering for the families of the workers.

Proposals

In the design of "The Birthplace of A Newspaper" the existence of some of some necessary facilities which incidentally has not been considered adequately has been viewed with great significance. Proposal has been made for the provision of a Canteen to seat 100 workers at a time during break periods. One of the reasons is that its location within the

premises will help curb late coming after break hours. Workers will also eat in a more decent atmosphere and this adds pleasure to the break period rest. This Canteen/restaurant will also serve for social functions at other times as well giving all workers an interaction forum.

A clinic has also been provided which will not only serve for industrial (or factory) accidents but cater for the medical needs of the workers' families.

Other social needs that are lacking such are work motivation strategy cannot be physically realised in the design. It is recommended for the management to take care of such aspects in their policy making.

Workers' Facilities:

The facilities will be discussed here in terms of those provided for in this design.

1. Cafeteria

The necessity of a cafeteria is no more the question but how much space should be provided. This depends on how many workers would be fed, at a peak break period, at a seating and whether or not there will be two lunch times (early lunch and late lunch).

Table 11.02 gives the use of meal load suggested by the United States Department of Agriculture*

Table 11.02

Industrial Kitchen Space Coefficients

Meal load	Base figure	Coefficient m^2
100 - 200	200	0.46
200 - 400	400	0.37
400 - 800	800	0.33
800 - 1,300	1,000	0.28
1,300 - 2,000	2,000	0.24
2,000 - 3,000	3,000	0.19
3,000 - 5,000	5,000	0.17
5,000 - 8,000	8,000	0.15

To give an example of the calculation involved, consider a kitchen meal load of, say, 1,400. This is within the range

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* See ALABI (1974) p.27

of 1,300 - 2,000 meal load whose base figure is 2,000 with a coefficient of 0.24.

The kitchen space requirement, therefore,

$$= 0.24 \times 2{,}000$$

$$= 480\ m^2$$

This is only the kitchen space required. To compute the dinning room space use is made of two figures:

i. the number of employees that are expected to be seated at one time;

ii. an allowance of 1.58 m^2 for each person seated.

The space computed this way will include allowances for seating, aisle, serving counters, space behind the counters, and dishwashing facilities.

For example a factory wishing to feed 500 employees at a seating would need $500 \times 1.58 = 790\ m^2$.

Further more a company having 800 employees and wishing to feed them in two seatings (i.e. 400 for early and late lunch each) would need

A. a kitchen space of $800 \times 0.33 = 264\ m^2$.

and B. dining room space of $400 \times 1.58 = 632\ m^2$.

Another recommendation by E. and O.E., "Planning"* is that

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* See ALABI (1974) p.28

the floor space required for the canteen be based on an allowance of 0.93 m^2 per person and the kitchen space be 60% of the canteen area.

2. Medical Services

Including the other functions for which the clinic is being provided in this design, mentioned above, the medical facilities will also cater for the following:

i. medical examination for applicants for purposes of interview,

ii. periodic medical check up of employees.

iii. profession medical services to employees as contrasted with factory accidents.

It is generally anticipated that three to six per cent of the total plant force will need medical treatment on an eight-hour day.

To determine the number of nurses needed in the medical services at least two pieces of information are needed.

i. occupational hazards in the industry, and

ii. number of workers.

The American Public Health Association suggests that for the maintenance of a complete health service the requirements will be:

i. 1 nurse for 300 employees

ii. 2 or more nurses for 301 - 600 employees, and

iii. 3 or more nurses for 601 - 1000 employees.

It is a general suggestion by medical authorities that a minimum of three rooms are necessary for a plant clinic, which should include a waiting room, an examination or consultation room, and a treatment room. Further recommendations include:

i. 0.09 m^2 per employee up to 92.9 m^2.

ii. less than 0.09 m^2 for anything above 92.90 m^2.

3. Cloakroom

There are various systems used in the design of this facility which is meant mainly for changing for the use of those workers that wear special clothes for their work. In some systems, the lavatories are seperated from the locker room in which case, usually, the later is located at (or close to) the workers' entrance, while the toilets and lavatories are located close to the highest on-the-job concentration of workers.

The other system (and which is used in this design thesis) is a combined lavatory and locker rooms. The design is such

also that the clocking is done within this facility which also provides for the time keeper, security and storage.

The following Table gives standards* used for industrial toilet facilities:

Table 11.02b.

No. of Persons	No. of fixtures
1 - 9	1
10 - 24	2
25 - 49	3
50 - 74	4
75 - 100	5

1 fixture for every additional 30 persons.

Urinary: 1 for every 30 males.

One water closet less than the number specified may be provided for every urinal installed for men, but the number of WC's shall not be less than two-thirds of the minimum specified.

Showers: 1 shower for every 15 persons.

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* See ALABI (1974) p.30. Original reference not known.

Drinking fountains: 1 for every 75 persons but shall not be installed in the toilets.

11.03 Storage

Apart from newsprint there are other things stored in the different areas of the press. Things like the wood-free paper for the commercial printing section, their finished products (temporarily before dispatch on orders), newly acquired equipment (temporarily before installation or as standby spares), the ink for the main press, photographic paper in the dark rooms, photographic plates for the plate making in the graphic art department, and many other things.

However many and diversified the things are to be store and whatever the number, they can all be put into two main categories - the raw materials, and the finished product. A third category could be tools and inplements.

Generally the finished products are stored temporarily awaiting dispatch. The conditions of storage are not too serious, therefore, and will necessarily be maintained only for a short time prior to dispatch. The conditions for the raw materials, however, command great import, because their quality prior to production is a determinant to the quality of the products and the effeciency of the machines.

The most important, (and it is also the main one) raw materials in newspaper business is the newsprint. This, also, is the raw material that demands most specifically that the conditions under which it is stored be maintained with accurac and constancy. The other raw material is the wood-free paper for the commercial printing department and the conditions for storage are similar to that of newsprint.

Newsprint Storage

There are still cases of sheet-fed press machines but for the majority of newspaper works the newsprint is used in reels (or rolls) whose sizes are classified into four categories: full, $\frac{3}{4}$, $\frac{1}{2}$, and $\frac{1}{4}$, depending on the number of pages of the newspaper the reel can print in width. The full size can take four pages in width, the $\frac{3}{4}$, three; gradually descending onto $\frac{1}{4}$ which takes only a single page.

The width of the reels used is determined by the specifications for the machines installed. These sizes determine the width of your newspaper also. The Standard reel sizes vary from 725 mm to 1500 mm (and thus most newspaper sizes are between 362 mm and 375 mm) and diameters of 900 mm to 1050 mm though some of the currently designed press machines would specify a diameter of 1125 mm.

The important conditions in the storage of newsprint are temperature and humidity. If the humidity is high the paper (newsprint) which is made up of 7 to 9 per cent moisture, and a hygroscopic material will pick up moisture from the atmosphere. The paper thus expands developing wrinkles and consequently causing poor machine operation leading to increase in wastage of raw material.

Storage in a relative humidity of 70% is considered ideal. Temperature, though one of the important conditions, is less important. The major criterion is that the paper be stored long enough for the inside of the reel to reach equilibrium with the external ambient temperature. Incidentally the "Birthplace of A Newspaper" has been designed to cater for newsprint storage for eight months at a time.

A temperature range of 70 - 72°F and relative humidity of 58% is a good compromise for printing matter and workers. Other major factors that are considered particularly for the storage of newsprint include:

(1) Smooth walls, without projections that can damage newsprint.

(2) Smooth floors which is level that the reel could be placed on its plane of diameter without damage to the edges.

(3) Fire protection; and

(4) a floor plan that allows for inventory rotation.

11.04 Internal Environment

The purpose of social* study in Architecture is to compute the desireable conditions of the human beings involved in the function of any building - how they react to their working conditions and the internal environment. This is necessary in order to determine the optimum conditions to design for.

A look at SDSM Questionnaire I

From the results gathered from these questionnaires* one could conclude some major condition which are prominent in the desires of the occupants of the existing press premises. Generally the desired condition is that all the rooms be cool but not cold except in the radio room for the sake of the machines; that the rooms be bright not dull neither is it desired that they be sturfy in the administration particularly there is a high degree of affinity for flexibility as opposed to the rigidity desireable for the telex machines. In many spaces the sizes are determined by the sizes of the equipment

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* See chapter 7.00.
* See Appendix 1C.

used rather than the "feeling" or reaction of the people but flexibility caters adequately for their little influence since the occupants can do some minor adjustments to strike a compromise. How formal a space is desired to be is determined by the business that goes on in there so there is a range of 2 to 7, the most formal being the telex room through the production areas to the most casual reception areas.

From these questionnaires therefore the design factors are established in conjunction with some established standards for comfortable environments.

Some Standards*

The standards will be discussed under three levels - the lighting level and use of colours, the comfort level, and then noise level. While the lighting level may sound only too obvious, the comfort level is a function of four variable conditions which include air temperature, radiant temperature, air humidity, and the rate of air movement. Of these air temperature is by far the most important.

1. COMFORT LEVEL

   1) Air Temperature

      In British factories the optimum air temperature has been computed to be 65°F (19°C) and a

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* ALABI, 1974.

comfort zone (over which no more than an individual out of seven complains of actual discomfort) is 60 - 68°F (15°C - 20°C) for individuals doing light work. A higher temperature range of 67° to 73°F (20 - 23°C) is the desire of those doing office and other sedentary work. For more active workers, a lower temperature range of 55°F to 60°F (12-19°C) will be preferrable, and should even be lower for workers who are exposed to sources of radient heat.

ii) Radient Temp

In the composing room the only source of radient heat is the hot metal composition Linotype machine. The radient temperature should neither be too high nor too low. A recommended globe thermometer reading (mean radient temperature) is 65°F (21°C) optimally, and anything in the range of 62 to 68°F (165 - 20°C) is comfortable. Where necessary use should be made of screens to shield workers from this source of heat.

iii) Air Humidity

Relative humidity (RH) is the percentage of the moisture that would completely saturate the air

at any given temperature and has limited effect on thermal comfort. It should not normally exceed 70% when the humidity is low, like it usually is during the harmattan periods, skin cracks result and very serious nose and throat dryness, especially at very high temperatures. High humidity is responsible in most cases for sturfiness especially in ill-ventilated and crowded rooms, because low rate of sweat evaporation results when the air temperature rises above the comfort zone.

iv) Rate of air-movement

Assuming optimum air and radient temperatures, air movement is just perceptible at about 9 meters per minute. Above 30 meters per meter the air is "too draughtly" and the condition is described as "airless" when the rate of air-movement is below 6 meters per minute. The rate of air movement can be controlled by the use of propeller fans and in more serious situations axial fans could be used.

2. LIGHTING LEVEL

The amount of lighting for any environment depends on

i) the nature of work

ii) the environment in which the work is being done,

iii) the worker's visual character i.e. his perceptive power (or ability).

In lighting design the needs of the worker for the task should be the overriding factor, then factors like system of emphasis, visual appreciation and interest could play their part after.

New industrial lighting standards "announced by the Illuminating Engineering Society"* indicates light levels are increasing. Table 11.04 shows recommendations which were adopted by the I.E.S. and are based on the findings of the Vision Research Laboratories of the University of Michigan.

Table 11.04a
Industrial lighting standards

Typical Industrial Areas		Foot-candles for acceptable plant lighting
i.	Exterior entrances active	5.00
ii.	Wrapping, packing or lebelling	50.00
iii.	Stairways, washrooms, and other services areas	20.00
iv.	Office, mail sorting, regular office work	100.00

* See ALABI, (1974) p.35

Table 11.04a (Contd.)

Typical Industrial Areas	Foot-candles for acceptable plant lighting
v. Machine shop, rough work	50.00
vi. Machine shop, fine work	500.00
vii. Machine shop, medium work	100.00
viii. Assembly areas, rough easy seeing	30.00
ix. Assembly area, medium	100.00
x. Assembly area, fine	500.00
xi. Active storage rooms, rough bulky	10.00
xii. Active storage rooms, fine	50.00

Calculation: (Watts per square foot method)

Considering a typical lighting problem for a shop designed for medium work being laid out for an area 60 fit x 20 ft. How many fixtures consuming 100.00 watts each are required? (They are to be semi-direct fixtures).

Answer:

From the tables, illumination needed for this type of shop = 100.00 ft - candles. Now, the fixtures in question can deliver 14 foot-candles/watt/sq. ft.

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* See ALABI, (1974) p 35.

Therefore, to deliver 100 foot-candles, requires

$$\frac{100}{14} \text{ watts/sq. ft.}$$

$$= 7.15 \text{ watts/sq. ft.}$$

But total area of shop

= 60 ft x 20 ft

= 1200 sq. ft.

Therefore, total lighting load

= 1200 sq. ft x 7.15 watts/sq ft.

= 8,580 watts

But each fixture discharges 100 watts.

Therefore, there are

$$\frac{8,580 \text{ watts}}{100 \text{ watts/fixture}} = 86 \text{ fixtures.}$$

Note:

This method is only a rough one. It may be necessary to employ a more accurate method before actual installation.

b. Use of Colours

This has some close connection with the lighting problems just discribed. Colours are being carefully selected for use in industries to achieve clear three dimensional vision and it is noticed that lighter and brighter colours one being

employed to bring this about. This is due to the fact that the uncomfortable and undesireable glare is much more reduced when compared with direct lighting.systems. Table 11.04b gives some quantitative values of this effect.

Table 11.04b.

Approximate reflectance factors used in interior painting.*

Surface	Colour	Approx. Reflectance.
i. Ceiling	white	75 - 80%
ii. Upper walls	Light green or light buff	50 - 55%
iii. Lower walls	dark green or dark buff	25 - 35%
iv. Task background	medium green or medium buff	35%
v. Floor	buff	15%

3. HOW ABOUT NOISE?

Noise is unwanted sound. However "unwanted" is defined in terms of who owns the ears so there is usually some conflict

*See ALABI (1974) p.40

about whether a particular sound is noise or not. There are a variety of sounds existing in an industry emanating from the different departments in the factory; and they are peculiar to the nature of job being handled at the source. The effect of constant (or continuous for that matter) exposure to high level sound (could be defined as 'noise') is a gradual one - the deafeing of the ears. It is, however not clear how much noise or what type of noise results in hearing loss but a logical assertion could be that the louder the noise at the point of hearing and the more prolonged the exposure to the sound (noise) energy the greater the hearing loss. The rate of loss may not be easily defined.

In spite of the disagreement on the level of sound (noise) that should be considered dangerous, 80 and 90 decibees have been identified as the modal figures for a minimum.

Noise in industries could be checked by:

i. control at source.
ii. acoustical treatment.
iii. use of baffles and sound absorbers.
iv. use of ear-protection devices and
v. isolation of the noise.

The cheapest and most effective way may be to control the noise at the source though a combination of methods would have far reaching results.

CHAPTER

12.00

THE DESIGN

The design is always the goal of any formulation of an architectural thesis and concept. If after a successful selection of the physical hardwares to achieve the dictates of the Semantic Differential Scale Model (SDSM) the brief is not properly considered and catered for then one would record an architectural failure. The brief is thus of prime import.

The aim, therefore, is always to satisfy both. This design of a Newspaper house is based on conclusions drawn from the results gathered from the SDSM questionnaires* administered in all the major pressess in the country as against the desired conditions. To achieve these condition (and thus successfully define an architectural thesis) a comfortable and practicable marriage has been the aim between the summary of these results and the physical hardwares* which includes the structural system, the envelope system, the channel system, and the filter system.

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* See Appendix 1B.

* See chapter 8.00.

12.01 The Design Brief

This "Birthplace of A Newspaper" will consist of three main sections and two others which include the workers' facilities and the works/maintenance department. The three main sections are the administration, the editorial, and the production units.

The brief is broken down as follows:

A. ADMINSTRATION

Consisting of:

(1) 25 offices

i. 9 Executive offices for the top administrative executives.

ii. 6 Semi-executive offices for those next in rank such as managers and heads of sub-sections of

iii. the administration.

iii. 10 others for secretaries, clerks, typists, etc.

(2) Rooms for:

1. Advertising staff (7-10)

ii. Account clerks (20-25)

iii. Filling room for staff personal files

iv. Store for stationery

v. Board/Conference room to contain up to 40 persons.

vi. Visitors' waiting room

vii. General office/mail

viii. Coffee room to contain an area for relaxed sitting.

B. EDITORIAL SECTION

Consisting of:

(1) 6 offices:

i. 2 Executive offices for the Editor and Editor-in-Chief

ii. 2 Semi-Executive offices for the Associate editor and news editors

iii. 2 other offices for secretaries

(2) Rooms for:

i. Sub-editors (10 - 12)

ii. Editorial executives (4 - 6)

iii. Reporters - Chief Photographer

- Chief Reporter

- Typist

iv. Proof readers (10 - 12)

where the proofs are read and corrected.

v. Newsroom - Reporters

- Photographers
- Typists
- Telephones
- Radio receivers
- Television

vi. Editorial meeting/press conference.

vii. Radio room housing the telex machines, Renters etc where messages are received for onward transmission to the editorial staff.

viii. Library for reference books and articles.

C. PRODUCTION

Consisting of:

(1) 3 offices all semi executives for the production management staff.

(2) Composing room to house

- Linotype machines (x8)
- Compugraphic machines (8 - 10)
- Pasters (8 - 10)
- Teletype setters (x3)
- Plate making machines (4 - 6)
- Dark room for processing page and other photographs.

- Camera (big) for the newspaper pages
- Camera (small) for normal photo sizing
- Proofing machines.

(3) Press room to house the goss set press machine.

D. MARKETING/CIRCULATION

Consisting of:

(1) 4 offices

i. 1 Executive office for the marketing manager

ii. 2 Semi-Executive offices for the commercial and transport officers.

iii. 1 other office for the secretary to the marketing manager.

(2) Rooms for:

i. Dispatch to accomodate the packaging and labelling of the newspapers and dispatch clerks.

ii. Dispatch hall where the packages are taken away

iii. Store where some old issues are kept along with the packaging tools.

E. COMMERCIAL PRINTING SECTION

Consisting of:

(1) 5 offices

i. 2 Executive offices for the Printing Manager and his assistant.

ii. 2 Semi-executive offices for the printing works Supervisor and the Accountant

iii. 1 other office for the Secretary to the Manager

(2) Room to accomodate:

i. the account clerks and cashier

ii. Main production machines.

iii. stores for both raw material and finished products.

