INTRA - URBAN POPULATION MOBILITY

IN THE OLD CORE OF IBADAN CITY

Hezekiah Olanrewaju Adesina.

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THE OLD CORE OF IBADAN CITY

BY

Hezekiah Olanrewaju Adesina

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A B S T R A C T

The interest of this thesis is in finding out whether or not there is any residential relocation in the old core of Ibadan city within the past five years (1968-1972); and if there is any, to find out the processes generating the movements. Consequently, there are two main parts to the study.

The first part sought for the pattern and volume of residential relocation. It looked at the direction and distance of the movements, using an accounting model to represent the aggregate flows that were analysed. The model led to coming to grip the general structure of the movement flows, particularly the varying spatial distribution of the Population-turnover that is the main focus of the thesis.

The second section delt with the explanation of the variations of the Population-turnover and the reasons for movement were also sought. Firstly, an attempt was made to inductively establish the parameters of 'strain'. The correlation and regression models were then applied to search for the relationship between these parameters and the movement rates. The procedures all confirmed that there is a singularly most important factor that can be used in the explanation of the variations in the Population-turnover. Since the importance of the perception of the people was brought out by the regression models used to explain the variations in the movement rates, the later part of the section was devoted at looking, into greater details, the ways in which the people perceive their environment.

In conclusion the major findings of the study were summarized and the implication of the study for planning was suggested.

A C K N O W L E D G E M E N T S

I would like to extend sincere thanks to all those who made it possible for me to complete this research project. First, I wish to express my deep appreciation to my supervisor, Dr. H. I. Ajaegbu, for his comments and suggestions throughout the period of this study.

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I also express my gratitudes to the staff of the Ministry of Economic Planning and Reconstruction, Ibadan. Ibadan City Council, Mapo Hall, Ibadan; and the Town Planning Authority, Ibadan, for the help rendered during my visit to their various offices.

CERTIFICATION PAGE

I certify that this work was carried

out by Mr. H.O. Adesina in the

Department of Geography, University

of Ibadan.

_____
Supervisor

H.I. Ajaegbu, B.A. (London), Ph.D. (Ibadan),
Senior Lecturer in the Department of
Geography,
University of Ibadan,
Nigeria.

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INTRODUCTION

(a) Review of Past Literature

The analysis of urban residential mobility is not new. Among the
earlier studies is that by William Albig (1933) titled "The Mobility of
Urban Population". Urban Residential Mobility is a phenomenon
involving peculiar convergence of social, demographic and psychologi-
cal influences, and it is therefore of broad theoretical significance
and so has continued to be of considerable research interest.

The classical models of urban growth, the concentric zone model
of Burgess and the sectoral growth model of Hoyt, both contain
general statements regarding residential mobility. Burgess argues
that continued in-migration when focussed on poor central districts
accompanied by an expanding central business district generates a net
out-ward movement of population within the city. Pressure of
increasing population and reduced residential land at the Centre cause
members of the innermost group to invade adjacent residential areas.
Residents of the latter areas in turn invade the areas next to them in
terms of distance from city centre. The over-all result is a wave of
outward movements producing a temporal succession of occupancy by
progressively poorer groups at any given distance from the centre of
the city.

Hoyt in his own model modifies this picture and argues for a
dominance of development along transportation routes radiating from

the down-town area. In particular, the progressive outward movement
of high rent districts tends to draw the growth of the rest of the
city in their wake.

These simple models are not very appropriate for explaining
mobility in most present-day large Nigerian cities. In-migrants to
the city locate initially in many parts of the city and not just in
the centre. Also the patterns of flow and counter flow are much more
complex than the single statements regarding radial movement would
suggest.

Another early interest in mobility rates was exhibited by the
urban ecologists at the University of Chicago in the 1920s. However,
their attention was directed mainly at the Inner city area experiencing
the full force of the waves of rural-to-urban and small-to-large town
migration of the post war period. Only one or two studies, notably that
of Albig (1933) cast their net over the entire urban area. Even in
these cases, the conclusions barely amounted to more than the observa-
tion that movements rates tended to decrease with increasing distance
from the city centre.

In the Mid-1g30s the work of H.W. Green (S.A. Stouffer 1940)
using the Real Property inventory in Cleveland provided a data source
in the form of a 321 x 321 matrix of inter-census tract moves which has
never been fully utilized, primarily because of the computational
problems of handling a matrix of this size at that time. However, it
did provide the basis for Stouffer's formulation of the concept of
intervening opportunities relating to the distribution of moves from a
given origin. (S. A. Stouffer, 1940).

(b) Significance of studying Individual changes of Residence

Study of individual changes of residence provides many insights into the ways in which the broader urban structure constrains individual behaviour. However, if one focuses attention at a different scale, one can see that these same changes of residence also modify that broader structure. It is the relocation of large numbers of households with varying characteristics which provides the basic mechanism for change in the composition of neighbourhoods. The move of the growing family to the suburb, the arrival of the rural migrant in the inner city, and the inflows and outflows associated with ethnic change all have important implications for the study of the internal structure of the city. An understanding of the processes which generate these flows and an evaluation of the net outcome of flow and counter-flow provide an essential imput to the development of dynamic models of urban structure.

(c) The Scope of the Study

The very magnitude of population flows within the city is such that it is useful to establish some framework for studying their characteristics. This present study is concerned primarily with a detailed study of human movement pattern in the core area of Ibadan. Attention is focused on the identification of essential properties of and reasons for such movements. Having established this base-point, one can make some general statements regarding the association between mobility and some socio-economic and physical variables.

The following discussion in this thesis can be grouped into two principal parts. The first treats aggregate properties of residential

mobility. A substantial part of the discussion is concerned with how the multitude of individual moves can be represented within a model such that specific questions relating to the rate of population-turnover can be answered. The second is concerned with the decision-making processes of individual households. In this section factors affecting the decision to move are identified with particular attention being focussed on movement as a response to stresses imposed by the local environment. Both residential choice behaviour and nature of change in residential structure of cities are topics of much current research activity. It is hoped that this thesis will give some idea of the types of questions that are being asked as well as provide some answers to same.

(d) The aim of the Study

The old core of Ibadan represents an indigenous urban area flanked at all sides by modern urban developments. According to Mabogunje (1968) the old core region is an area of bad slums in which over 70% of the buildings have a deteriorated structure. These dwellings are built of mud, having no identifiable sanitation facilities and generally in conditions of physical deterioration. The problem of its slum affects the comfort, aesthetic pleasure and convenience of living in this part of the city. Also the old Core area has not only the highest housing densities but also the highest population density ranging from 600 to 1,000 persons per acre, (Mabogunje, 1968). The people inhabiting this area of the town regard themselves as 'owners of the city' (or as they popularly assert 'sons of the soil').

Since these people are mostly 'Sons of the Soil' and since the area is almost homogeneous in terms of social, demographic and physical characteristics, it is widely believed that very little population movement occurs within the area.

The main problem of the study has been therefore to see whether there is any movement within the study area; if there is any, to look at the pattern of movement in terms of direction and distance and volume; and finally to search for the processes generating the pattern. The study looks at the movement of people at the level of the basic decision-making unit, which in most practical circumstances is the household. When one individual splits from an existing household and relocates by himself, it is convenient to regard this event as the creation of a new household.