F. WORKS/MAINTENANCE SECTION

Consisting of:

(1) 6 offices

i. 2 Executive offices for the Works Engineer and the Higher Estate officer

ii. 3 Semi-Executive offices for the Engineers

iii. 1 other office for the secretary to the Works Engineer.

(2) Rooms to accomodate

i. small workshop for maintaining such machine parts small enough to be removed.

ii. Vehicle/heavy duty maintenance hall.

iii. Room for the storekeeper and store for tools and spare parts.

G. ANCILLARY FACILITIES

Provision be made for:

(1) Airconditioning plant

(2) Stand-by power generator

(3) Switch room

(4) Toilets.

H. WORKERS' FACILITIES

to include

(1) Kitchen/Canteen for workers during break time and other social functions.

(2) Clinic to cater for industrial accidents and families of employees.

(3) Changing locker rooms and toilets.

12.02 Functional Relationship

Functional Relationship, like the layout problems is highly essential and both go hand in hand and could even be operated at the same time since the bases are very similar.

The basis for the achievement of a good and effecient funotional relationship lie in the following;

i. Production flow
ii. Similarity in functions
iii. Administrative hierarchy
iv. Material handling
v. Security

Out of these, the production flow tops the list in priority followed by material handling and security. Similarity in function is closely related to production flow, material handling and workers movement. Administrative hierarchy affects the details of the relationship within the administrative block. However, the block taken as whole needs some consideration in siting since its proximity to strategic functional facilities of the set-up is essential to efficiency and control.

From gross analysis there are three main functionary parts in a newspaper works; the administration, which houses

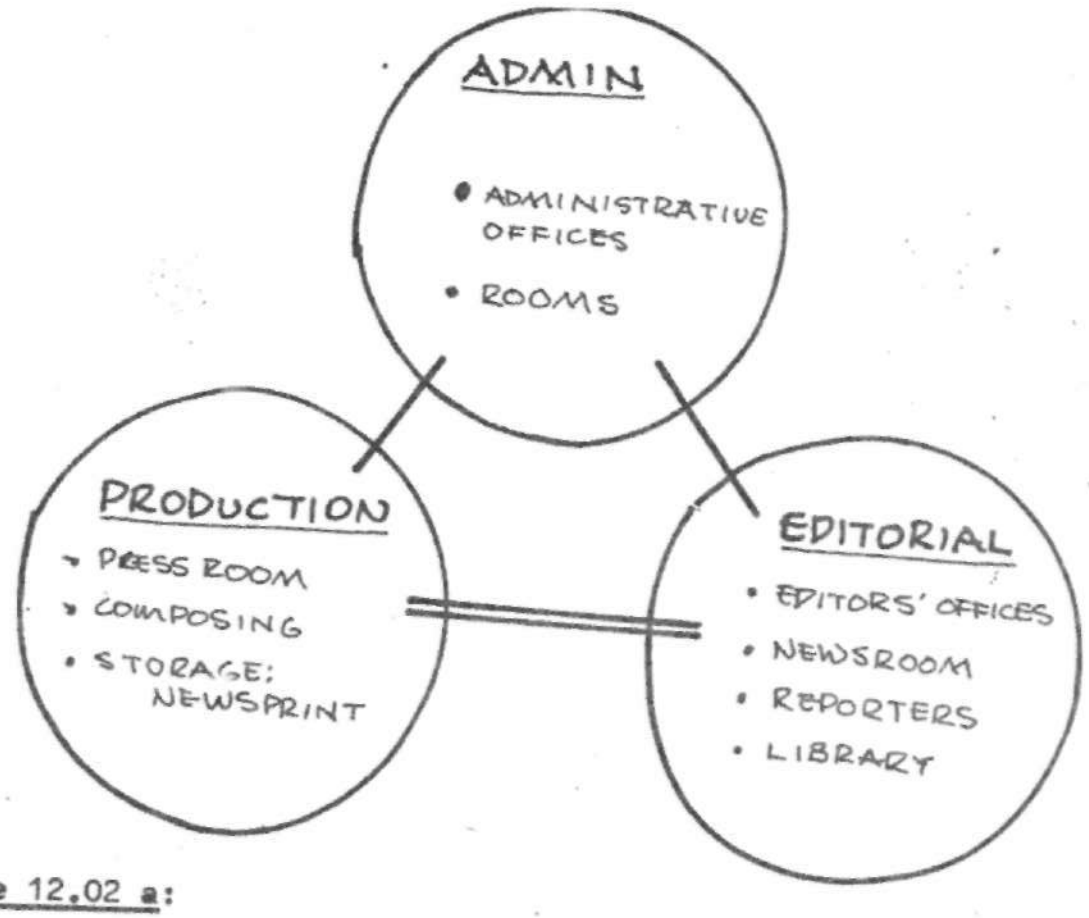


Figure 12.02 a:
Functional relationship I

the administrative concern of the business - office accomodations and rooms; the editorial section which accomodate the various editors, the newsroom, reporters' rooms, and the library including all editorial hardwares; and then, the production section which comprisesof three parts; the press room being the main production unit, the composing room which is an equivalent of the labour room of a maternity home, and the newsprint storage system, the immediate source of the raw material. (See Fig. 12.02 a).

The functional link between the administration and any of the other two parts is not as strong as that between the two remaining parts. This is because the administration does not form part of the production system but proximity is advocated.

The other parts, of necessity, to facilitate production, have direct link in line with the production flow. It should be noted that in "the Birthplace of A Newspaper", there is an overlap in the relationship between the editorial and the production section - being connected by accomodating the composing room and the editorial in the same block with direct vertical circulation.

There are other facilities which do not form part of the main sections of the press. They are incidental, however,

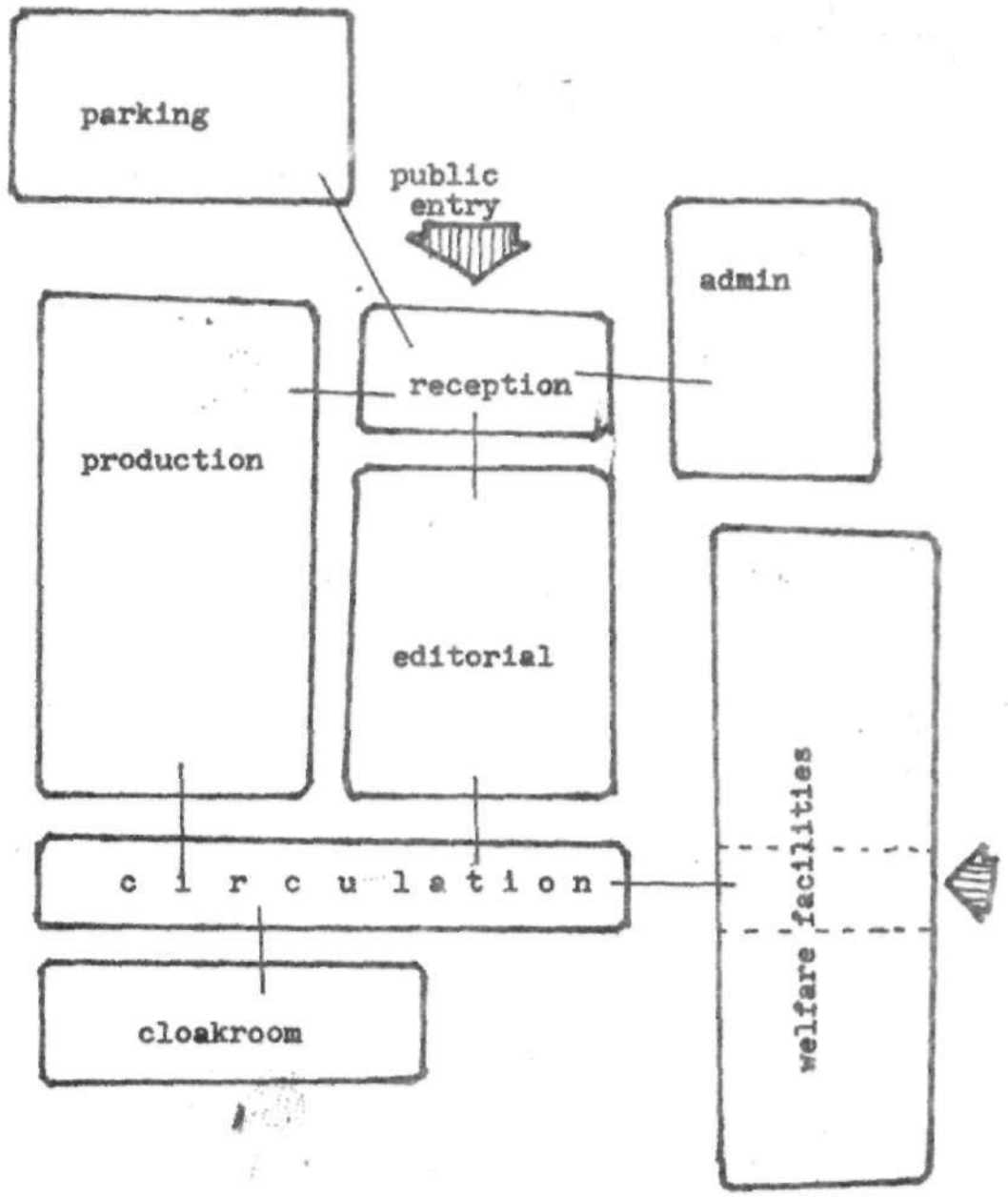


Figure 12.02 b:
Functional relationship II

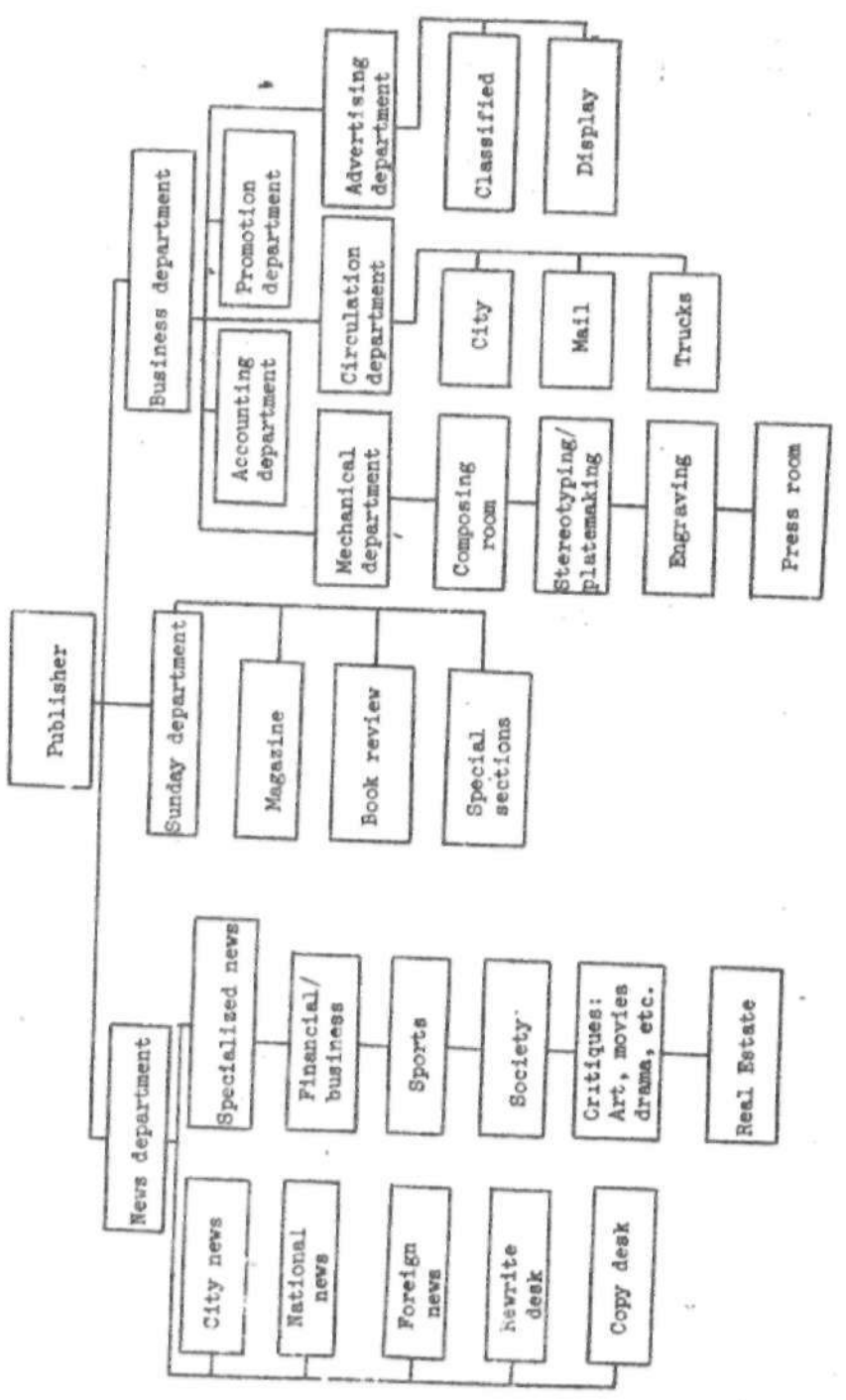


Figure 12.02 c:
Organisation of a large newspaper.
(Moughdam, p6)

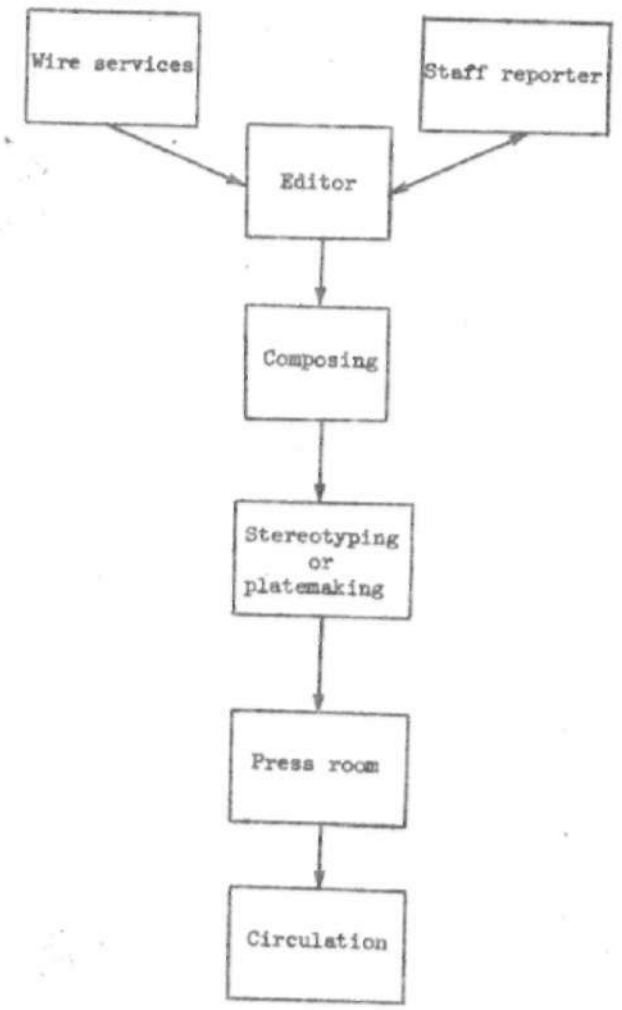


Figure 12.02 d:
Flow of information through the press.
(Moughdam, p10)

to facilitating the operation of the press in general. These include the workers facilities: the clinic, the canteen, and the cloakroom which has the colsest link with the production line. The maintenance section is also included.

The detailed relationship is illustrated by Fig. 12.02.

12.03 Equipments and sizes

The most important determinants in spatial requirements, particularly, in the mechanical sections of the press are the sizes and number of equipments to be accomodated. In the design a general working space allowance is assumed in conjunction with the sizes of the machines (unless such allowances are specified for any equipment) to determine the space required.

The following table show some dimentions:

Table 12.03: Equipment, sizes and number.

A. Composing Room

Type	Dimension in cm	No. Required
i. Linotype	159 x 147 x 201	8
ii. Compugraphic machine		10
iii. Ludlow	183 x 366 x 201	1

Table 12.03 (Contd.)

Type	Dimension in cm	No. Required
iv. Handproof	122 x 91 x 107	1
v. Solan's Proof	274 x 91 x 107	1
vi. Stone	168 x 107 x 107	2
vii. Teletypesetter		3
B. Camera Section:		
i. Magna colour Camera (type 228) (max size of negative is 51 x 75 cm)	391 x 99 x 206	1
ii. Lithotex vertical Camera for photo re-production (réduction and enlargements)	156 x 81 x 206	1
iii. Fibre glass sink unit (accomodates two 51 x 61 cm dishes with seperate troughs for	160 x 66 x 107	2

Table 12.03 (Contd.)

	the chemicals and for washing)		
iv.	Drying Cabinet	107 x 76 x 107	1
v.	Printing Down Machine	183 x 183 x 107	2
C.	The Press Room		
i.	Goss a typical layout of unit press with folders		
	The Commercial Printing Section		
i.	Solna off-set speed 8,000 cph	194 x 129 x 165	1
ii.	Stitching machine	92 x 92 x 160	1
iii.	Triming machine	152 x 139 x 160	
iv.	Puncher	107 x 76 x 107	1
v.	Stapling machine	162 x 129 x 160	1

12.04 Schedule of Accomodation

The schedule of accomodation forms an essential aspect of the design brief because this is what actually is being provided for. In this design thesis it has been my aim to provide for as comprehensive a staff requirement as possible so that the necessary expansion of the whole project would be minimal. The provision made for the offices will definitely not be fully utilized at the start of the project but as much office space that is left unoccupied (that is if the construction is completed in one face) could be let out. This is a source of income to carry on with the project.

In this schedule, the different sections of the press have been spelt out for ease of reference and the areas given have been given with minimal approximation, and have been based on general standards.

The Schedule

A. THE MANAGEMENT

I. GENERAL:

Type of Space	Accomodation	Area m^2
Office	Managing Director	27
"	Secretary to M.D. Secretary to Company Secretary	20

contd.

The Schedule

A. THE MANAGEMENT (CONTD.)

GENERAL (CONTD.)

Type of Space	Accomodation	Area m^2
Office	Company Secretary	18
"	General Manager (SP. Duties)	20
"	Secretary to G.M. (Sp. Duties)	15
"	Secretary to Chief Accountant	15
"	Chief Accountant	18
"	Advertising Manager	20
"	Secretary to Advertising Manager	15
"	Principal Accountant	18
"	Typist to Accounts Department	15
"	Property Manager	20
"	Secretary to Prop. Man.	15
"	Manager (Commercial Services)	20
"	Secretary to Manager (C.S.)	15
"	Personnel Manager	20
"	Secretary to Personnel Manager	20
"	Secretary to Administrative officer	
"	Typist	

cont'd.

The Schedule

A. THE MANAGEMENT (CONTD.)

GENERAL (CONTD.)

Type of Space	Accomodation	Area m^2
Office	Credit Controller	18
"	Senior Accountant	18
"	Insurance Officer (Accounts)	18
Room	Advert Staff (7-10) @ $2.5m^2$	25
"	Account Clerks (20-25) "	62.5
"	Filing room	
"	Board/Conference (30-40) @ $1.2m^2$	48
"	Visitors' Waiting	20
"	General Office/Mail	25
"	Filing + Store	25
"	Coffee Room	30
II. SPECIAL:		
Office	Chief Engineer	15
"	Technical Adviser	15
"	Technical Manager	15
"	Production Manager	20
"	Secretary to Prod. Manager	12.5
	TOTAL AREA	€78

The Schedule

B. EDITORIAL (CONTD.)

Type of Space	Accomodation	Area m^2
Rooms	Press Meetings/Conference	36
"	Radio Room - Telex	
	- Renters -	15
	- etc.	
"	Library	64
"	Circulation/Lobby	80
	TOTAL AREA	392

C. PRODUCTION

Type of Space	Accomodation	Area m^2
Off ce	Printing Manager	18
"	Graphic Art Supervisor	18
"	Composint Rm Superintendent	18
Rooms: Composing		
	- Linotype Machine (x8)	64
	- Compugraphic Machine (8-10)	20

cont'd.

The Schedule

B. EDITORIAL

Type of Space	Accomodation	Area m^2
Office	Editor	25
"	Secretary to Editor	15
"	Editor-in-Chief	18
"	Secretary to Editor-In-Chief	15
"	Associate Editor (Features)	18
"	News Editor	18
Rooms	Sub-Editors (10-12) @ $1.2m^2$	20
"	Editorial Executives (4-6)@ $3m^2$	18
"	Reporter's Room: - Chief Photographer - Chief Reporter - Typist	15
"	Proof readers (10-12) @ $1.2\ m^2$	15
"	Newsroom: - Reporters - Photographers - Typists - Telephones - Radio Receiver - Television	20

cont'd.

The Schedule

C. PRODUCTION (CONTD.)

Type of Space	Accomodation	Area m^2
Rooms	Composing:	
	- Pasters (8-10) @ 3 m^2	30
	- Teletypesetters (x3)	18
	- Plate Making (4-6) @ 3 m^2	16
	- Dark Room (general)	16
	- Camera (Big)	32
	- Camera (Small)	12
"	Press Room	300
"	Storage:	
	- - Newsprint	1,000
	- General	500
	TOTAL AREA	2,062

The Schedule

D. MARKETING / CIRCULATION

Type of Space	Accomodation	Area m^2
Office	Marketing Manager	20
"	Secretary to Marketing Nanager	15
"	Commercial Officer	16
"	Transport Officer	16
Rooms	Dispatch Room (dispatch Clerks and packaging)	42
"	Dispatch Hall	27
"	Store	12
	TOTAL AREA	148

E. COMMERCIAL PRINTING

Office	Commercial Printing Man.	20
"	Asst. Comm. Printing Man.	20
"	Secretary to Managers	18
"	Printing works Supervisor	16
"	Accountant (Comm.)	18
Rooms	Lobby Reception	35
"	Machine Room	160
"	Storage	56
"	Accounts Clerks	15

The Schedule (Contd.)

H. WORKERS FACILITIES

Kitchen/Canteen	270
Clinic	220
Locker Rms/Toilets	270
TOTAL AREA	1081

Note:

This schedule does not include all the circulation spaces, such as spaces occupied by the staircases, etc. unless where such is specifically mentioned, so compared with the actual design there will be some difference in the total areas.

APPENDICES

MSc (ARCHITECTURE) THESIS: NEWSPAPER PRODUCTION.
DATA TO STUDY THE WORKING CONDITIONS IN THE PRESS.

QUESTIONNAIRE I.

A. THE PAPER

1. Name of Newspaper _____

2. Site Town _____ State _____

3. Coverage ( ) Local
( ) State
( ) National
Tick the one applicable.

4. Name of any other publications:-
1. _____
2. _____
3. _____
4. _____

5. Language medium _____ Target Population _____

B. SOCIAL AMENITIES

Residence

6. What type of residence do you have ?
( ) Company house
( ) Rented house
( ) Personal house

7. How is your house furnished
( ) Company furniture
( ) Rented furniture
( ) Personal furniture

8. Of what status is your residence ?
( ) L income
( ) upper income.

...../2.

Car.. Motivation

9. Can you identify a y form(s) of motivation in your work ?

( ) onusos

( ) ff-duty days

( ) n-service training

( ) tudy leave

( ) eminars Lectures

( ) ree papers

If 'yes' tick one s) applicable.

Views/Meetings

10. How do you get yo r views accross to the authority ?

.arough ( ) uggestion at meetings

( ) iscussions

( ) inion Pool

Health

11. How does the coma ny provide for your health care ?

( ) ompany health clinic

( ) ther comapny facility _____

( ) ealth allowance or subsidy.

Recreation

12. Are there any com any recreational facilities available to you ?

If so which ? ( ) ompany club house

( ) afe

( ) wimming Pool

( ) arties/Get-together, ( ) weekends

( ) Monthly

( ) Festivals

( ) rips (How often _____

C. YOUR WORK

13. Name of Departmen _____

...../3.

14. What type of staff are you ?

( ) Senior

( ) Intermediate

( ) Junior

( ) Permanent

( ) Confirmed

( ) Contract (Term: _____Months/years)

( ) Daily paid

15. Nature of Job _____

16. What time are you normally able to get to work ? _____am/p.m

17. What are you supposed working hours ?

Start _____am/pm

Close _____am/pm

18. What is often the situation that makes you come late to work when you do come late ?

_____

_____

19a. Are there any shifts ? ( ) yes ( ) No

b. How many ? _____

20. How far do you live away from work ?

( ) Under 5 km

( ) Between 5 and 10 km

( ) Over 10 km.

D. YOUR WORKING SPACE

21. What is your type of working space

( ) Enclosed room

( ) Open shade

( ) Open air

22. On which floor are you ?

( ) underground floor

( ) ground floor

( ) Any other _____.

...../4.

23. How is your working area ventilated?

( ) Natural

( ) Mechanical (fans)

( ) Airconditioning

24. How do you assess the condition of your working space? Use the scale provided below.

*(In using this scale proceed as in the following example: On the second scale "clean _ _ _ _ _ _ _ _ _ _ dirty", if the room is dirty rather than clean, your range of grading will be 6 - 10, then how dirty it is is graded within this range - 'very dirty' being 10 and 'just dirty' or at least dirty being 6; between 'just dirty' and 'very dirty' will be 8. If you consider your space clean, then assess how clean it is in the same way within the range 1 - 5.

Example: If my space/room is dirty but not very dirty, and is more dirty than I would consider average, the assessment would be as follows:

	1	2	3	4	5	6	7	8	9	10	
clean	_	_	_	_	_	_	_	_	X	_	dirty)

*Now you can proceed.

*SEMANTIC DIFFERENTIAL SCALE by Hershberger

	1	2	3	4	5	6	7	8	9	10	
cozy	_	_	_	_	_	_	_	_	_	_	roomy
clean	_	_	_	_	_	_	_	_	_	_	dirty
light	_	_	_	_	_	_	_	_	_	_	dark
useful	_	_	_	_	_	_	_	_	_	_	useless
delicate	_	_	_	_	_	_	_	_	_	_	rugged
active	_	_	_	_	_	_	_	_	_	_	passive
good	_	_	_	_	_	_	_	_	_	_	bad
ordered	_	_	_	_	_	_	_	_	_	_	chaotic
cool	_	_	_	_	_	_	_	_	_	_	warm
old	_	_	_	_	_	_	_	_	_	_	new
colorless	_	_	_	_	_	_	_	_	_	_	colorful
sturfy	_	_	_	_	_	_	_	_	_	_	drafty
flexible	_	_	_	_	_	_	_	_	_	_	rigid
expensive	_	_	_	_	_	_	_	_	_	_	inexpensive
calming	_	_	_	_	_	_	_	_	_	_	exciting
clear	_	_	_	_	_	_	_	_	_	_	embinguous
quite	_	_	_	_	_	_	_	_	_	_	noisy
safe	_	_	_	_	_	_	_	_	_	_	dangerous
SMall	_	_	_	_	_	_	_	_	_	_	large

...../5.

- 5 -

	1	2	3	4	5	6	7	8	9	10	
hot	—	—	—	—	—	—	—	—	—	—	cold
simple	—	—	—	—	—	—	—	—	—	—	complex
pleasing	—	—	—	—	—	—	—	—	—	—	annoying
smooth	—	—	—	—	—	—	—	—	—	—	rough
formal	—	—	—	—	—	—	—	—	—	—	casual
dull	—	—	—	—	—	—	—	—	—	—	bright
friendly	—	—	—	—	—	—	—	—	—	—	hostile
messy	—	—	—	—	—	—	—	—	—	—	tidy
private	—	—	—	—	—	—	—	—	—	—	public
boring	—	—	—	—	—	—	—	—	—	—	interesting
traditional	—	—	—	—	—	—	—	—	—	—	contemporary
generous	—	—	—	—	—	—	—	—	—	—	frugal
huge	—	—	—	—	—	—	—	—	—	—	tiny
beautiful	—	—	—	—	—	—	—	—	—	—	ugly
unified	—	—	—	—	—	—	—	—	—	—	diversified
subdued	—	—	—	—	—	—	—	—	—	—	Bibrant
protected	—	—	—	—	—	—	—	—	—	—	exposed
facilitating	—	—	—	—	—	—	—	—	—	—	distracting
musty	—	—	—	—	—	—	—	—	—	—	fresh
temporary	—	—	—	—	—	—	—	—	—	—	permanent

25. How do you assess the production of the press ?

( ) Good
( ) Fair
( ) Poor

26. What in your opinion is responsible for your assessment

( ) Staff strength
( ) Condition of working spaces.

THANK YOU.

Udenyi P. E.

Appendix I: B

1

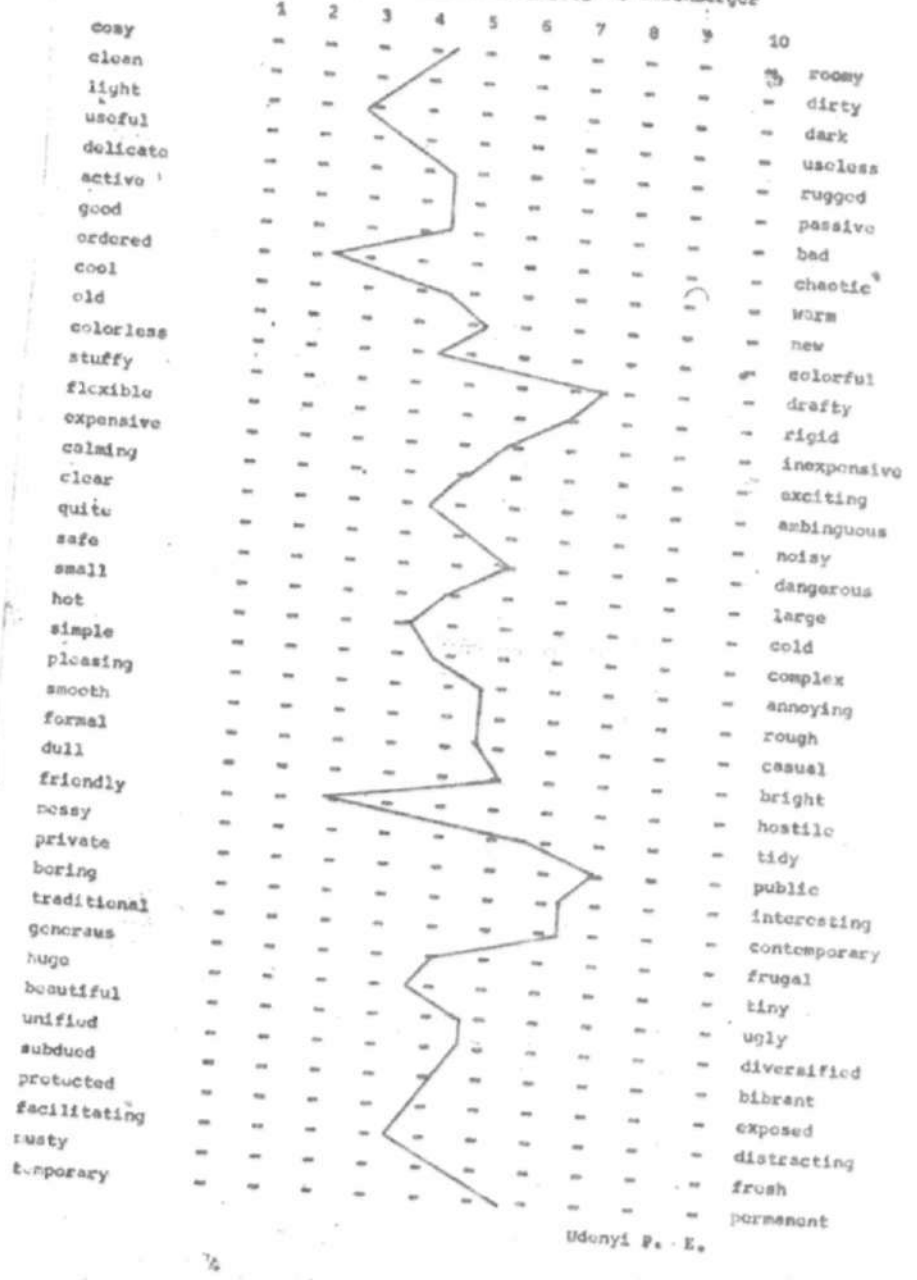
ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS:

B. SECTION OF PRESS ADMINISTRATION

C. SUBJECT:

* SEMANTIC DIFFERENTIAL SCALE by Hershberger



Udonyi P. E.

11

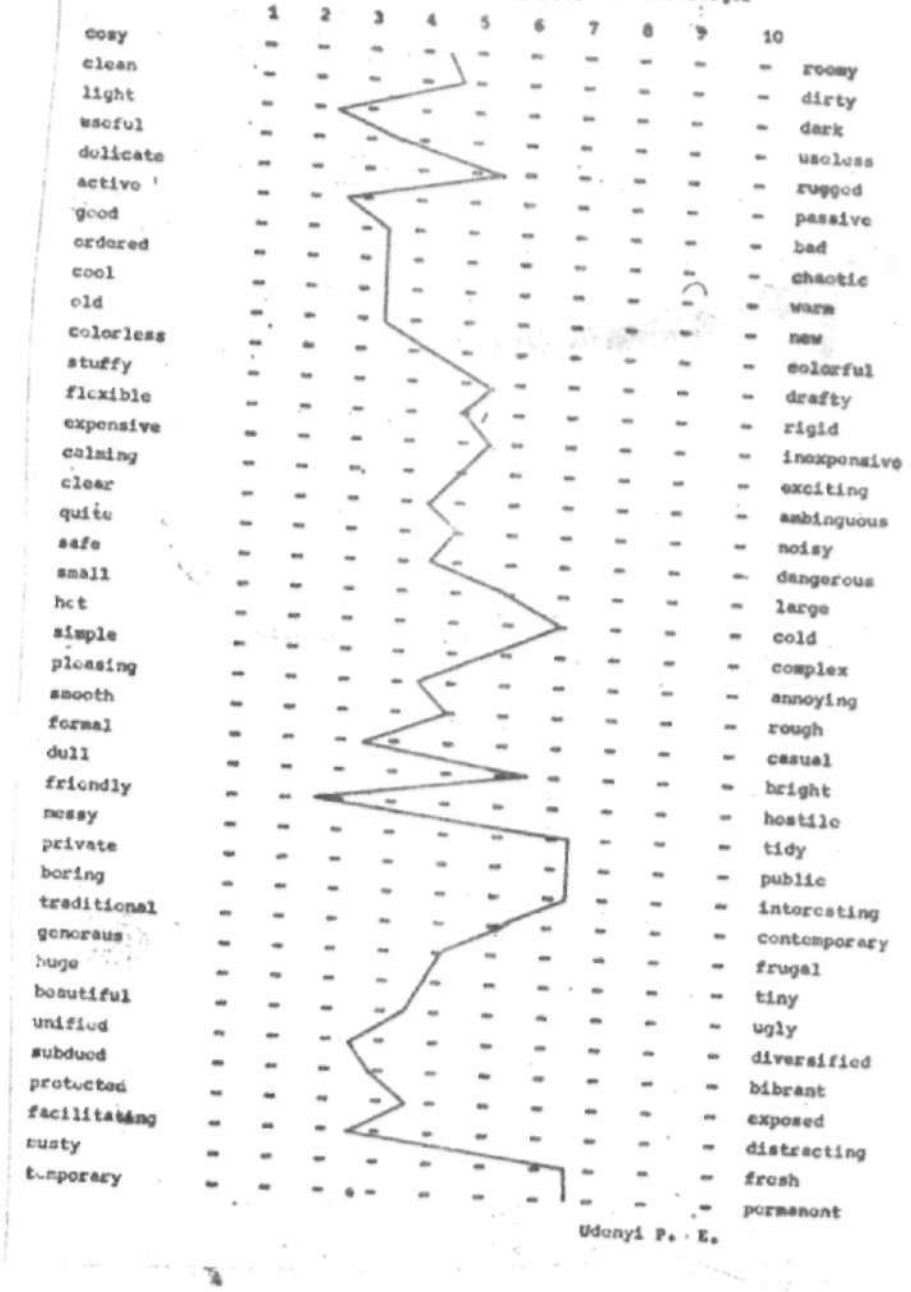
ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS: .....