The movement of each household within the delimited traditional Core area of the city is represented as a Vector, defined by distance and direction. The main focus is the spatial patterning of Intra-Urban residential mobility in this old part of the city. An attempt is also made to determine the magnitude of this mobility within the area.

In this study, the basic unit of analysis is the census collectors district, there being 18 such districts, in the study area, all lying to the east of Ogunpa river (Figure I). The area contained a population of 192,633 and a total of 47021 adult males by the 1963 census. The investigation has been limited to the movement into, and within the 18 census enumeration districts within the last five years 1968-1972.

THE MAP OF IBADAN SHOWING THE STUDY AREA (The traditional core)

N 6

NW 6

N 3

N 5

NW 4   NW 5

N 4

NW 3

E 9

E 8

SW 7

NW 2

N 1   N 2   E 5

E 7

SW 6

NW 1

E 1

E 6

SW 5

C 2

C 1

E 2   E 3

E 4

SW 4

SW 1   SW 2   S 1   S 2

SW 8

SW 3

S 3

S 4

S 7   S 6   S 5

Study area

Area outside
the study area.
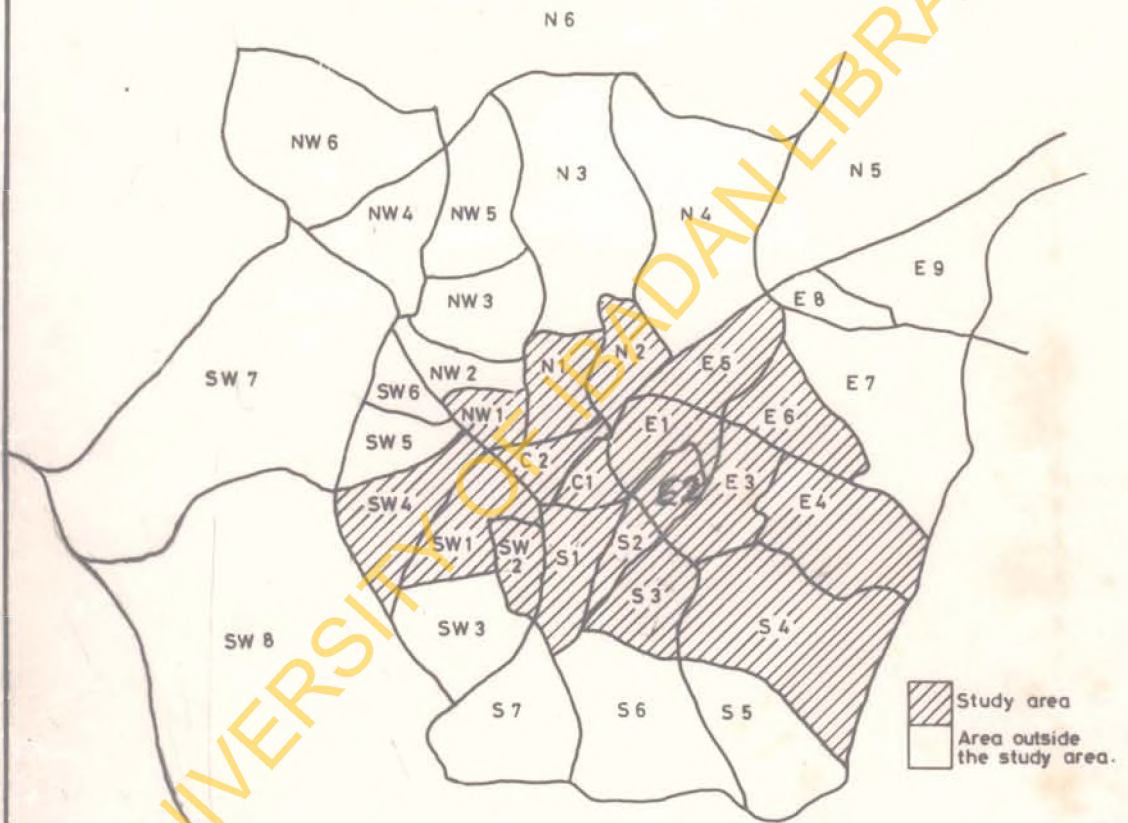
0   1067 2134 3261   4328 FEET

Fig 1.

The out-migrants from the area are excluded because they can not be found in the study area because they have moved out of the area.

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CHAPTER TWO

DATA COLLECTION PROCESSES

(a) **Sources of data:**

The following sources of information were used to aid the collection of data in this study:

1. IBADAN Guide Map of the Scale: 1:20,000.

2. Map of Ibadan and Environs - Scale 1:12,500.

3. Ibadan Town Plan - Scale 400 feet to One Inch.

4. Data for total number of houses in each ward in the study area were obtained from two sources.

   (a) The Ibadan City Council Revenue Department, Mapo, Ibadan.

   (b) The Ministry of Economic Planning and Reconstruction, Secretariat.

5. 1963 Census data.

6. Questionaires.

(b) **Method of collection of data:**

The Ibadan Guide Map (scale 1:20,000) was used for familiarization with all the streets crossing and bounding the study area.

The Map of Ibadan and Environs (scale 1:12,500) gives the delimitation of the 18 wards with which the study is concerned. These boundaries were later interpolated into Ibadan Town Plan (scale 400 feet to One Inch). From these interpolations, one was able to count and number each building. The data for the total number of houses in each ward which was got from the Ibadan City Council Revenue Department and from the Ministry of Economic Planning and Reconstruction Secretariat, were used to countercheck the number of houses. There were little discrepancies especially at the older suburb where new houses are still being erected. Where such discrepancies were noted correction was made on the field.

The population Census data of 1963 gave a rough idea of the total number of people living in the study area. From this base point, it was possible to calculate the total number of adult people expected to be found in each ward, by subtracting the number of people between the ages of 0 - 15.

1963-72 =
period is 9 years.
It is possible that some born
these people would become adults.

Since the study would be dealing with the male head of household, the total number of adult males in each ward was then calculated. This served as the stable frame. It was then decided to sample at least 30 heads of households from each ward depending on the calculated total number of adult male in each ward. By the use of the random table figures, the decided number of houses from each ward using the already numbered houses in the Ibadan Town Plan was then sampled. On getting to a house, the interviewer then picked at random the head of household to be interviewed. But in many houses there is only one head of household. If one happened to come across a female head of household, the woman was then skipped because women were not interviewable at that time when kidnapping was rampant. In all 618 male heads of households in the 18 wards were interviewed.

Specifically the study is concerned with the Migration history of the population in the study Area over a period of five years (1968-1972).

The residential movement data were provided by a series of questions in the household fact-finding questionnaire. After discussion of a preliminary questionnaire with my supervisor /in the

Department of Geography_7 and with some lecturers in the Sociology
Department, there were some 20 test interviews made at the end of
July, 1972 in the City of Ibadan. The questionnaire was then
finally drawn. The actual data were obtained from July to October
1972. Appendix I gives the details of the questionnaire.