B. SECTION OF PRESS ACCOUNTS

C. SUBJECT: .....

* SEMANTIC DIFFERENTIAL SCALE by Heeshbergor



Udonyi P. E.

111

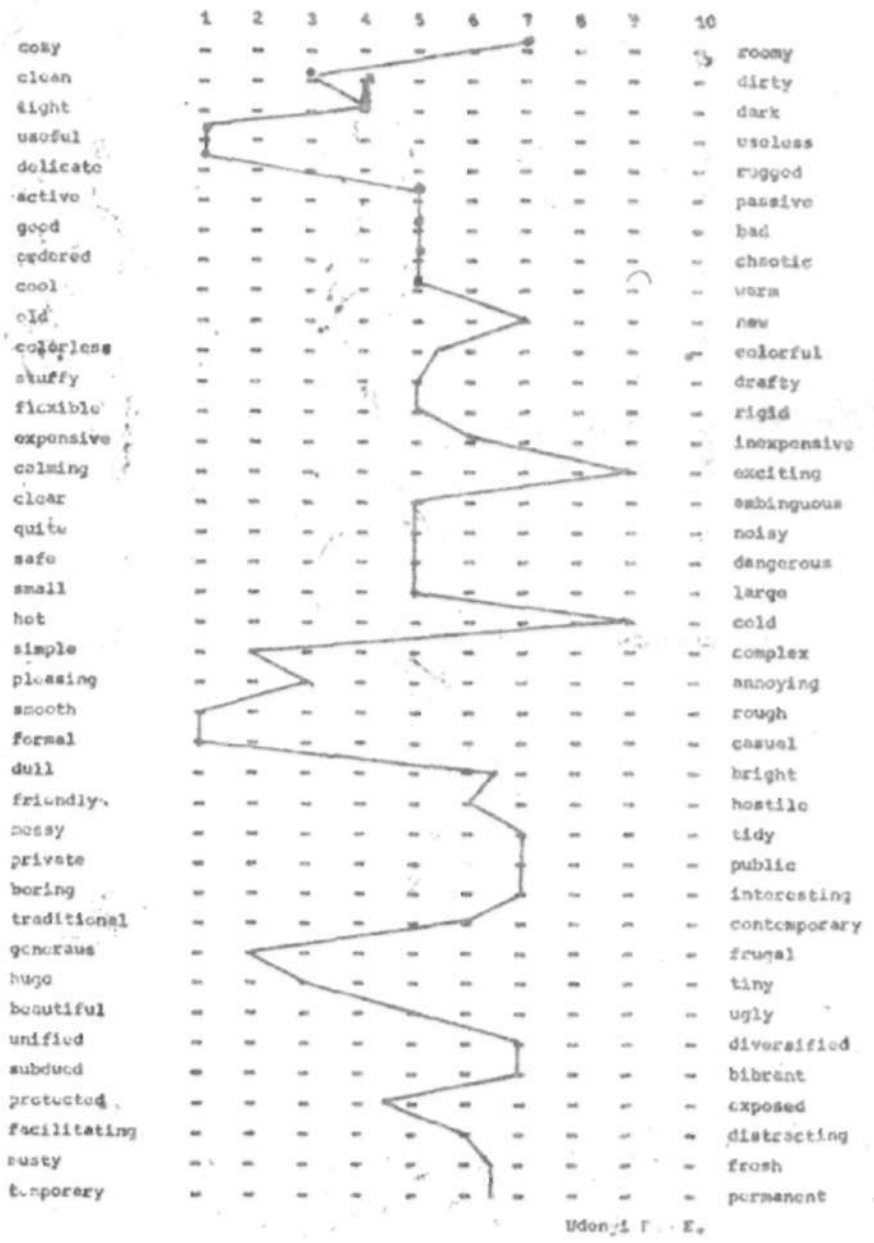
ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS: .....

B. SECTION OF PRESS RADIO / TELEX ROOM

C. SUBJECT: .....

* SEMANTIC DIFFERENTIAL SCALE by Hershberger



Udon, I. E.

.V

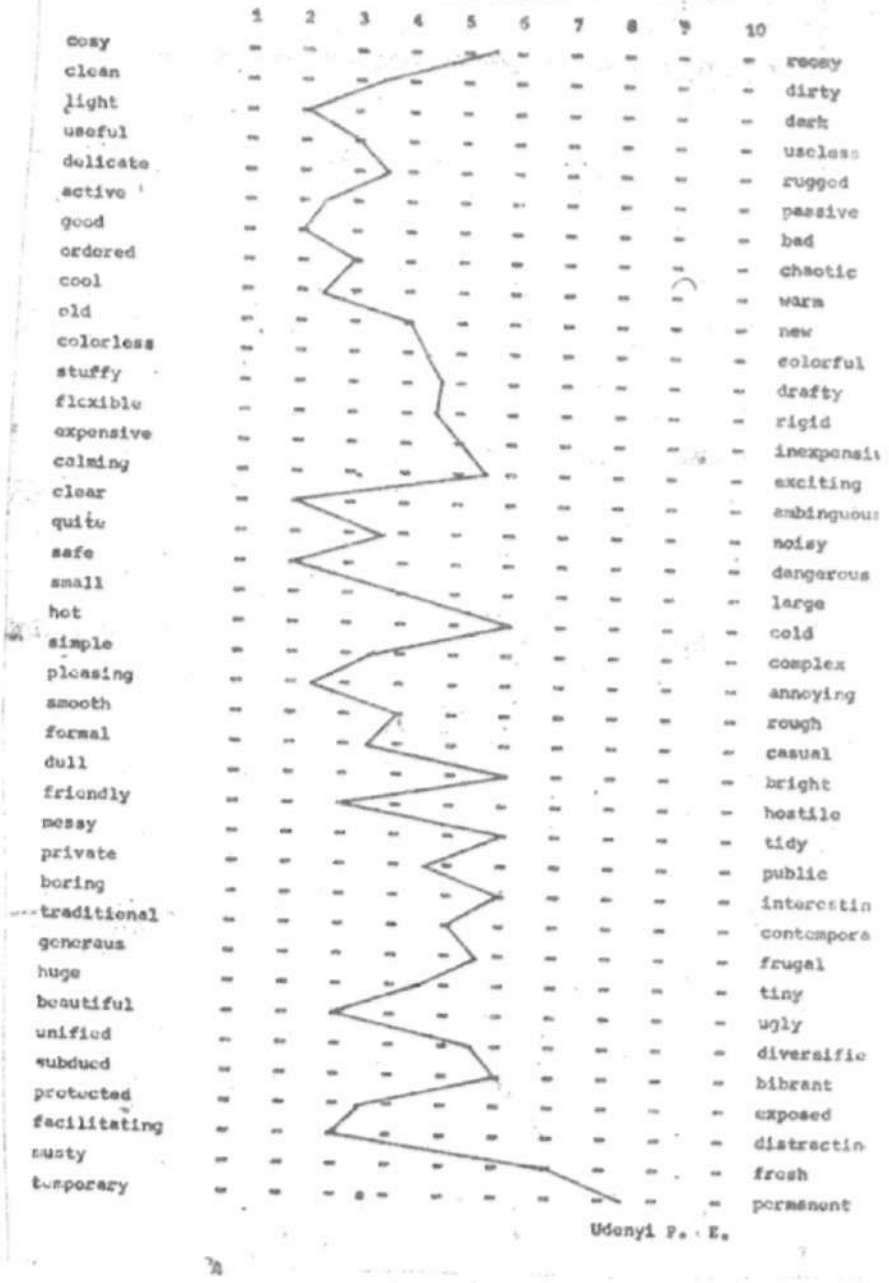
ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS:

B. SECTION OF PRESS EDITORIAL

C. SUBJECT:

* SEMANTIC DIFFERENTIAL SCALE by Hershberger



Udenyi P. E.

ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS: .....

B. SECTION OF PRESS COMPOSING

C. SUBJECT: .....

SEMANTIC DIFFERENTIAL SCALE by Heeshberger



Udonyi P. - E.

vi

ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS: _____

B. SECTION OF PRESS PRODUCTION

C. SUBJECT: _____

* SEMANTIC DIFFERENTIAL SCALE by Hershberger

	1	2	3	4	5	6	7	8	9	10	
cosy	-	-	-	-	-	-	-	-	-	-	roomy
clean	-	-	-	-	-	-	-	-	-	-	dirty
light	-	-	-	-	-	-	-	-	-	-	dark
useful	-	-	-	-	-	-	-	-	-	-	useless
delicate	-	-	-	-	-	-	-	-	-	-	rugged
active	-	-	-	-	-	-	-	-	-	-	passive
good	-	-	-	-	-	-	-	-	-	-	bad
ordered	-	-	-	-	-	-	-	-	-	-	chaotic
cool	-	-	-	-	-	-	-	-	-	-	warm
old	-	-	-	-	-	-	-	-	-	-	new
colorless	-	-	-	-	-	-	-	-	-	-	colorful
stuffy	-	-	-	-	-	-	-	-	-	-	drafty
flexible	-	-	-	-	-	-	-	-	-	-	rigid
expensive	-	-	-	-	-	-	-	-	-	-	inexpensive
calming	-	-	-	-	-	-	-	-	-	-	exciting
clear	-	-	-	-	-	-	-	-	-	-	ambinguous
quiet	-	-	-	-	-	-	-	-	-	-	noisy
safe	-	-	-	-	-	-	-	-	-	-	dangerous
small	-	-	-	-	-	-	-	-	-	-	large
hot	-	-	-	-	-	-	-	-	-	-	cold
simple	-	-	-	-	-	-	-	-	-	-	complex
pleasing	-	-	-	-	-	-	-	-	-	-	annoying
smooth	-	-	-	-	-	-	-	-	-	-	rough
formal	-	-	-	-	-	-	-	-	-	-	casual
dull	-	-	-	-	-	-	-	-	-	-	bright
friendly	-	-	-	-	-	-	-	-	-	-	hostile
messy	-	-	-	-	-	-	-	-	-	-	tidy
private	-	-	-	-	-	-	-	-	-	-	public
boring	-	-	-	-	-	-	-	-	-	-	interesting
traditional	-	-	-	-	-	-	-	-	-	-	contemporary
generous	-	-	-	-	-	-	-	-	-	-	frugal
huge	-	-	-	-	-	-	-	-	-	-	tiny
beautiful	-	-	-	-	-	-	-	-	-	-	ugly
unified	-	-	-	-	-	-	-	-	-	-	diversified
subdued	-	-	-	-	-	-	-	-	-	-	bibrant
protected	-	-	-	-	-	-	-	-	-	-	exposed
facilitating	-	-	-	-	-	-	-	-	-	-	distracting
rusty	-	-	-	-	-	-	-	-	-	-	fresh
temporary	-	-	-	-	-	-	-	-	-	-	permanent

Udenyi P. E.

11

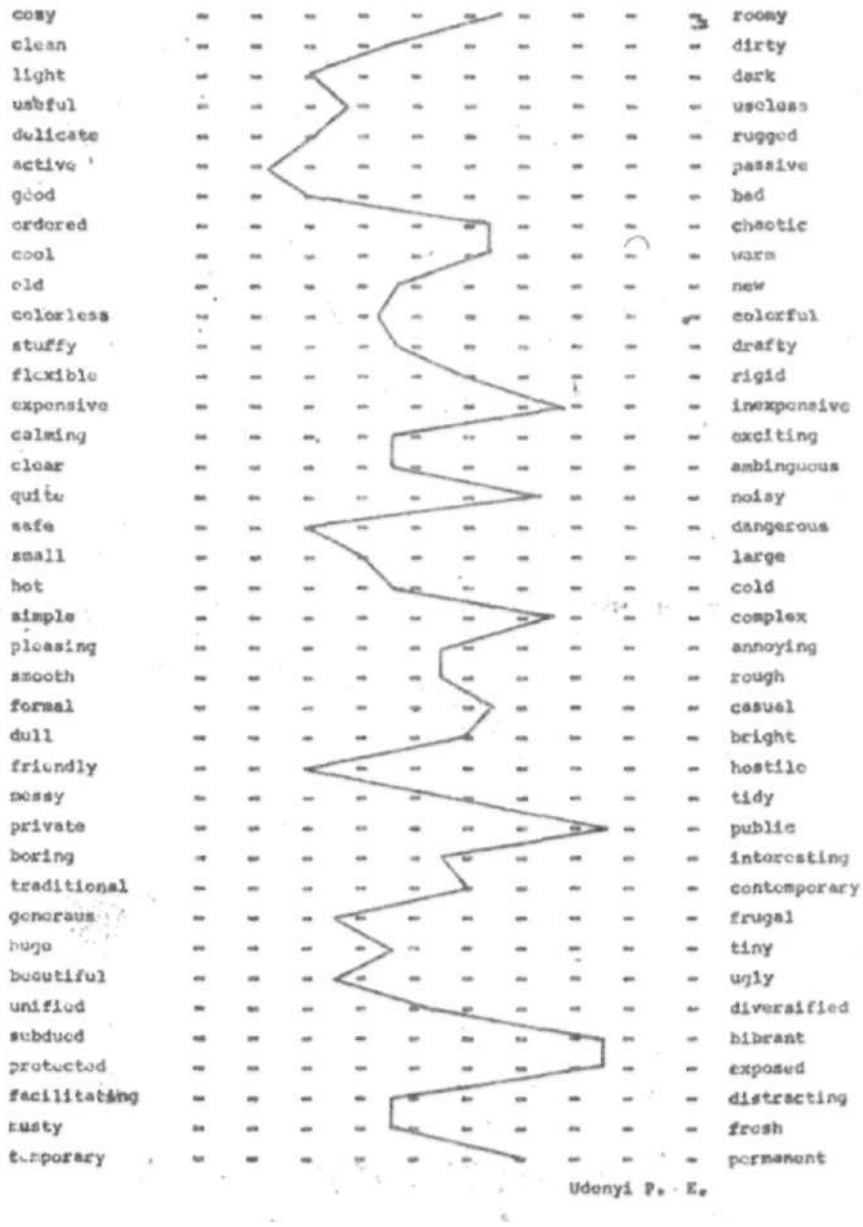
ANALYSIS OF DATA ON NEWSPAPER PRODUCTION

A. THE PRESS: .....

B. SECTION OF PRESS CIRCULATION

C. SUBJECT: .....

* SEMANTIC DIFFERENTIAL SCALE by Hershberger



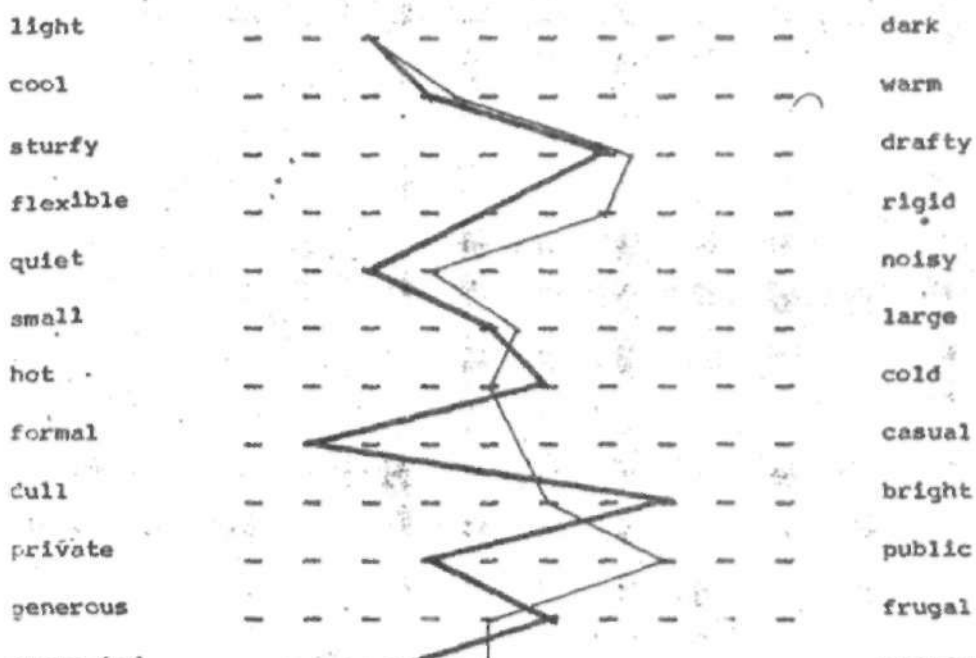
Udenyi P. E.

Appendix I: C

1 ANALYSIS OF DATA ON NEWSPAPER PRODUCTION,

SECTION OF THE PRESS ADMINISTRATION

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)



——— EXISTING CONDITIONS

——— DESIRED "

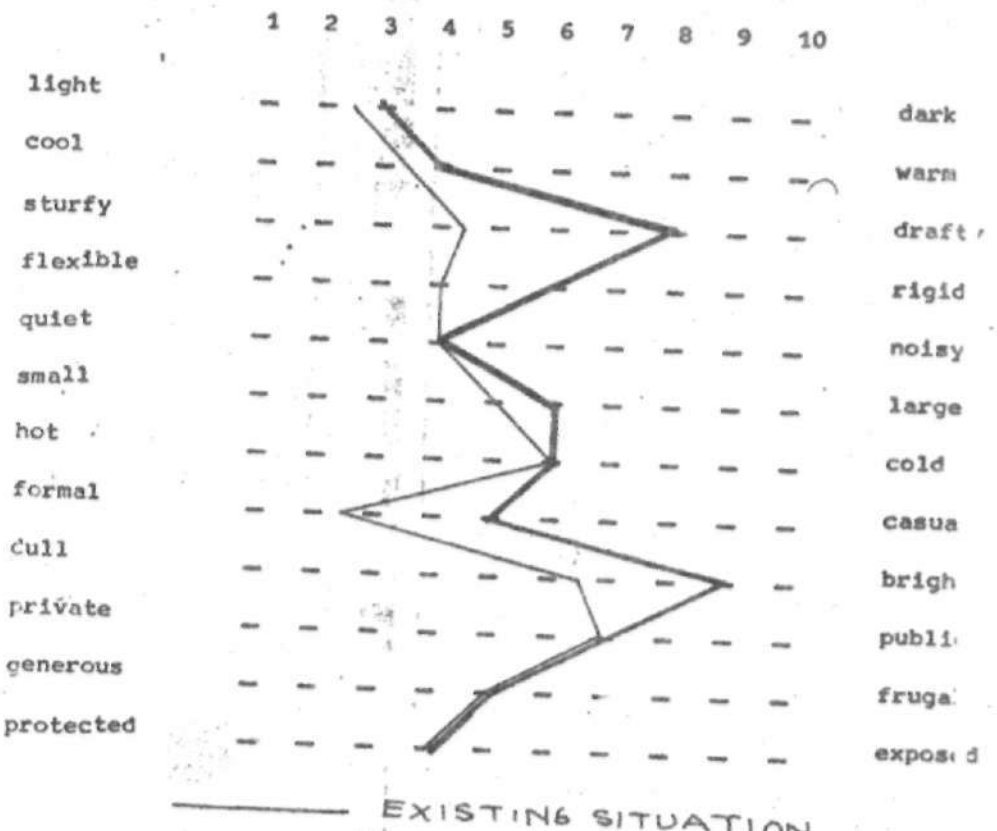
Udenyi, P.E.

1

ANALYSIS OF DATA ON NEWSPAPER PRODUCTION,

SECTION OF THE PRESS ACCOUNTS

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)

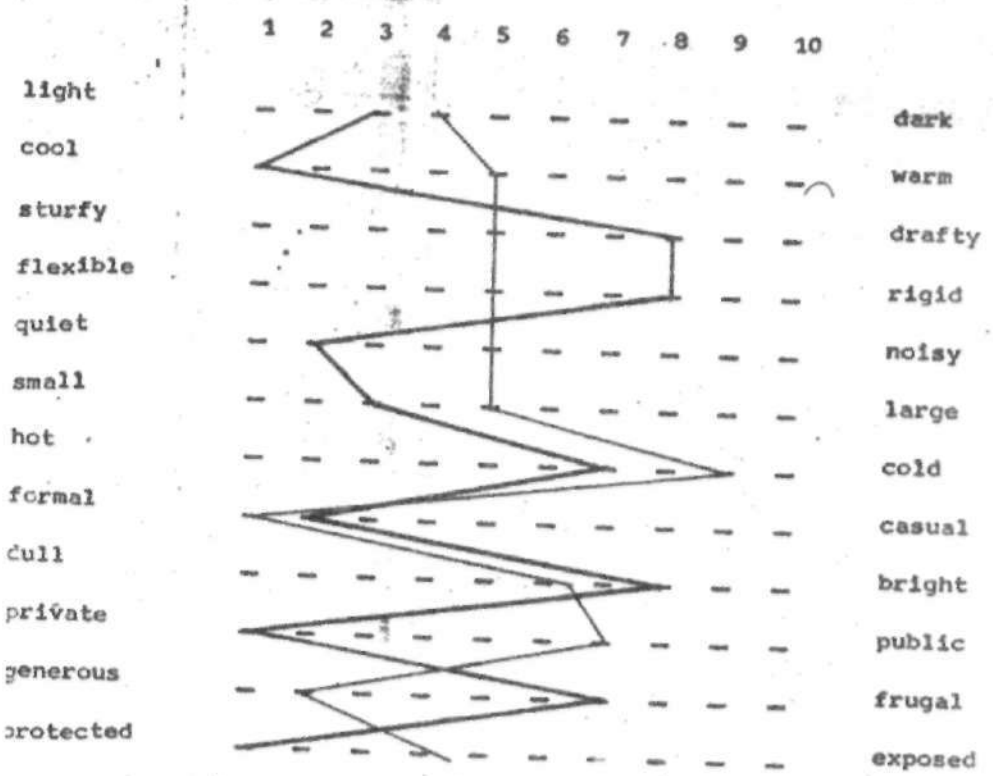


Udenyi, P.E.

iii ANALYSIS OF DATA ON NEWSPAPER PRODUCTION.

SECTION OF THE PRESS RADIO/TELEX ROOM

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)



——— EXISTING CONDITIONS

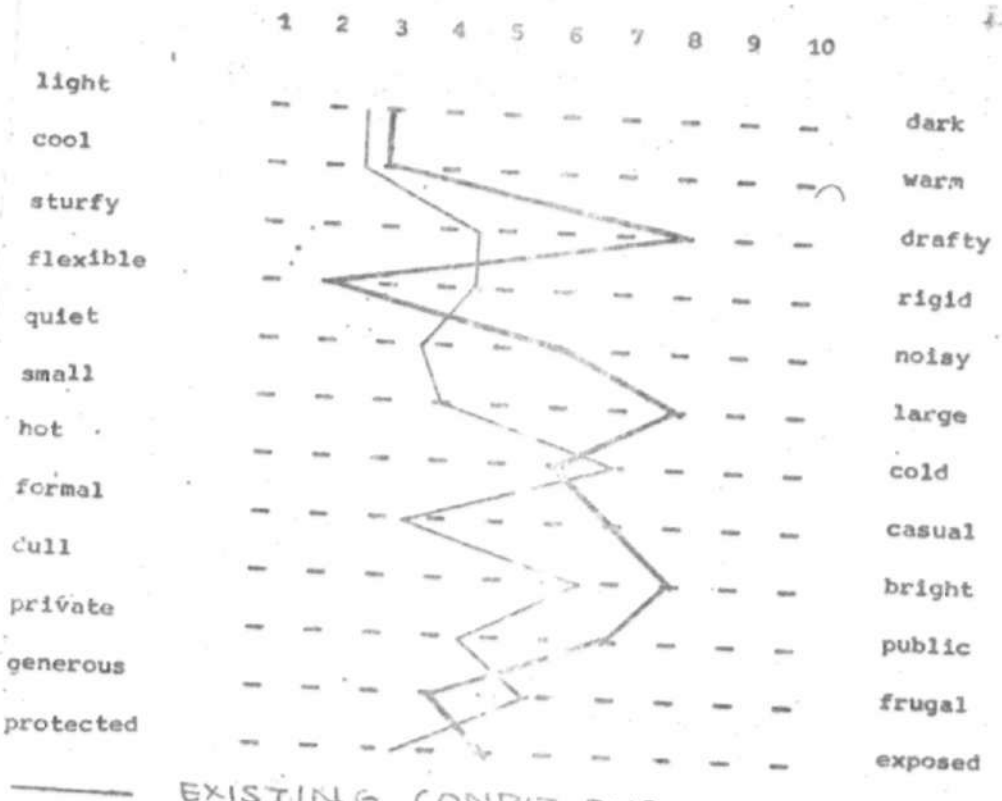
——— DESIRED "

Udenyi, P.E.

iv ANALYSIS OF DATA ON NEWSPAPER PRODUCTION.

SECTION OF THE PRESS EDITORIAL

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hersnberger)



——— EXISTING CONDITIONS

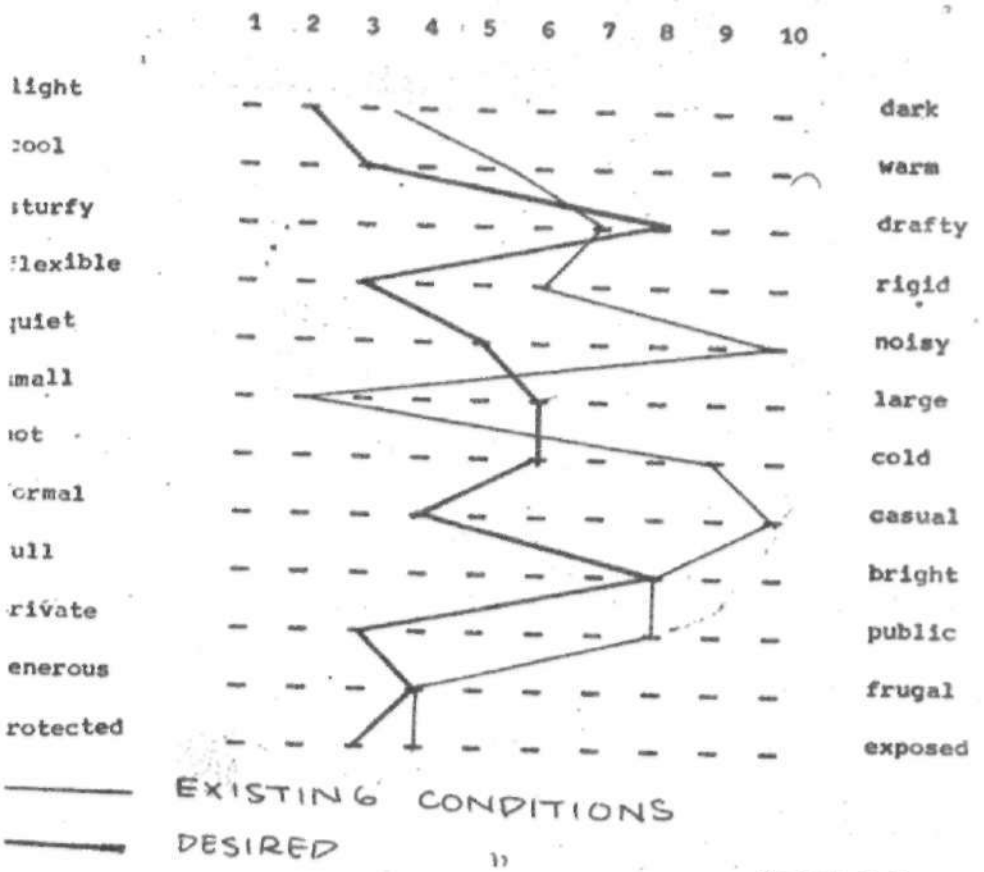
DESIRED ,,

Udenyi, P.E.

V ANALYSIS OF DATA ON NEWSPAPER PRODUCTION.

SECTION OF THE PRESS COMPOSING ROOM

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)



——— EXISTING CONDITIONS

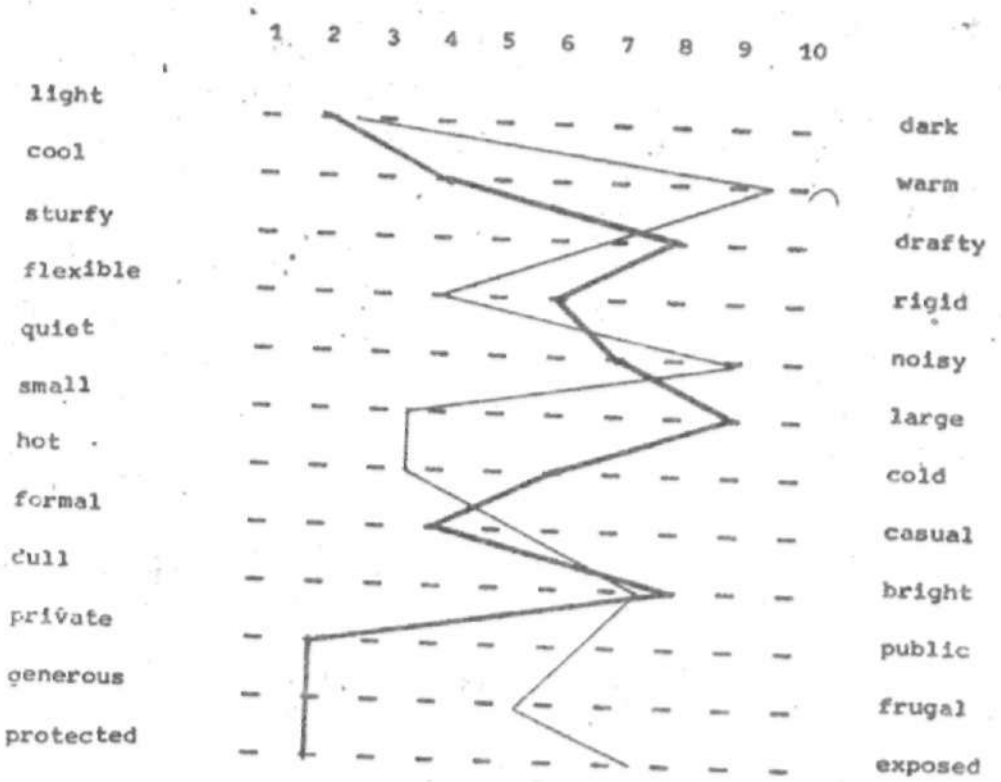
——— DESIRED "

Udenyi, P.E.

vi ANALYSIS OF DATA ON NEWSPAPER PRODUCTION,

SECTION OF THE PRESS PRODUCTION/PRESS RM.

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)



——— EXISTING CONDITIONS

——— DESIRED "

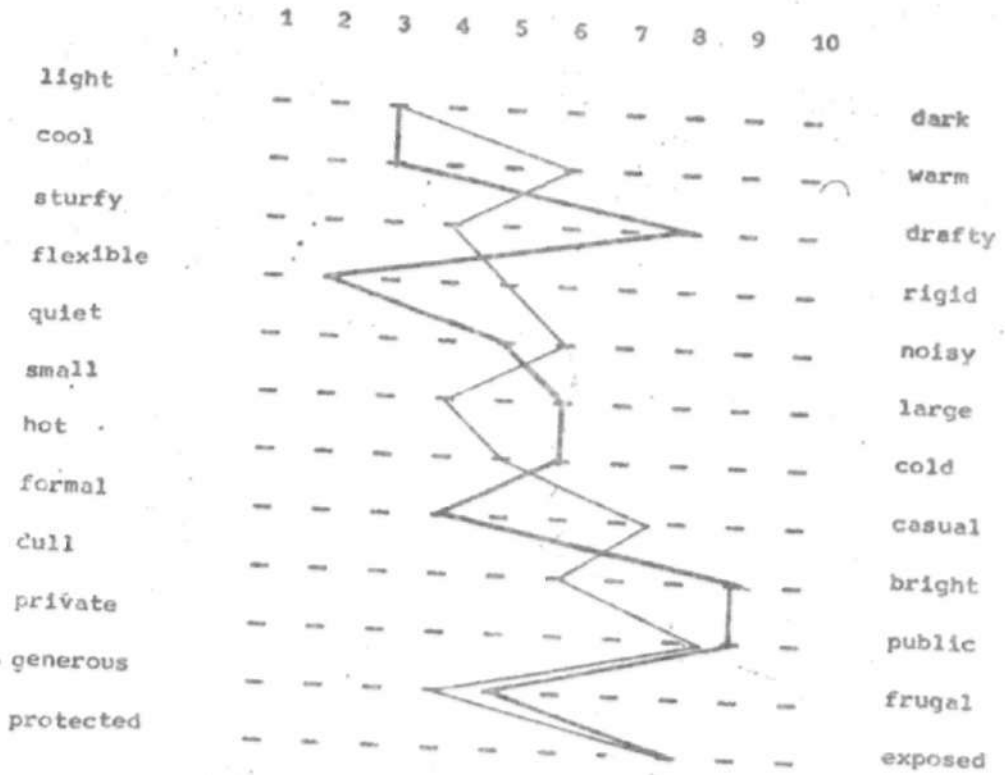
Udenyi, P.E.

vii

ANALYSIS OF DATA ON NEWSPAPER PRODUCTION,

SECTION OF THE PRESS CIRCULATION

CONDENSED SEMANTIC DIFFERENTIAL SCALE
(Hershberger)



——— EXISTING CONDITIONS

——— DESIRED " "

Udeny1, P.E.

Appendix II

MSc (ARCHITECTURE) THESIS: NEWSPAPER PRODUCTIONS

DATA ON THE PRESS AND CIRCULATION

QUESTIONNAIRE II.

A. THE NEWSPAPER

1. Name of Newspaper [illegible]
2. Site Town [illegible]
3. When was the newspaper established ? _____ 19____
4. What is/are the aim(s)/objective(s) of the newspaper
   1. _____
   2. _____
   3. _____
5. Intended coverage:
   ( ) Local
   ( ) State
   (✓) National
   ( ) International
   Tick the one applicable.
6. Language Medium ENGLISH
7. Other publications:
   (a) Intended coverage:

	NAME OF PUBLICATION	COVERAGE			
		LOCAL	STATE	NATIONAL	INTERNATIONAL
i	[illegible]			✓	
ii				✓	
iii					
iv					
v					

   (b) Frequency of Publication

	NAME OF PUBLICATION	FREQUENCY				
		DAILY	WEEKLY	MONTHLY	QUARTERLY	ANNUALLY
i	[illegible]	✓				
ii	[illegible]		✓			
iii						
iv						
v						

...../2.

8. Who owns the newspaper ?

( ) The Federal Government.
( ) The State Government
(✓) A Group of Individuals
( ) An Individual
( ) Any other(s)

NEWS ITEMS

9. What are your sources of news items?-

( ) Government Press releases
(✓) Employed journalists
( ) Any other sources:-

i.----------
ii.----------
iii.----------

10. How are the news items transmitted to the press?

(✓) In person
(✓) By post
(✓) By telephone
(✓) By telex
( ) By teletype
( ) Any other means:- ----------

C. PRODUCTION

11. Who does the printing of the news paper?

(✓) The company
( ) Outside
Where? ----------

a) Does the press operate any other commercial business?

( ) No
(✓) Yes.

b) If 'YES' what?

i.----------

ii._____

iii._____

12. (a) How many presses does the establisiment operate ?

_____

(a) where are they located?

i. Town ---------- ---State----------
ii. Town ----------State----------
iii. Town----------State----------

13. What is your target population of readership?----------

14. What is your production rate per day ----------Copies.

...../3.

16. What factors affect your production?

		Favourably	Adversely
i.	Storage facilities		✓
ii.	Manpower: skilled	✓	
	unskilled	✓	
iii.	News materials	✓	
iv.	Newsprint	✓	
v.	Circulation	✓	
vi.	Any others:		
	_____	_____	_____
	_____	_____	_____

D. FINANCIAL INPLICATIONS.

17. How much does each copy of your newspaper cost? _____k

18. What is the cost of production of a copy of the newspaper?

N _____:_____k

19. What percentage of the production cost does the sale of the newspaper pay? _____.

20. How is the balance in production cos paid for? _____

_____

21. How much gain does the establishment make on the average in the business (percentage of gross profit) _____

22. Is there any other source of funds for the business?

( ) No

( ) Yes ✓

Which? _____

23. How are the newspapers distributed to the public?

( ) Directly on retail basis

(✓) Through vendors on wholesale basis.