Together with the present address and the household characteris-
tics all the essentials of the movement pattern are given.

(c) Problems in collection of data:

Such a study as this obviously involves a number of problems;
there are the questions of the reliability of memory in recollecting
specific events and dates more so when it is realised that the
majority of the people in the study area are illiterates. And there
is always, of course, the possibility that the respondents consciously
falsified their answers in an attempt to protect themselves, to
fortify their egoes, to give "expected answers" or for any of a
variety of other reasons. It is customary to count with the
following sources of error in a field survey of this type.

    (a) Interviewer effect

    (b) Respondent effect

    (c) Situation effect

    (d) The Instrument effect.

The instrument effect has been checked in this study by asking
specific and simple questions only. The wordings have been
simplified and ambiguous terms have been avoided, thus deliberately
restricting the degree of intricacy of questions. The test interviews
were partly made to find out and correct any vocabulary difficulties

and any doubts as to the purpose of question.

Each item was read and explained individually before being
answered by the respondent. In addition, respondents were
instructed not to provide any answers about which they were uncertain.
Less than one per cent of the filled questionnaire had to be rejected
for incompleteness.

The respondent effect has been decreased by guaranteeing anonymity
in the introductory passage at the start of each questionnaire. The
circumstances of the interview had been arranged in such a way that
distracting factors were reduced to a minimum. If for some reason
no answer was given by the male head of household in any particular
house, the household was omitted and another substituted. In all
618 households entered the analysis.

By considering only moves made in the last five years, the
sample represents current movers and gives a picture of current
movement trends. Since the sample is drawn at the end of the movement
period, no data is available on those households who left the core
area for other parts of the town at large or who left for other towns
or villages. But it is possible to identify households moving into the
old core area during the five year study period. There is no way,
however, to specify households which moved more than once or which
formed during the 5 year period. The questions on movement refer
only to the most recent move by the head of households. The 618
households which were represented were assumed to exist both at the

beginning and end of the 5 year period.

During the interview, movers were asked to state their preferences for other areas in the city should they contemplate a further move within the same general set of constraints as applied to the real move analysed. It was thus possible to measure not only a move which had actually taken place but also a further set of preferred direction of movement for some future time.

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THE FRAMEWORK

(a)   THE BEHAVIOURAL FRAMEWORK

Several authors have outlined the stages in the process
of voluntary residential relocations - (Burgess 1925 and
Hoyts, 1937). Their simple models, as seen in the previous
chapter, are not very appropriate for examining mobility in most
present-day large Nigerian cities. Also the patterns of flow
and counter-flow are much more complex than the simple statements
regarding radial movement would suggest.

The scheme adopted here is a simplified version of a model
suggested by Wolpert (1965, 1966) and latter elaborated upon by
Brown and Moore (1968).

Initially it is assumed that each household is satisfied with
its residence and neighbourhood environment; i.e. the household
is in an equilibrium state with its location. Changes in the
characteristics of a household such as life cycle changes or
socio-economic changes or changes in the environment (i.e. the
deterioration of housing or the influx of unacceptable neighbours)
may cause a disequilibrium state to emerge between the household
and location. This new state may or may not motivate the household
to seek a new residential location.

Wolpert terms the first of these disturbances or changes
"strain" factors and terms the second of these disturbances "stress"
factors. Now, assuming that the decision to move is made, the

household proceeds to seek out a new residence (Figure 2)

Figure 2

The Behavioural Framework
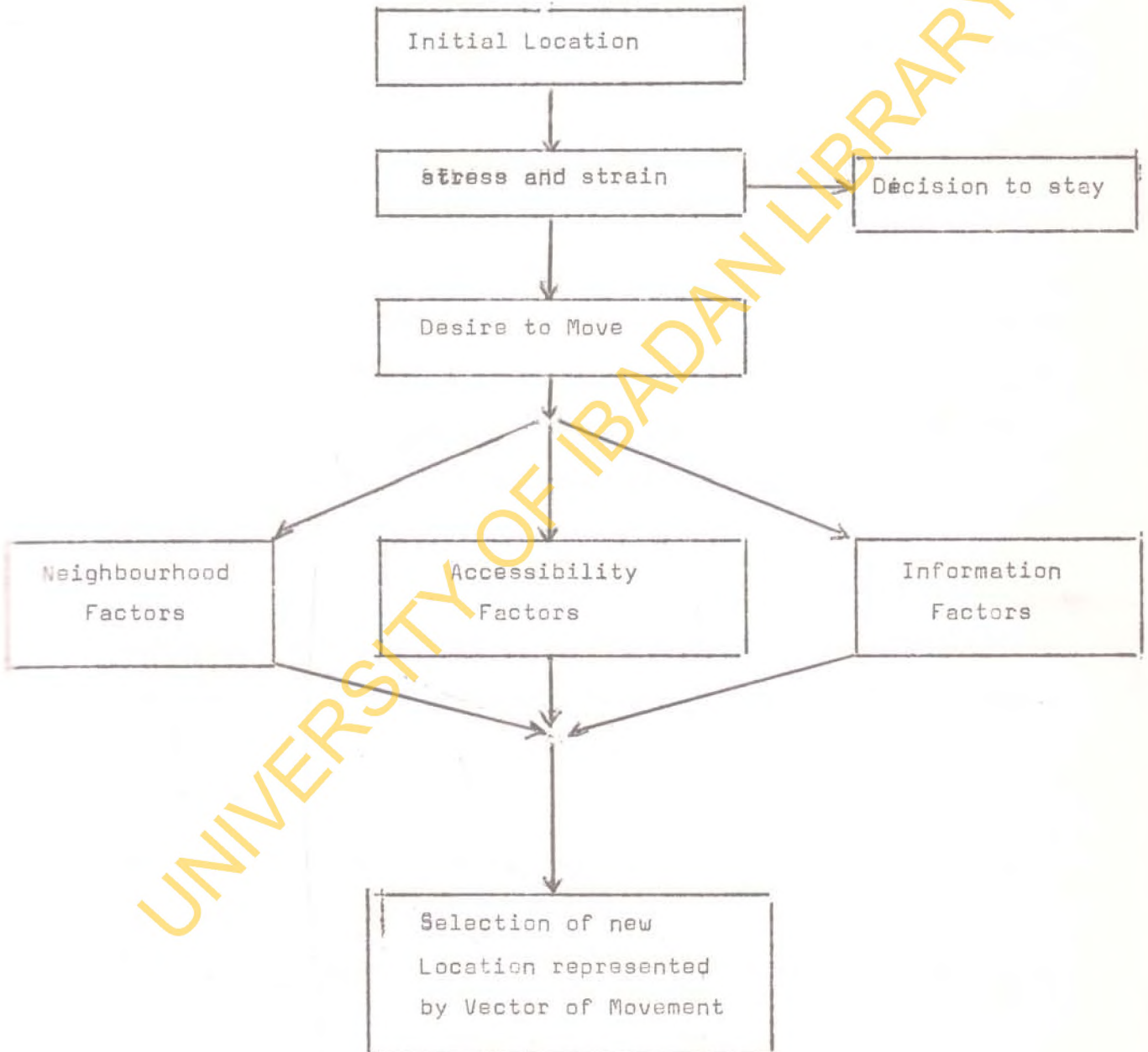
Simplified version of a model suggested by Wolpert (1965 and 1966)

✓ The literature on intra-urban mobility suggests that households choose new residences on the basis of three quasi-independent sets of factors i.e.