(✓) Transportation to regional/district distribution offices.

( ) Any other way(s) _____ _____

_____

_____

24. By what means are the newspapers transported to the regional/district offices?

(✓) By road.

( ) By rail.

(✓) By air

( ) Any other means: _____

E. CIRCULATION

25. What has your distribution been like for the past five years ?

STATES	NUMBER OF COPIES DISTRIBUTED				
	1974	1975	1976	1977	1978
Kaduna					
Lagos					
Ogun					
Ondo					
Oyo					
Bauchi					
Borno					
Gongola					
Niger					
Sokoto					
Kwara					
Benue					
Plateau					
Anambra					?
Imo	-		-	-	-
Cross River	-	-	-	-	-
Rivers					-
Bendel	-	-	-	-	-
Kano					

26. Does the location of the press(es) affect the distribution?

(√) No

( ) Yes

How? _____

_____

27. Does the attitude of the vendors have any effect on the distribution?

( ) No

( ) Yes

How? _____

28. Does the cost of the newspaper determine the attitude of the vendors?

(√) No

( ) Yes

How? _____

29. What other factor(s) affect(s) the relationship of the press with the vendors? _____

_____

How? _____

_____

...../5

30. Does the distribution have any effect on the production?

(✓) No

( ) YES

How ? ----------

F. YOUR ASSESSMENT.

31. How would you assess the success of this newspaper

(a) In terms of production ?

(✓) Good

( ) Fair

( ) Poor

(b) In terms of meeting the air/objective of the press ?

(✓) Good

( ) Fair

( ) Poor

32. In your opinion which area(s) would you suggest need(s) improvement ?

i. ----------

ii. ----------

iii. ----------

iv. ----------

v. ----------

THANK YOU.

Udenyi, P.E.

APPENDIX III

A directory of Newspaper publications in Nigeria as per records of the Nigeria Year Book 1978 - 79.

DAILY TIMES: 3, 5, 7, Kakawa Street, P.O. Box 139, Lagos; founded 1925. Published by The Daily Times of Nigeria Limited, Lagos.
Editor: Tony Momoh.

DAILY SKETCH: New Court Road, P.M.B. 5067, Ibadan; founded 1964, Published by the Sketch Publishing Company Limited, Ibadan.
Editor: Dayo Duyile.

NEW NIGERIAN: Ahmadu Bello Way, P.O. Box 254, Kaduna; founded 1965. Published by the New Nigerian Newspapers Limited, Kaduna.
Editor: Aminu Abdullahi.

THE NIGERIAN OBSERVER: Airport Road, Benin City; founded 1968. Published by the Bendel Newspapers Corporation, Benin City.
Ag. Editor: Tom Borha.

APPENDIX III
(Contd.)

DAILY STAR:

9 works Road, P.M.B. 1139, Enugu, founded 1972. Published by Star Printing and Publishing Company Limited, Enugu.

Editor: Josef Bel-Molokwu.

NIGERIAN TRIBUNE:

98 Shittu Street, Adeoyo Road, P.O. Box 78, Ibadan; founded 1949. Published by the African Newspapers of Nigeria Limited, Ibadan.

Editor: Sina Bamgbose.

WEST AFRICAN PILOT:

34 Commercial Avenue, Yaba, Lagos, founded 1937. Published by Zik Enterprises Limited.

Acting Editor:

DAILY PRESS:

57 Igbosere Road, Lagos; Published by the Commercial Amalgamated Printers Lagos.

Ag. Editor: Omotayo Okunola-Adigun.

APPENDIX III
(Contd.)

THE NIGERIAN STANDARD:

P.M.B. 2112, Jos; Published by the Plateau Publishing Company, Zaria Road, Jos.

Editor: Gideon G. Barde.

NIGERIAN HERALD:

Offa Road, Ilorin; founded October, 19, 1973. Published by the Kwara State Newspaper Corporation, Ilorin.

Editor: Peter Ajayi.

NIGERIAN CHRONICLE:

Published by the Cross River State Corporation, P.M.B. 1074, Calabar.

Editor: Ray Ekpu.

NIGERIAN TIDE:

Published by the Rivers State Newspapers Corporation, 4 Ikwerre Road, P.M.B. 5072, Port Harcourt.

Editor: Maurice Domboh.

THE PUNCH:

Kudeti Street, Onipetesi, P.M.B. 1204, Ikeja; founded November 1, 1976. Published by Punch (Nigeria) Limited, Lagos.

Editor: Sola Odunfa.

Other Dailies:

EVENING TIMES:

3, 5, 7, Kakawa Street, P.O. Box 139, Lagos,; founded August 6, 1973. Published by the Daily Times of Nigeria Limited, Lagos.

Editor: Ben Lawrence.

WEEKLIES: National Sunday Papers.

SUNDAY TIMES:

3,5,7, Kakawa Street, P.O. Box 139, Lagos; founded 1953. Published by the Daily Times of Nigeria Limited.

Editor: Tunji Oseni.

SUNDAY OBSERVER:

Airport Road, Benin City; Published by the Bendel Newspapers Corporation.

Ag. Editor: Alhaji M.J.A. Baruwa.

SUNDAY TIDE:

Published by the Rivers State Newspaper Corporation,

P.M.B. 5072, Port Harcourt,

Editor: Tony Tebekaemi.

WEEKLY STAR:

9 Works Road, P.M.B. 1139, Enugu, founded 1970. Published by the Star Printing and Publishing Company Limited.

Editor: Henry Onyedike.

SUNDAY PUNCH:

Kudeti Street, Onipetesi, P.M.B. 1204, Ikeja, Founded 1973.

Published by Punch (Nigeria) Limited, Lagos.

Editor: Dayo Wright.

SUNDAY CHRONICLE:

Published by the Cross River State Newspapers Corporation, Calabar.

Editor:

APPENDIX III
(Contd.)

Other Weekly Papers

SPORTING RECORD (every Wednesday);
Published by the Daily Times of Nigeria Limited, 3,5,7, Kakawa Street, P.O. Box 139, Lagos.
Editor: Cyril Kappo.

LAGOS WEEKEND (Witty Newspaper);
Published by the Daily Times of Nigeria Limited, 3,5,7, Kakawa Street, P.O. Box 139, Lagos.
Editor: John Adollo.

TIMES INTERNATIONAL
Published by the Daily Times of Nigeria Limited, 3,5,7, Kakawa Street, P.O. Box 139, Lagos.
Editor: Terry Agbelemoge.

BUSINESS TIMES:
Published by the Daily Times of Nigeria Limited, 3,5,7, Kakawa Street, Lagos.
Editor: Onyema Ogochukwu.

APPENDIX III
(Contd.)

LAGOS THIS WEEK:

1 Gbemisola Street, Off Isheri Road, Ikeja, Published by Lagos Periodical Publications Limited,

Publisher/Ed-in-chief: Yemi Martins.

NIGERIA RADIO/TV TIMES:

Published by the Nigerian Broadcasting Corporation, Ikoyi, Lagos.

Editor: Alhaji A.T.I. Lawal.

IROHIM YORUBA (Yoruba Language):

214 Broad Street, P.M.B. 2416, Lagos. Founded 1945, Published by the Amalgamated Press of Nigeria.

Ag. Editor: S.A. Ajibade.

GASKIYA (Hausa Language):

Published by the New Nigerian Newspapers Limited, Ahmadu Bello Way, Kaduna.

Editor: Utman Mairiga Gida.

APPENDIX III
(Contd.)

WEST AFRICA (Nigeria Edition):

Times Press, Warehouse Road, Apapa.

THE LEADER (Catholic):

Published by Assumpta Press, Owerri,

Editor: Rev. Fr. Ben Chima.

THE INDEPENDENT (Catholic):

P.O. Box 510, Ibadan. Published in English and Yoruba.

Editor: Rev. Fr. Cronin - Coltsmann.

ADVANCE (Socialist Newspaper):

5, Agege Motor Road, Idioro, Mushin.

Editor: Nat Iwuagwu.

SUNSHINE:

Published by the Sunshine Publishing Company, SW9/1032,

Lagos Road, Challenge Ibadan, P.O. Box 3304, Ibadan.

Editor: Afolabi Alo.

APPENDIX III
(Contd.)

THE RECORD:
Published by the Department of Journalism, University of Nigeria, Nsukka.
Editor: Ballantyne Okwonna.

AFRICAN IMPACT:
P.M.B. 1143, Benin City.

SEXTAPE (Witty Newspaper)
Published by Alagbara Publishing Company, SW9/140 Ago Taylor, Ibadan.
Editor: Funso Adindubuwa.

THE TRUTH:
45 Idumagbo Avernue, P.O. Box 418, Lagos; founded 1951.
Published by the Ahmadiyya Mission Nigeria.
Ag. Editor: Z.O. Elias.

ILANA YORUBA (Yoruba Language):
Published by the Amalgamated Press of Nigeria.
Editor: Olalekan Onatade.

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ALBISHIR:

P.M.B. 1064, Maiduguri

Ag. Editor: A.M. Zinnass.

SUNDAY STAR:

Yemetu Aladorin, Ibadan, Published by the People's Star Press, Ibadan; founded 1966.

Editor: Moni Adewale.

NEWS (bi-weekly)

37 Zik Avenue, Uwani, Enugu.

GBOUNGBOUN:

New Court Road, P.M.B. 5067, Ibadan. Published by the Sketch Publishing Company Limited.

Editor: Joe Fadiran.

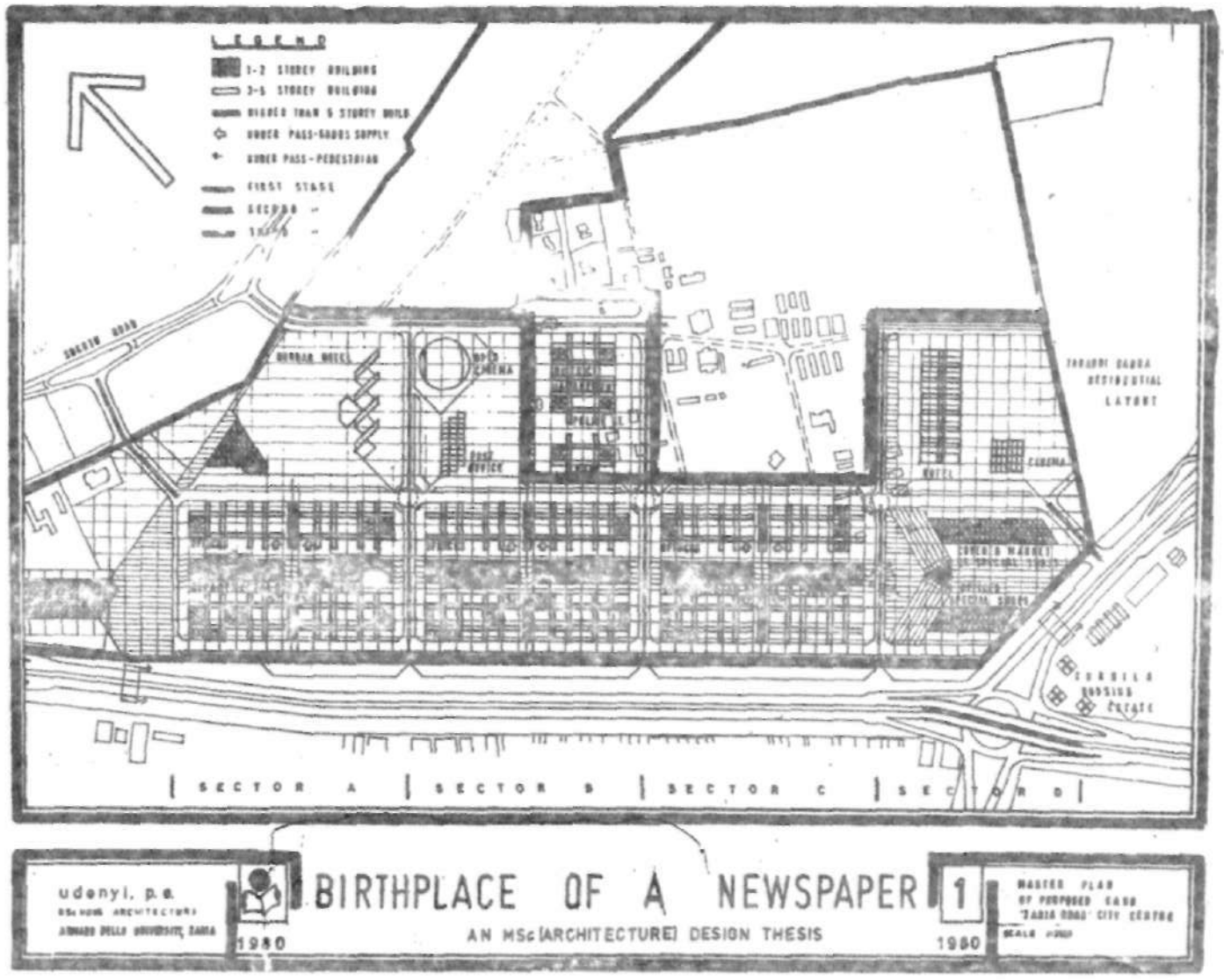
THE GUIDE: (every Sunday)

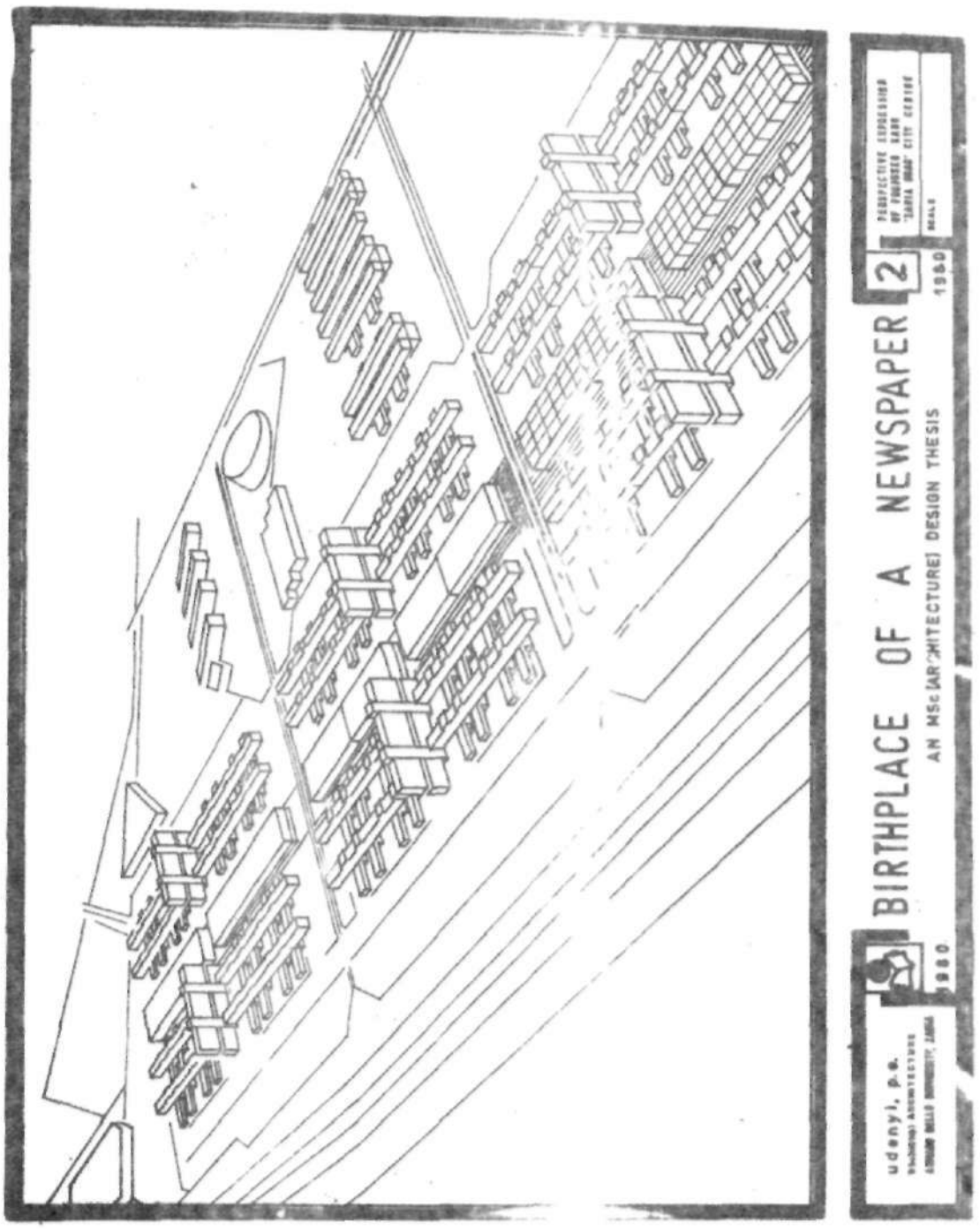
Published by Ibrahim Publishing Company, Ilorin.