(1) Neighbourhood factors, or the attraction of households to area of the city with similar socio-economic and/or life cycle characteristics.

(2) Accessibility factors, especially access to the place of employment.

(3) Information factors, embracing the knowledge that the household has of the city and the manner in which households seek out a new residence. Brown and Moore (1968) term the first of these Ideas "the awareness space" of the household and the second they term the "search procedure".

A large proportion of sociological literature on intra-Urban mobility has been addressed to establishing the characteristics of mobile population (Shryock, Rossi and Simons, 1971 and 1972). At best they give only a static description of who moves and helps little in explaining why people move.

The concepts of stress and strain, introduced by Wolpert to describe the changing attitude of the household toward the place it occupies, represents a rather different orientation.

The primary focus in this approach is not who is moving, but
what kind of changes do movers experience which stimulate
the search for a new residence. The concept of stress i.e. the
changes that take place in the residential environment, is
rather difficult to quantify because of a lack of specific
data. The concept of strain, or changes in the characteristics
of the household is more directly measured and will represent
a major point of study.

(b)   A FRAMEWORK FOR RECORDING CHANGES OF
                RESIDENCE IN THE CITY

    In developing a representation of the movement pattern, the
first assumption is that the boundary for the traditional
core of Ibadan can be operationally defined. This area so
defined constitutes an open population system in so far as transfer
of households take place across its boundaries.

    Each change of residence appropriate to the study has either
an origin or destination or both within the defined limits of the
study area.

    Another assumption is that the area of study can be
divided into a number of small sub-areas which are mutually
exclusive and exhaust the whole of the defined traditional core
region. There are a number of ways by which this sub-division
can be done. For example one can use such small areal units as
blocks of buildings. This approach is not used in this study as
it has been ignored in most studies because it will definitely

lead to great computational problems. Also one can rely on sub-
area definition which is based on the experience of certain people
who are able to apply some subjective notions of "neighbourhood" or
"functional area" to sub-division of the city. This procedure should
have been sounder if only a degree of concensus concerning "functional
area" from a number of different individuals can be established.
Unfortunately this is usually impossible for any practical purpose.
So as in most of the previous studies one is left with no other
option but the use of the census tracts. This method has its own
defects but these can easily be overcome. In the majority of
studies of mobility in which census tracts data are used, it was
possible to record only those moves crossing the boundaries of
the units. Many measures of mobility derived from such data are
highly sensitive to the size of the Areal Units for which they
are computed since intra - area movements are ignored. But in
order to reduce this sensitivity to the barest minimum, estimates
of total movements are acquired in this study.

There are 18 of these census tracts in the area of study,
(Figure I) starting from central ward one and rediating to all
directions from the Central Mapo Hall. As in all analysis of
areal data, one treats each areal unit as homogeneous in the
characteristics being measured. In most cases, internal variability

of social and demographic characteristics is small in these census
tracts relative to inter-area variations.

Finally in order to treat the open system one can artificially
close it by defining a 19th area which consists of the entire
territory which lies outside the limits of this defined traditional
core region. Movement from this 19th region is recorded and used
separately in the analysis. Therefore the matrix so derived is a
18 x 19 matrix. (Table I)

A simple accounting model representing the aggregate flows
to be analysed can now be developed. First the individual
moves (when individual here means the head of households) are
considered. Majority of the Moves possess origins and destinations,
each of which can be assigned to one and only one of the 18 sub-
area so defined in the old core area, and the rest moves originating
from the 19th sub-area and terminating in the old core so defined.
Thus from basic data referring to the origins (former address) and
destinations of moves (present address) one can now construct a
Table (Table II) representing the flows within and between all
sub-areas.

From this table a number of simple characteristics can be
derived from this accounting frame-work.

(A) T_i : The Population-Turnover for each sub-area

$$= \sum_{j=1}^{18} \text{ mij } (i = 1, 2, - - - -, 18)$$

(B) E_t: Total population movement from sub-area i excluding

Table I

DESTINATION (Raw Data)

ORIGINS	C1	C2	E1	E2	E3	E4	E5	E6	S1	S2	S3	S4	N1	N2	SW1	SW2	SW4	NW1	TOTAL
C1	2		3	1	1		1		1	1		3	5			1			19
C2		3		1		1	1						2	2			1		11
E1			11	1	2	1	3	1	2	1	1	2	1	2					28
E2			1		4	2		1						2					10
E3		1			1	6	3							1					12
E4						3		4								1			8
E5			3				8	2					2	1					16
E6					1	2	1	2						1					7
S1									1	2					1				4
S2		1				2				3	2		1						9
S3				1						3	2	1	1						8
S4					1	1				1	1	6							12
N1		2							1	1			10					2	16
N2			1		1	1	2	1					1	7					14
SW1															3	5		3	11
SW2																3			3
SW4						1										1	10		12
NW1			1															6	7
OUTSIDE	7	6	9	6	12	14	7	12	6	5	9	13	10	13	11	3	14	8	163
NON MOVERS	20	17	18	16	17	9	10	5	20	12	15	5	18	11	14	23	5	11	248
																	GRAND TOTAL—		618

THE MOVEMENT MATRIX.

Table II.

DESTINATIONS.

	C1	C2	E1	E2	E3	E4	E5	E6	S1	S2	S3	S4	N1	N2	SW1	SW2	SW4	NW1	P.T.O.
C1	.97		1.45	.48	.48		.48		.48	.48		1.45		2.42		.48			9.17
C2		1.45		.48		.48	.48						.97	.97			.48		5.31
E1			5.31	.48	.97	.48	1.45	.48	.97	.48	.48	.97	.48	.97					13.52
E2			.48	1.93	.97			.48					.97						4.83
E3		.48		.48	2.90	1.45								.48					5.79
E4						1.45		1.93							.48				3.86
E1			1.45				3.87	.97					.97	.48					7.74
E6					.48	.97	.48	.97						.48					3.38
S1									.48	.97					.48				1.93
S2		.48				.97				1.45	.97		.48						4.35
S3				.48						1.45	.97	.48	.48						3.86
S4	.48				.48	.48		.48		.48	.48	2.90							5.78
N1		.97					.48			.48			4.84					.97	7.74
N2			.48		.48	.48	.97	.48					.48	3.38					6.75
SW1															1.45	2.45		1.45	5.32
SW2																1 45			1.45
SW4						.48								.48			4.84		5.80
NW1			.48															2.90	3.38
TOTAL	1.45	3.38	9.65	4.33	6.76	7.24	7.73	6.27	1.93	5.79	2.9	5.8	9.67	9.66	2.41	4.35	5.32	5.32	99.96

ORIGINS

P.T.O. = Population-turn over

≈100 %

POPULATION — TURNOVER MATRIX.

intra - Area movement $= \sum_{j=1}^{18} mij - Mii$ $(i= 1, 2, - - - 18)$

(C) Mt :   Total Intra - Movement in each area

mii $(i= 1, 2, - - - -, 18)$

(D) Nt :   Net Migration of each sub-area within the study area.

$\sum_{j=1}^{18} mij - \sum_{i=1}^{18} mji$ $(i = 1, 2, - - - -, 18)$

(E) Ot :   Total in movement from the outside into the area

M19j $(i = 1, 2, - - - -, 18)$

All these characteristics will be looked at and mapped but the main focus will be placed on 'A' which is (Ti)   The 'Ti' is defined as the number of persons involved in residential movements within or out of, but not into the sub-area. This number is expressed as a proportion of the total movement within the study area.   This index emphasises the strength of the total linkages between locations.

A further arguement for using Population-turnover and Net Migration as measures of residential mobility is that whereas values of in-movement, out-movement and intra-area movement are all extremely sensitive to sub-area definition, the measures chosen possess much lower levels of sensitivity in this respect and are therefore more amenable to analysis in terms of relations to other area specific characteristics. (Moore E. G. 1971)

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C H A P T E R   F O U R

THE OVERALL MOVEMENT PATTERNS

In this chapter the major patterns of residential relocation
during the period 1968 - 1972 among the 18 zones of analysis
defined above will be examined. The amount of information
available, the magnitude of flow makes cartographic or statisti-
cal generation difficult, so a wide variety of techniques and
parameters are applied.

THE DEGREE OF STABILITY OF THE CORE AREA
POPULATION, REFERENCE TO TABLE I

Out of the 618 people interviewed 248 people (or 40%) have
never moved in the past five years. Out of these 248 non-movers
186 people (or 75%) had never moved at all out of their fathers'
houses in life. This finding shows that true to our assumption,
many of the people of the old core area of Ibadan are stable
and have little cause to move within the delimited area.

But this percentage of non-movers also varies as to wards,
as shown on figure 3. The highest percentage of non-movers or
stayers is recorded in Ward 'C1' i.e. the area around Mapo,
(Table 3). From this core ward, a band of high percentage of
non-movers can be observed south wards. Such areas include
Wards S1 and SW2 (areas of Oke Ayingun and Kure and Isale Ijebu)
In these areas non-movers exceed 60%. It should be noted that

Table 3
PERCENTAGE OF NON—MOVER IN EACH WARD.

C1	C2	E1	E2	E3	E4	E5	E6	S1	S2	S3	S4	N1	N2	SW1	SW2	SW4	NW1
66·7	56·7	37·8	53·3	39·5	23·7	30·3	16·7	66·7	40	50	16·7	39·5	25	46·7	65·7	16·7	36·7

PERCENTAGE OF NONE-MOVERS.

Fig 3.

	>60 - 70%
	>50 - 60%
	>40 - 50%
	>30 - 40%
	>20 - 30%
	>10 - 20%

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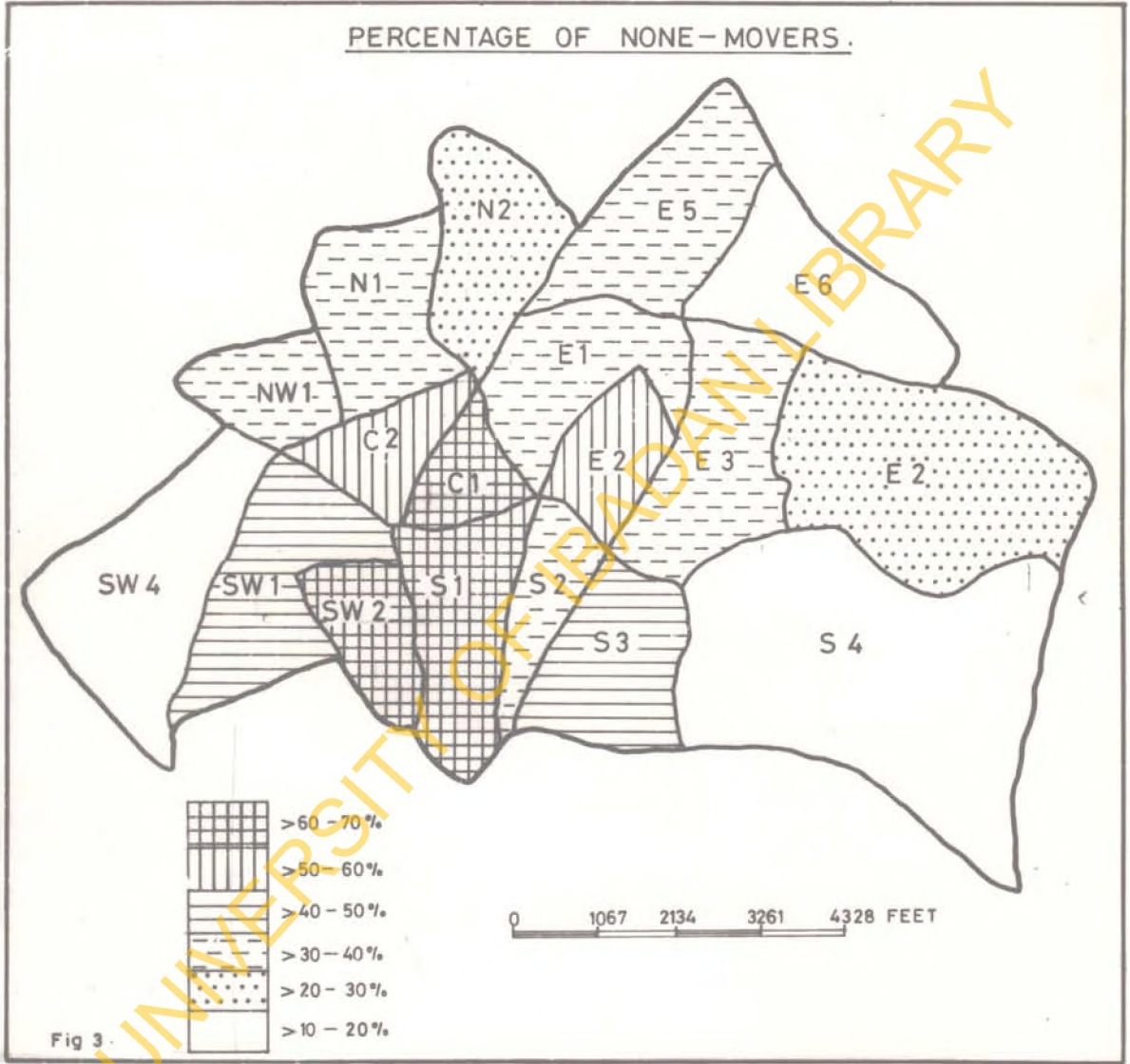
these areas are part of the real core of the old town of
Ibadan. Next in stability of population are the remaining
parts of the oldest part of Ibadan. These areas are just
adjacent to the central ward one and the southern wards. They
include Oke Olugbode and Ogunmola sections of the town. Thus
the real heart of the old traditional area is characterised
by relatively stable families who have preferred staying all
their life long in their fathers' houses.