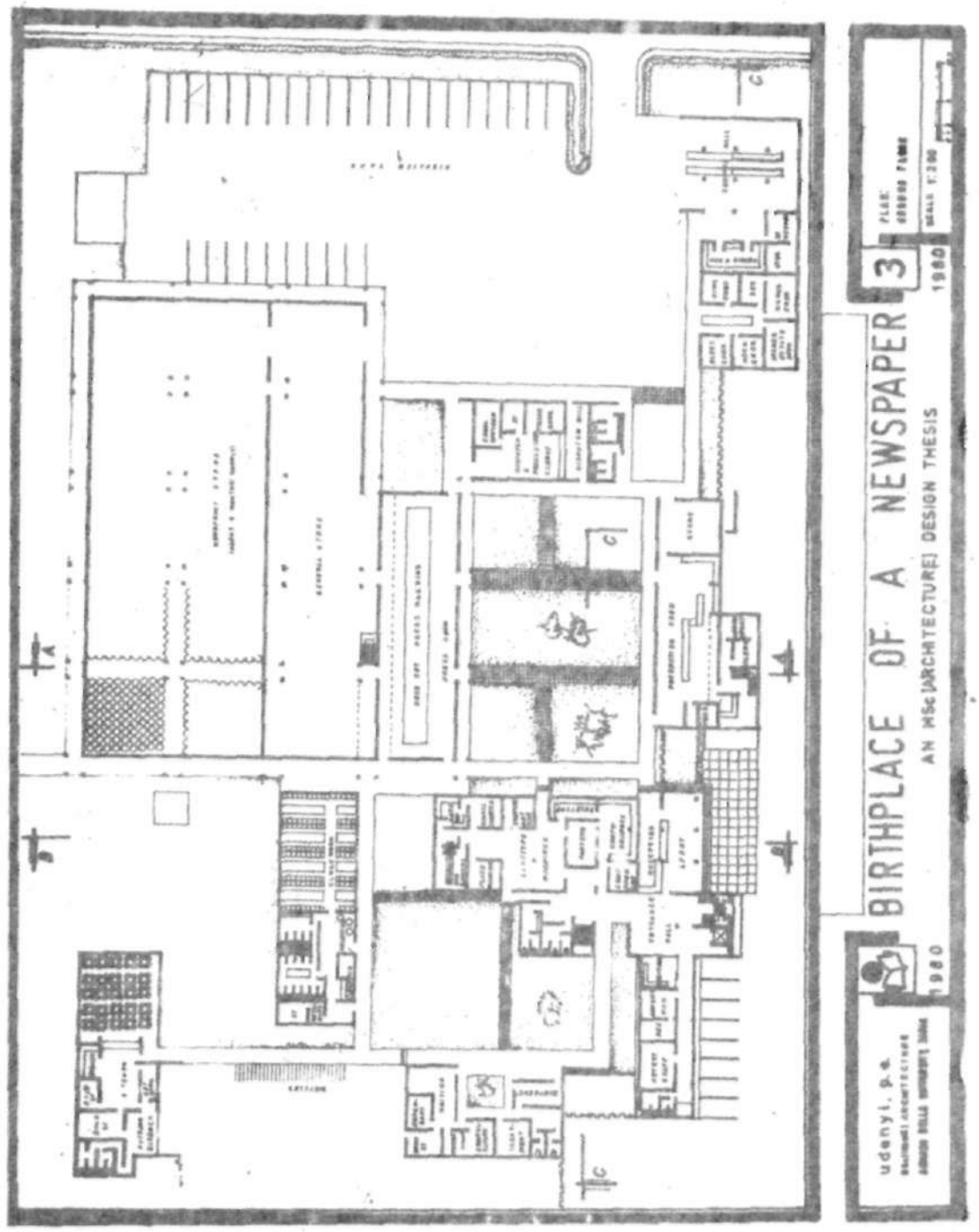
Editor: Mallam Musa Ibu-Ibrahim.

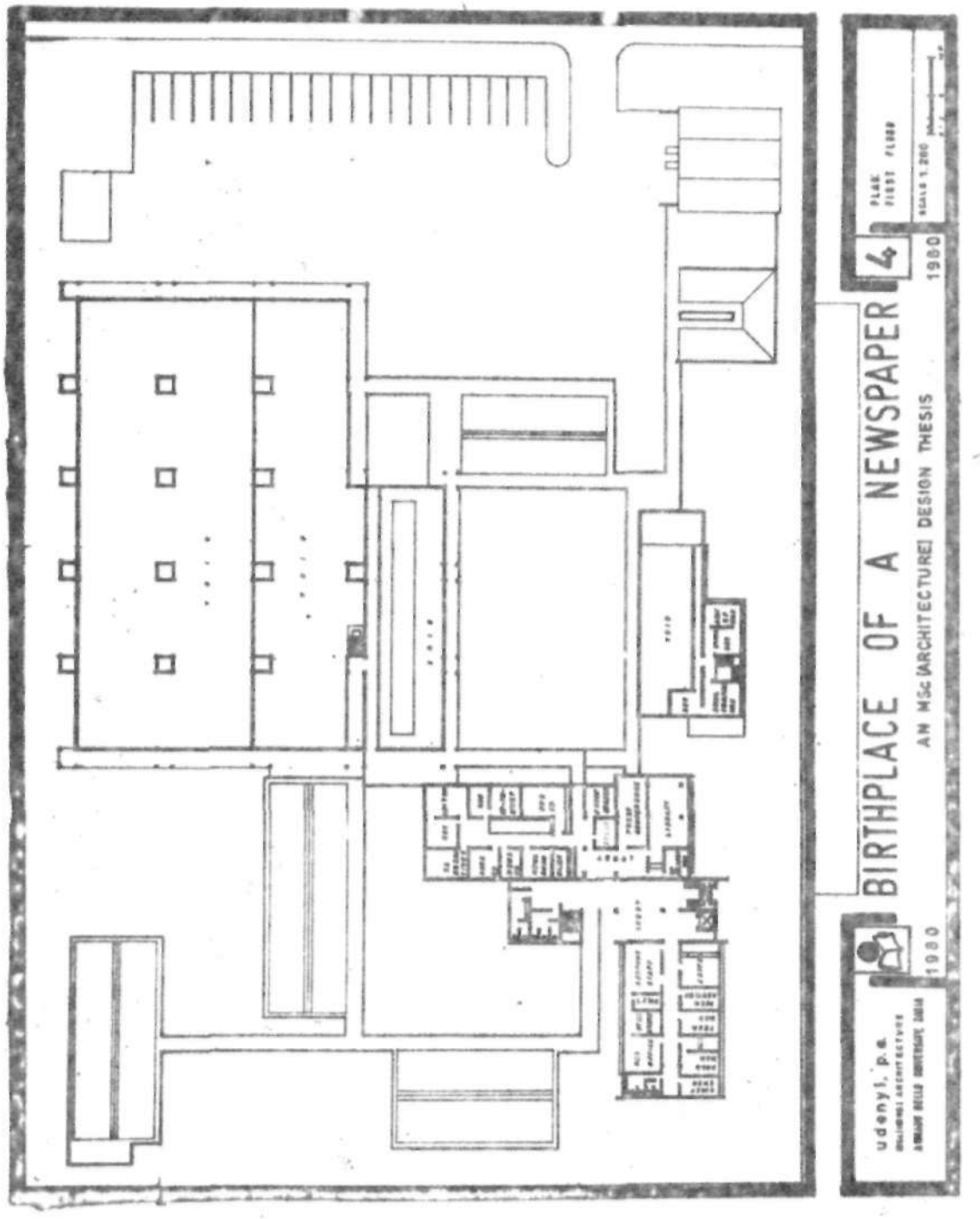
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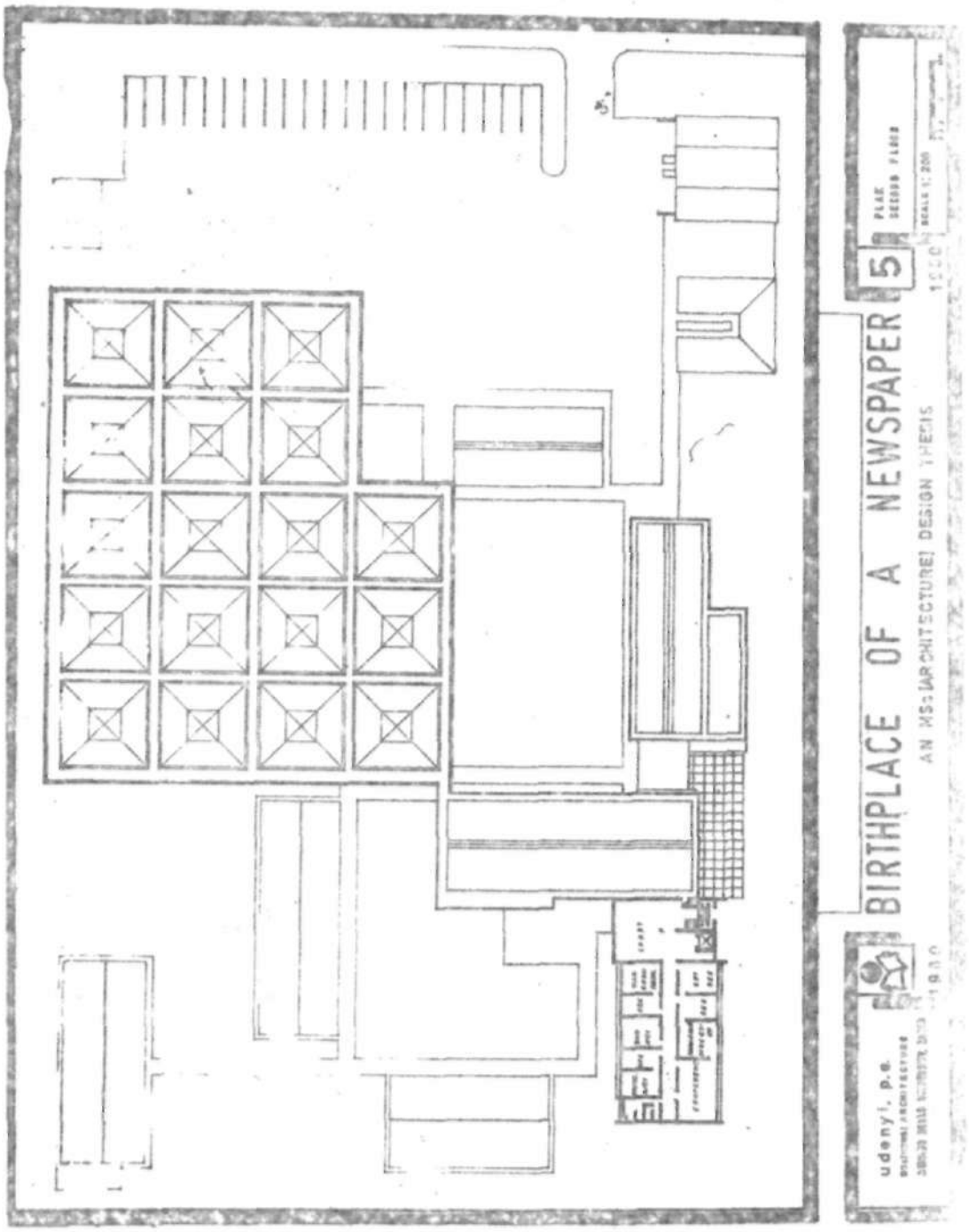
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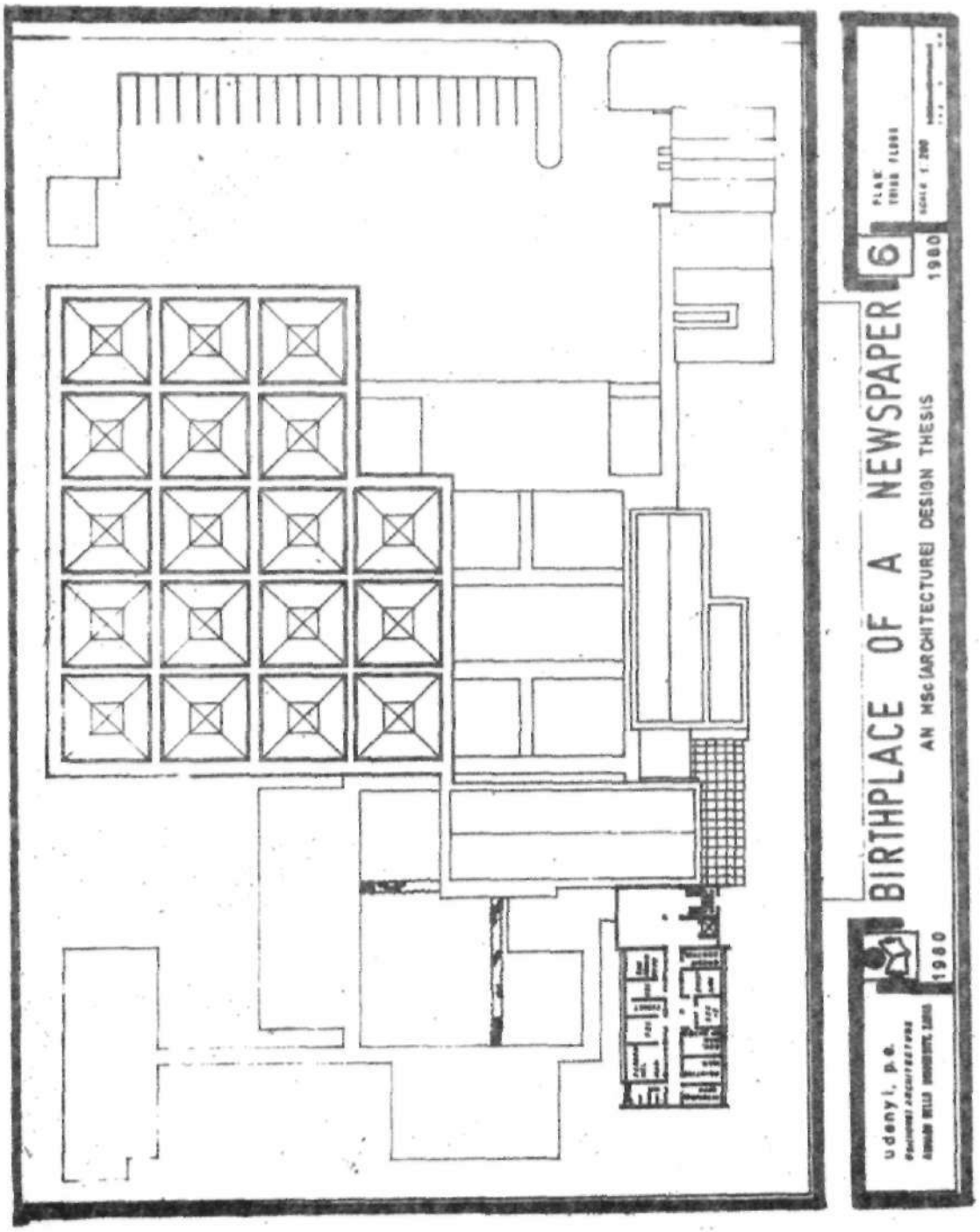

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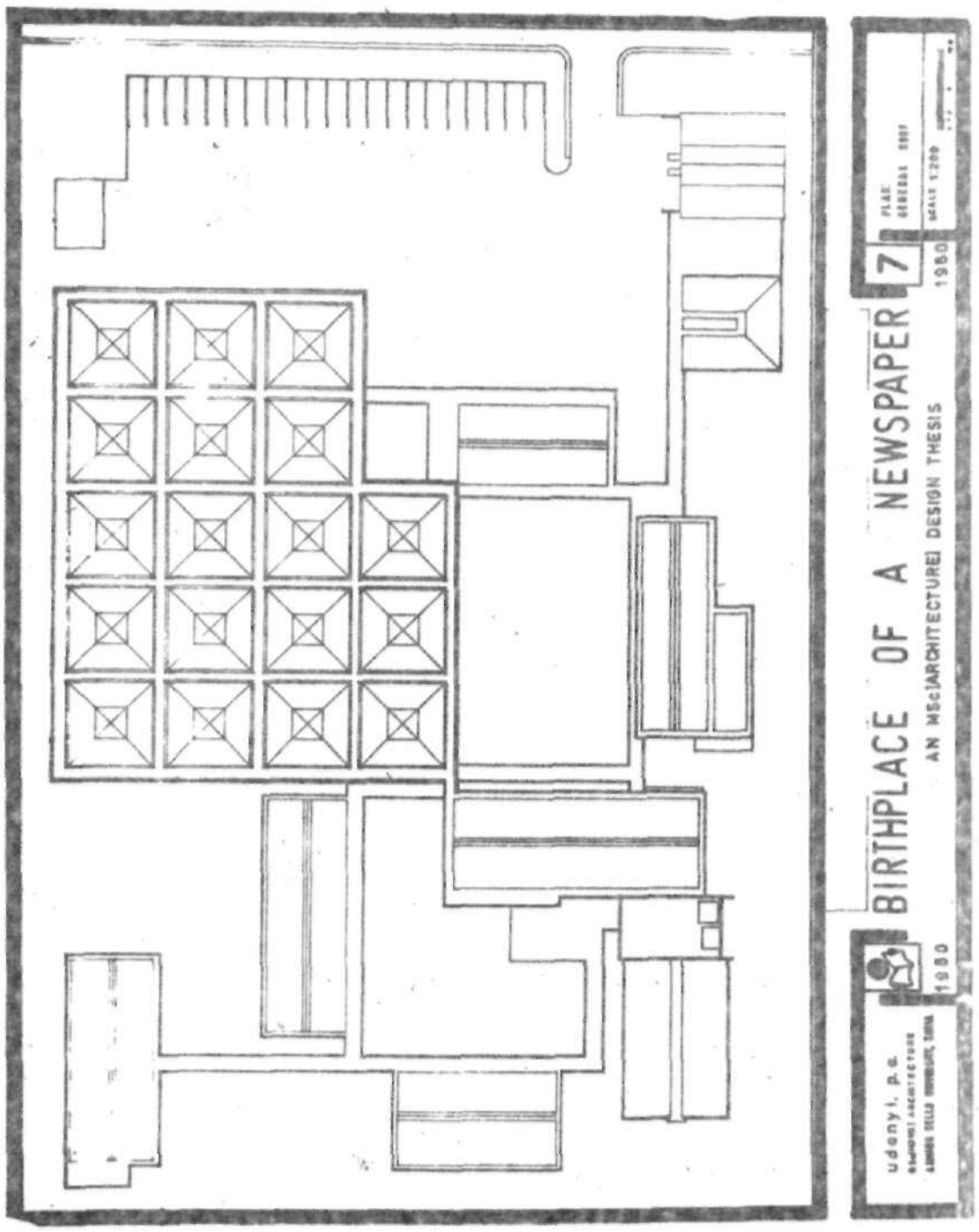

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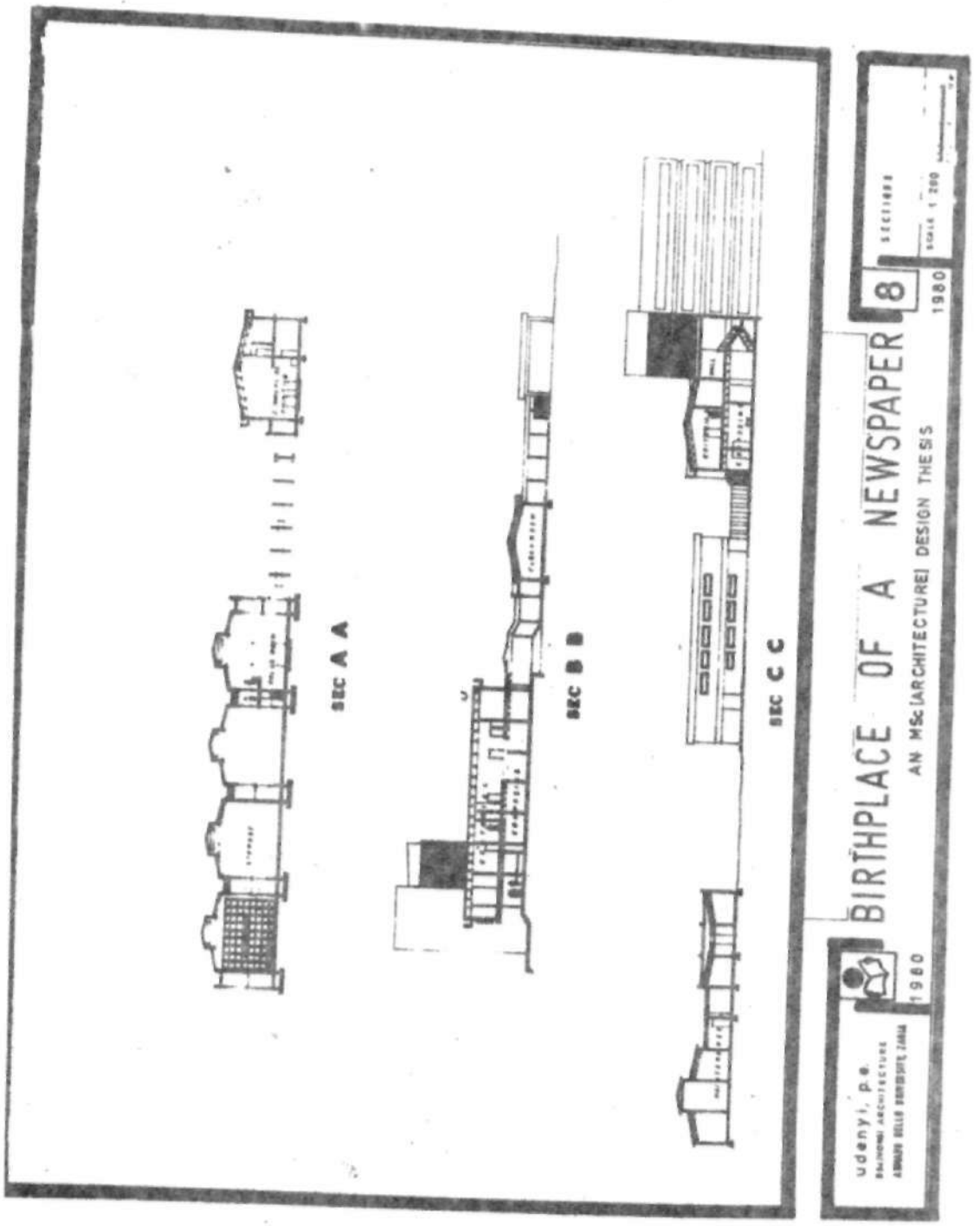

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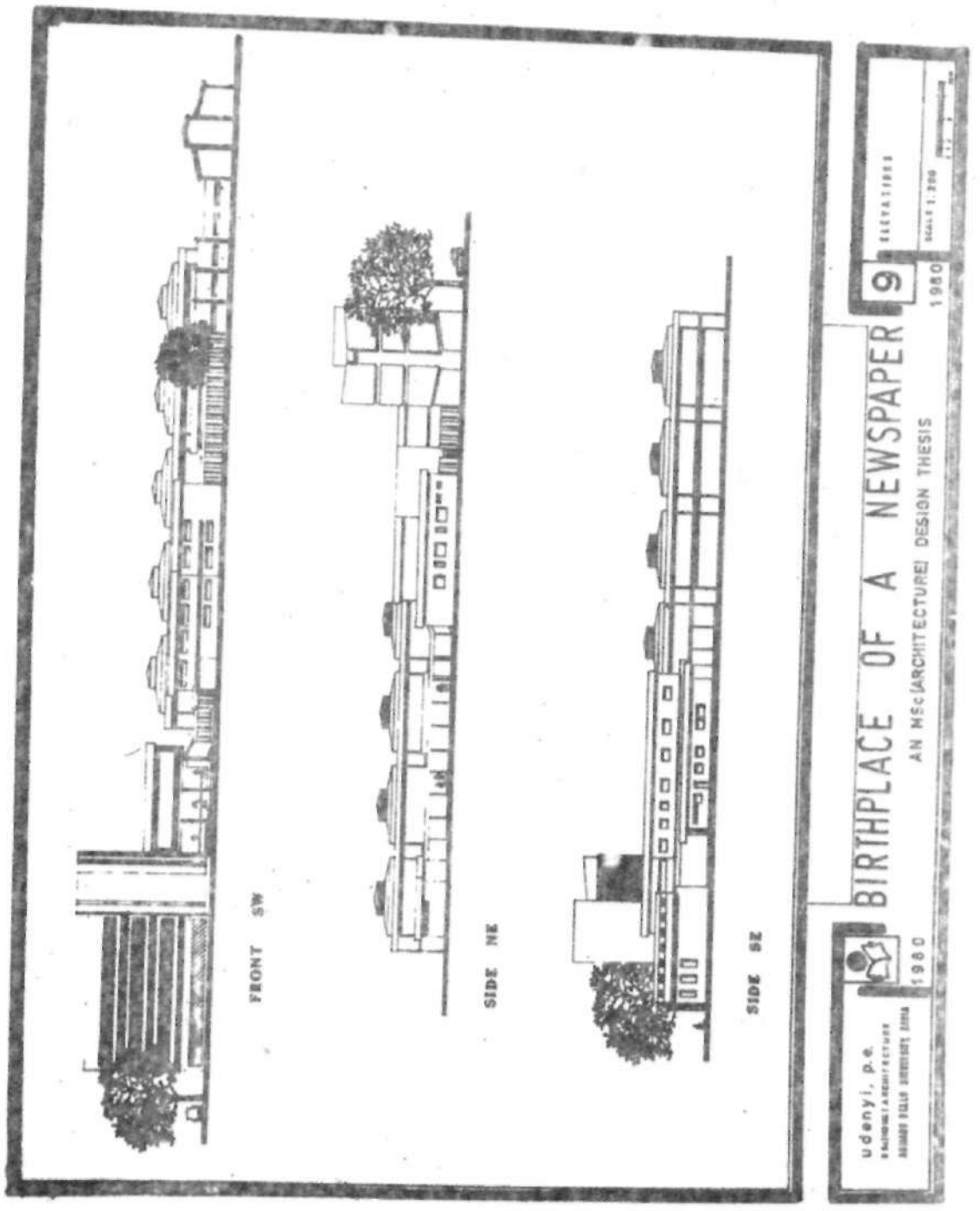

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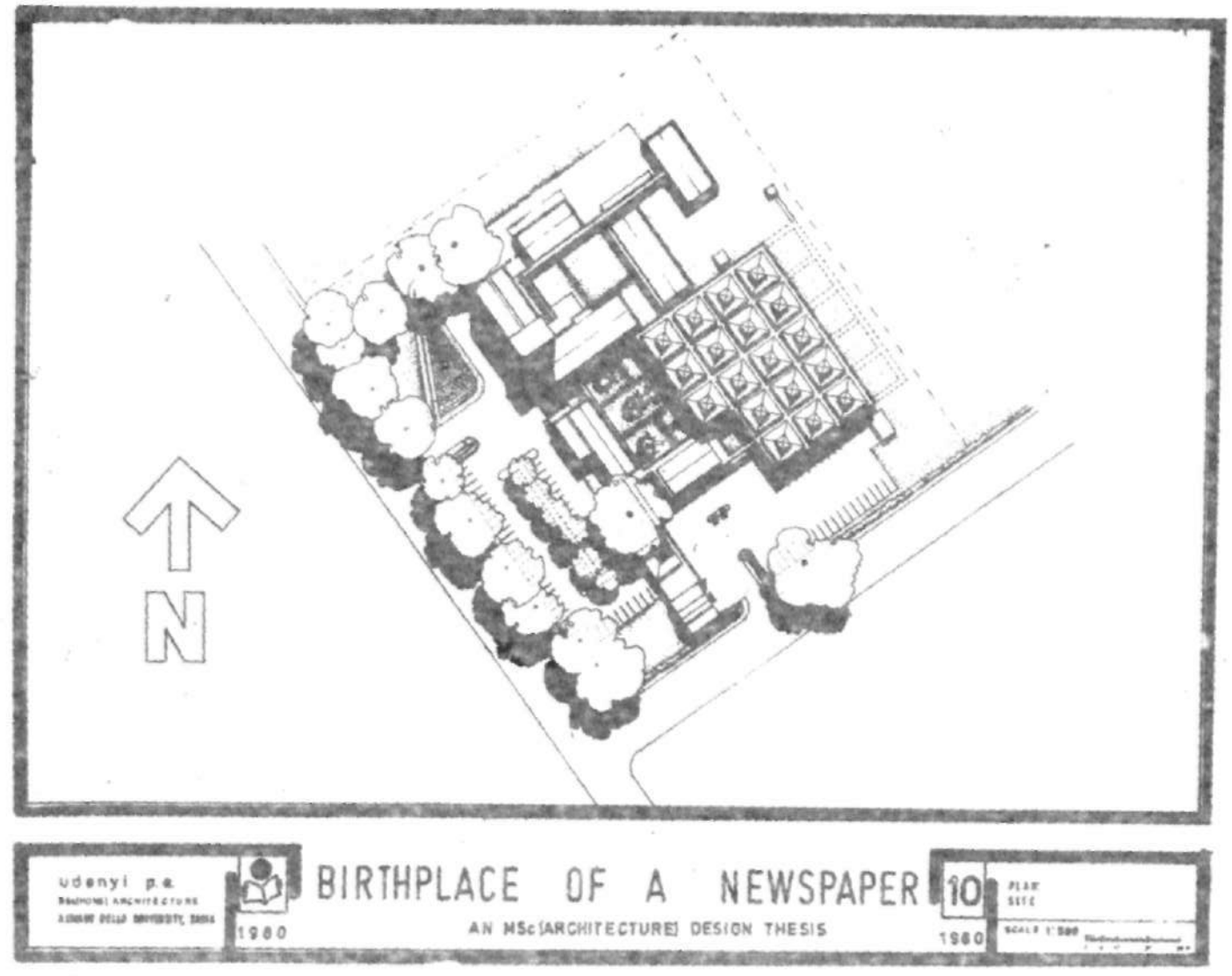

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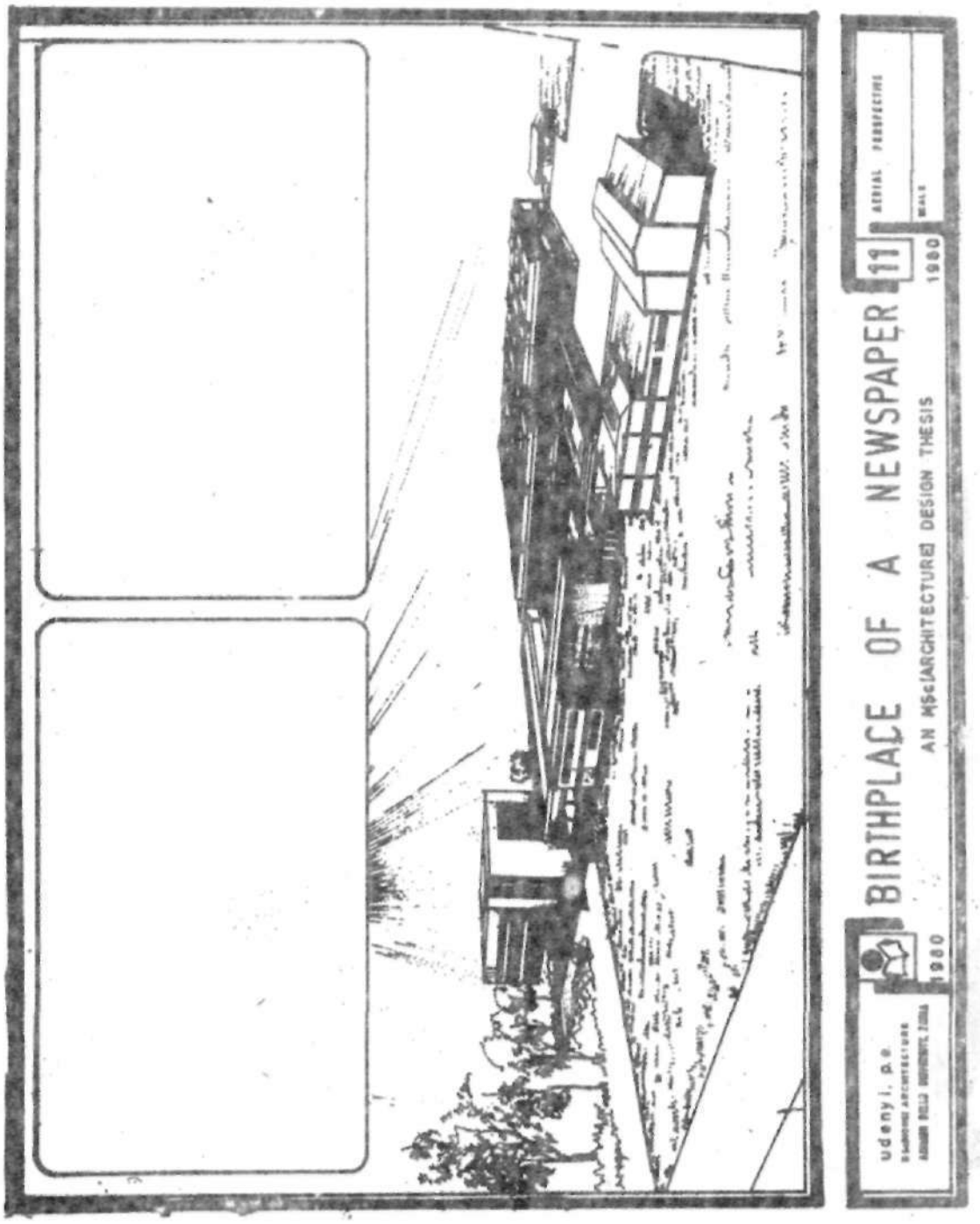

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BIRTHPLACE OF A NEWSPAPER
AN MSc(ARCHITECTURE) DESIGN THESIS
11
AERIAL PERSPECTIVE
1980
udenyi, p.e.
1980

REFERENCES

1. ALABI, Y.O. (MR.), "A Newspaper Works, Ilorin" thesis submitted to the Faculty of Environmental Design, Department of Architecture, A.B.U., Zaria for the award of MSc (ARCH). June, 1974.

2. DR. DINEH MOGHDAM, MLS, PhD. "Computers in Newspaper Publishing" Marcel Dekker, inc., 270 Madison Avenue, New York, N.Y. 10016, 1978 pp 1-7, 22-27.

3. EDWIN EMERY, Professor of Journalism University of Minnesota, The Press and America, (An interpretative history of journalism). Prentice-Hall, Inc., Englewood Cliffs, N.J. (1962) Forward p.v.

4. The Nigerian Year Book 1978 - 79 by the Daily Times of Nigeria.
Editor: James O. Ojiako.

5. ANPA Mechanical Bulletin 442, July 20, 1951, p. 222.

6. Newspaper Management, (London: Heinemann 1967).

7. ERIC W. ALLEN, "International Origins of the Newspaper: The Establishment of Periodicity in Print" Journalism Quarterly VII (Dec. 1930), 314; quoting from OTTO GROTH, Ein System des Zeitungskunde (Journalistik) Mannheim : J. Bensheimer, 1928), V.I., pp. 21 ff.

8. ALBERT DESEMBERG, "The Press in Germany" M. Scholl Publishers, Bonn, (1960) pp 27-28.

9. JOLYON DRURY, "Two Definitions of Industrial Buildings" Architects' Journal, 12th April, 1978 No. 15, Vol. 167 p. 719. Information sheet 4, paragraph 2.01, p.720 paragraph 4.02.

10. WILLIAM LITTLE, M.A. Late Fellow of Corpus Christi College, Oxford; H.W. FOWLER, M.A. (Oxon); J. COULSON, B.A. Leeds: "The Shorter Oxford English Dictionary on Historical Principles". Edited: C.T. ONIONS, C.B.E., F.B.A., M.A. (Lond.); M.A. Hon. D.Litt (Oxon); Hon. Litt (Leeds); Hon. LL.D (Birmingham); Hon. F.R.S.L. 3rd. Edition, Vol. II N-Z.
Oxford University Press, Ely House London. W.1 (1933).

11. "Chambers Mini Dictionary"
Edited: E.M. KIRK PATRICK, M.A., W&R Chambers Ltd. Edingburgh (1978).

12. B.A.W. TRAVELLION, S.P. Dip., M.T.P.I, A.R.I.B.A., "Metropolitan Kano" Pergamon Press (1963), pp.2-11.

13. DAVID CANTER, PhD, A.B.Ps.S, A.I.J., University of Surrey, England "Psychology for Architects". Applied Science Publishers Ltd., Ripple Road, Barking, Essex, England (1974).

14. L.E. BOURNE, Jr., "Human Conceptual Behaviour", Boston: Allyn-Bacon (1966).

15. J. STROUD FOSTER
"Mitchell's Advance Building Construction" B.T. Batsford Ltd. 4, Ftzharchinge Street, Portman Square, London, W.1 (1963).

16. DR. ALBERT IKOMI, B.Arch, (ABU M.Arch. A.S., (M.I.T.), PhD (ARCH) Penn. "Appreciating Complex, Architectural Problems" Doctoral Thesis (May, 1979). pp 73-77, 113-121