The areas of least stability are found in the older
suburbs e.g. Aremo, Elekuro, Foko/Isale Asaka areas where
as low as 16.7% is recorded. These areas receive people from
other areas both from within and from outside the study area.

The people choose not to move out of their residences for
a number of reasons, as shown in Table 4.

Table 4

Reasons given by the non-movers for not moving

Reasons	Percentage of people giving the reason
(1) No money for rent	49
(2) Controlling father's house	28
(3) Closeness to relatives	15
(4) Nearness to hospital	03
(5) Nearness to road	03
(6) Nearness to job place	02
Total	100%

From these reasons given, it is clear that economic
disability is the major set-back to movement within this
environment. Many of these poor people feel themselves
perpetually trapped in their position of disadvantage. They
occupy relatively well defined areas in the old city centre--
usually in the poorest quality housing. Although the net
effect of the defficiencies in the existing dwelling or
attractions of suburban alternatives is to provide dissatis-
faction with respect to the present location. This is not,
in itself, sufficient to stimulate a search for some-where
else to live. The cost of a move is perceived to be too great
when compared with the benefits from eliminating the small
degree of dissatisfaction.

David Everseley (Lansing J. B. 1957) calls such areas
"losing areas" and he contrasts the level of services which
might be found in such areas with those in what he called
"the luster suburbs". There is certainly a considerable contrast
in the quality of services, private and public as well in both
of these areas. The number of houses having private water
taps per ward in these two types of environment will be used
to substantiate this fact. These figures can then be looked
at in relation to each ward's population. (Table 5).

Table 5

COMPARISON OF THE NUMBER OF HOUSES HAVING PRIVATE WATER
TAPS AND EACH WARDS' POPULATION IN BOTH THE
"LOSING AREA" AND THE LUSTER SUBURBS"

The "Losing Area"			The "Luster Suburbs"		
Wards	Total population	No of Private Taps	Wards	Total population	No of Private Taps
C1	11,557	9	E6	9,825	49
C2	16,437	18	E9	9,206	406
E1	12,856	51	NW5	3,980	333
E2	7,595	15	S7	11,654	460
S1	11,391	22	NW4	6,913	208
Total	59,836	115	Total	41,578	1456
Mean	11,967	23	Mean	8,315	291

Sources: Western Nigerian Water Corporation
Ibadan and Nigeria population census
1963.

The contrast is quite striking. Despite the great population
size at the old core region (the losing area) the services are very
low. Conversely the level of services at the surburbs where
population is relatively thin is very high. The average number
of water taps in the two regions 23 and 291 taps can be compared
with the mean sizes of population of 11,967 and 8,315 respectively.

The services are worse in the "losing Area" because these
people possess low skills therefore their income is not generally
adequate to support better services. Table 6 illustrates for
instance the fact of the people's low occupational structures.

Table 6

OCCUPATIONAL STRUCTURE OF THE NON-MOVERS

Categories of occupation	No. in Sample	Percentage of Total
Petty services	66	26.5
Petty trading	56	22.8
Manual work	44	18
White collar job	32	12.8
Agriculture	24	9.5
Arabic teaching	10	4.2
Other occupation	9	3.6
Retired	5	2.1
Unemployed	2	.5
Total	248	100%

Source: Result from Field Work.

It is obvious from Table 6 that jobs of low skill e.g.
petty services, Trading, Manual Work and farming are the major
occupation of these stable population. No wonder the income
generated from these occupations are not enough to maintain
good quality amenities. The very low proportion of the un-
employed should be looked at with a critical eye. This small
percentage might be due to the fact that many people hate
declaring themselves as unemployed when actually they are.

Another factor which encourages resistance to movement
is the strength of social and cultural networks. People are
either compelled to stay in their fathers' houses so as to
control the houses or many chose willingly to act as the
bread winner of the extended family after the father had died
(Table 4). Also of importance is accessibility to friends and
relatives. The social interaction serves to integrate the
individual in the functioning of the local community. The
inertia effect on plans for change of residence is therefore
considerable. Also from Table 4 one discovers that the factors
of accessibility to roads and nearness to job place are not
at all important in this study of resistance to movements, as
shall be seen later in Chapter Six.

MOVEMENTS INTO THE STUDY AREA

Before focussing our attention entirely on the close system
it is pertinent to examine briefly the relationships between

the study area and the immediate surrounding area (i.e. Column 19th

of the Matrix I). The spatial distribution of the in-migrants

is of concern because it biases the close system analysis.

If the whole people interviewed are grouped under 3 headings:

(1) Non - Movers

(2) Total movers within the study area

(3) Total movers into the study area from outside

This third Category has the least percentage as shown in

Table 7 below:

Table 7

Percentages of people who are non-movers, Intra-area movers

and movers from outside the area.

Categories of People	No. in Sample	Percentage of Total
Total movers within the study region	207	33.50
Total movers from outside the study area	163	26.37
Total of non-movers	248	40.13
Total	618	100%

From this table one sees that there are few people coming
to relocate in the core area of Ibadan from outside the study area.
In fact the majority of people in this category are people from
the surrounding villages and towns rather than from the rest
of the city.

But since little data is available for those moving out
of the area of study to the rest of the city, comparison is very
difficult to make. But from the question "where are your other
brothers living in the city" an indication of the magnitude of
movers away from this study area can be gained. For each person
interviewed there is an average of 3 relatives, (brothers, cousins
etc.), particularly the educated ones in the new residential area
of Ibadan who have moved out from the study area.
Oke Ado, Mokola and Molete areas of the city dominate the pulling
of these educated people away from the real heart of the city.

The Map of in-movement (Figure 4) shows quite a different
pattern from the map showing percentage of non-movers. The move
to this traditional part of Ibadan from the surrounding area is
not selective. And unlike studies in the advanced countries,
migrants locate any-where in the study area, instead of the only
movement to the central core of the city. In fact the real
core is mostly avoided by many in-migrants. The reason

PERCENTAGE OF IN-MOVERS.

N 2 · E 5 · N1 · E 6 · NW1 · E 1 · C 2 · C 1 · E 2 · E 3 · E 4 · SW4 · SW1 · S 1 · S 2 · SW 2 · S 3 · S 4

> 40 – 50 %
> 30 – 40 %
> 20 – 30 %
> 10 – 20 %
> 0 – 10 %

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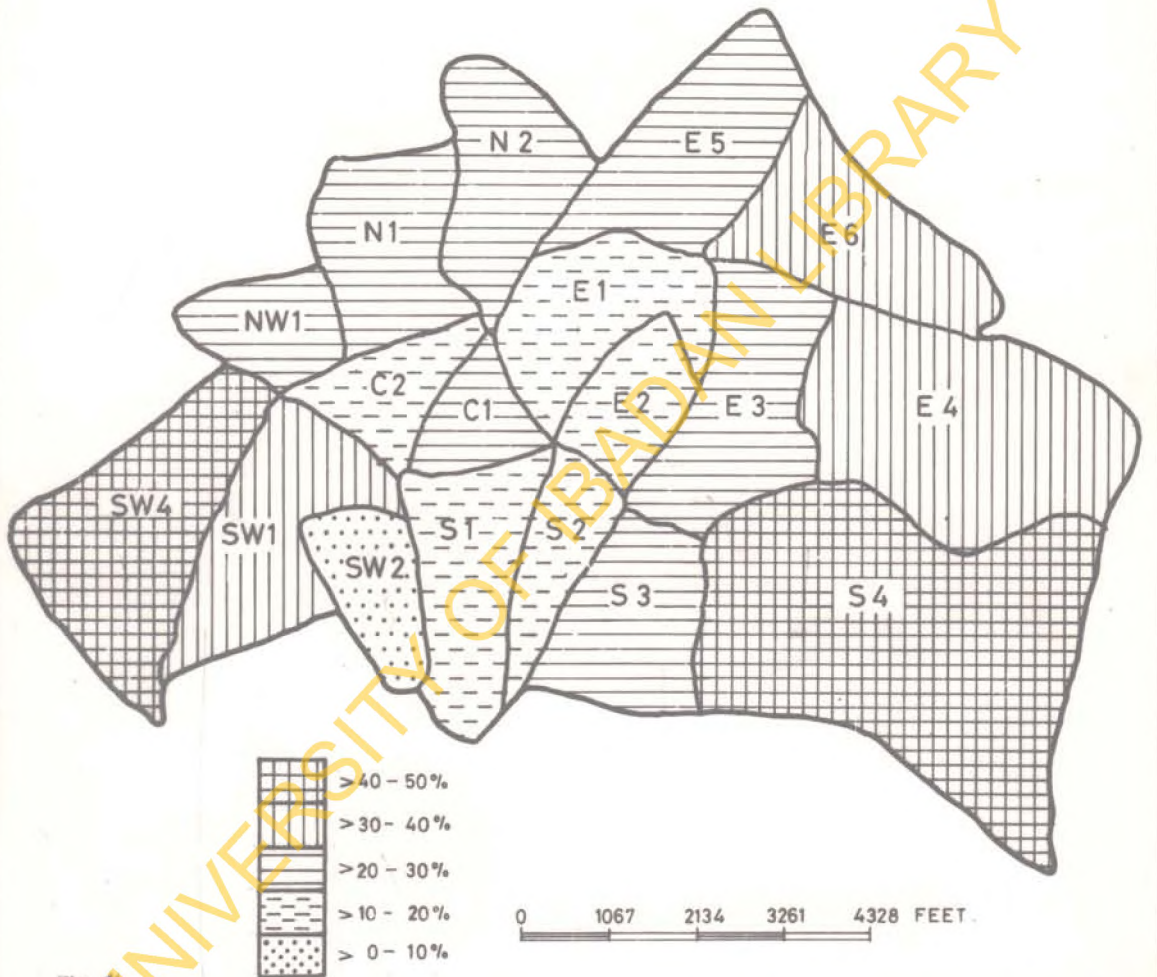
Fig. 4

for this discrepancy might be largely socio-cultural. The
inner city is an area of very dense population and of owner-
occupied houses. Since rooms to let are very rare, even if
immigrants chose to locate at the core area, there may be no
residence for them. Hence their location in other parts of the
city where better and more accommodation exists. In-migrants
prefer the eastern old suburbs and the south western old suburbs
probably because of this high density of population and
congestion in the real hub of the city. The highest percentage
is recorded in Foko/Isale Asaka Areas (46.7%) and Elekuro Area
(43.3%). These areas are followed by the eastern suburbs
and the northern wards. Apart from Mapo Area, the real heart
of the traditional area stretching southwards to Isale-Ijebu
areas have low figures of less than 20%. The least percentage
is of course recorded in SW2 Ward (Isale' Jebu Area).

THE SPATIAL DISTRIBUTION OF THE
POPULATION-TURNOVER RATES

The study area shows a low population-turnover as compared
with other findings in the developed countries. In the study area,
for instance only 33.5% of the people interviewed changed residences
in the past five years. Where as J. W. Simmons (1968) shows
that over 50% of the population change their place of residence

at least once in six years in the cities of the United States.
E. G. Moore (1972) noted some inner city areas experiencing
mobility rate which often exceeds 70% per year. But probably
it may be that if the whole city of Ibadan were studied this
core area would record a higher figure since the out-movement
from the study area would be recorded plus the movement rates.

The mean population turnover is 5.6%, ranging from 13.52%
in the Inner City to about 1.45% in the south western suburb.
Firgure 5 shows the distribution of the turnover rates. Two general
properties of the distribution are immediately evident. First,
turnover rates are much higher in the centre of the city (the
maximum value being recorded by Akintayo/Tubosun area in E1
with 13.52%) than at the peripheral areas. Secondly moderate values
tend to extend further out from the centre of the city to the
northern part.

The pattern should only be interpreted to mean that more
people move from the central area to other areas of the same
environmental type or to better environmental type within the
study area. It does not mean the general mobility rate
is highest at the centre. It is most probable that there are
plenty of movements from the old suburban areas to the modern
residential areas of the city. But this study is not concerned

POPULATION TURNOVER RATES.

Fig. 5

Legend:
- > 12 – 15%
- > 9 – 12%
- > 6 – 9%
- > 3 – 6%
- > 0 – 3%

Scale: 0   1067   2134   3261   4328 FEET
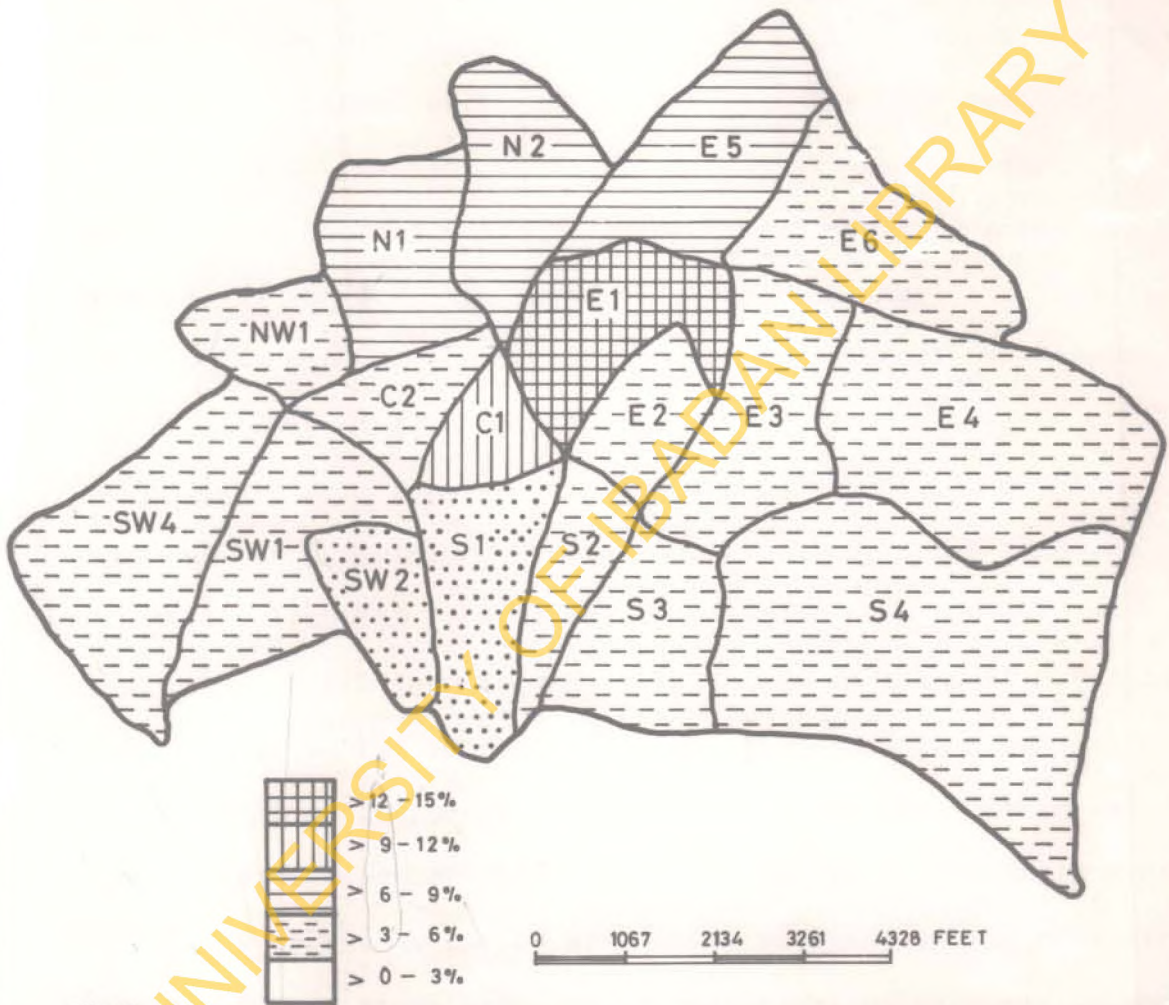
with such movements, since it is limited to movements within
the delimited study area.

The almost homogeneity of the traditional area as to
movement rates within the area of study is brought out vividly
(figure 5). Eleven wards out of the 18 wards have turnover
rates of 3 to 6%. The whole of the eastern and western
wards belong to this category. The lowest mobility rates are
recorded at the southern area of Oke Ayingun, Kure and Isale
'Jebu. The explanation for these variations shall be a topic
for a later chapter in this thesis.

An even more complex pattern is shown in Figure 6 which
portrays the proportion of movers originating from a zone who
relocate within it. The values vary widely over space. The
high value of 5.31% in ward E1 is adjacent to a low of 0.97% in
ward C1. These two areas of highest population turnover are now
so divergent in intra-area flow. People move less within wards
from the real heart of the study area down to the southern areas.
Intra-ward movements can be seen to be greatest at the northern
section of this study area. Also participating strongly in the
Intra-ward movement is ward SW4 (Foko Area). Less homogeneity is
apparent in this distribution.

Figure 7 which shows Inter-Area flow reveals a more interesting
distributional pattern. More people go out of the central core

INTRA - AREA MOVEMENT RATES.

Fig 6

	> 5 – 6%
	> 4 – 5%
	> 3 – 4%
	> 2 – 3%
	> 1 – 2%
	0 – 1%

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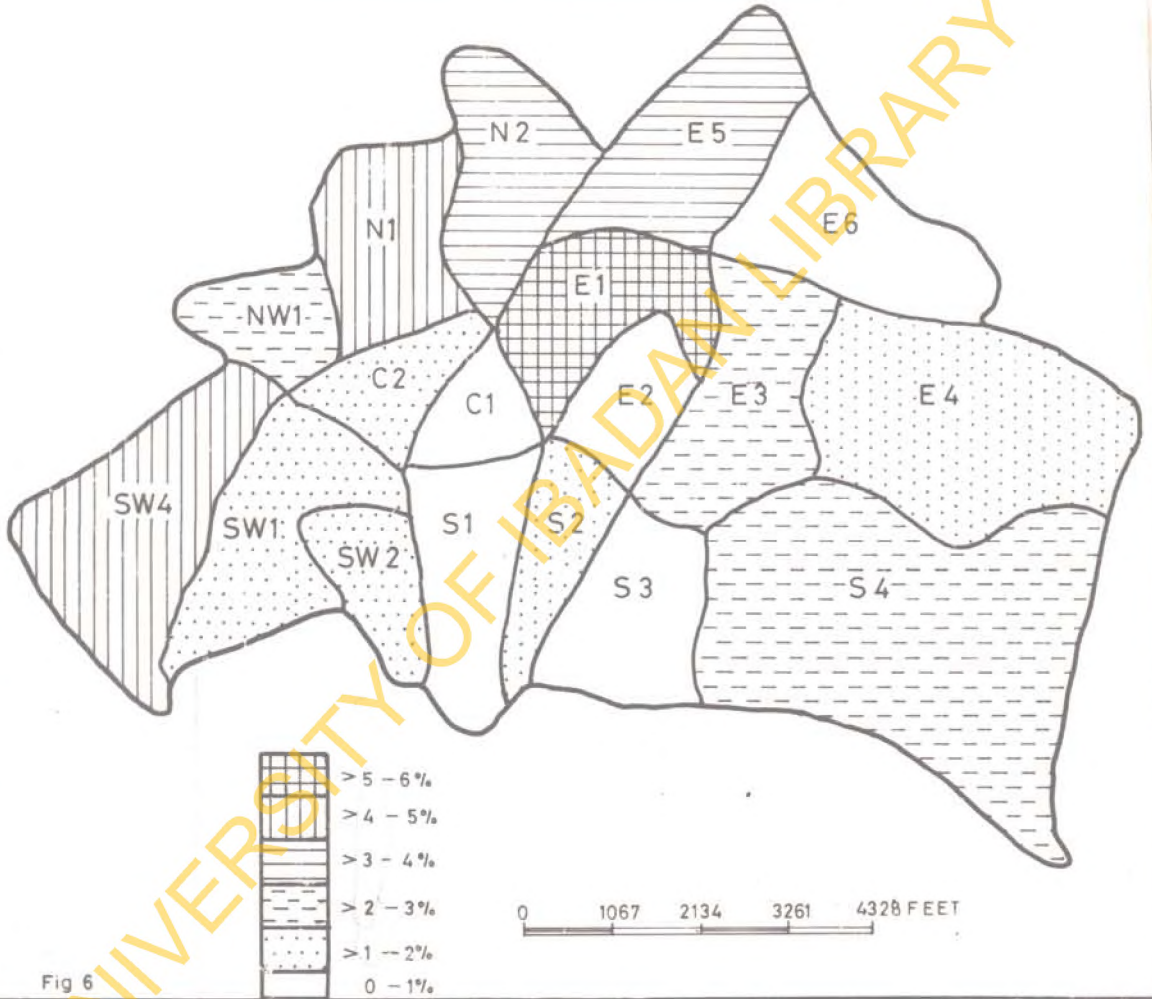
INTER – AREA MOVEMENT RATES.

Fig 7

Legend:
- > 4 %
- > 3 – 4 %
- > 2 – 3 %
- > 1 – 2 %
- > 0 – 1 %

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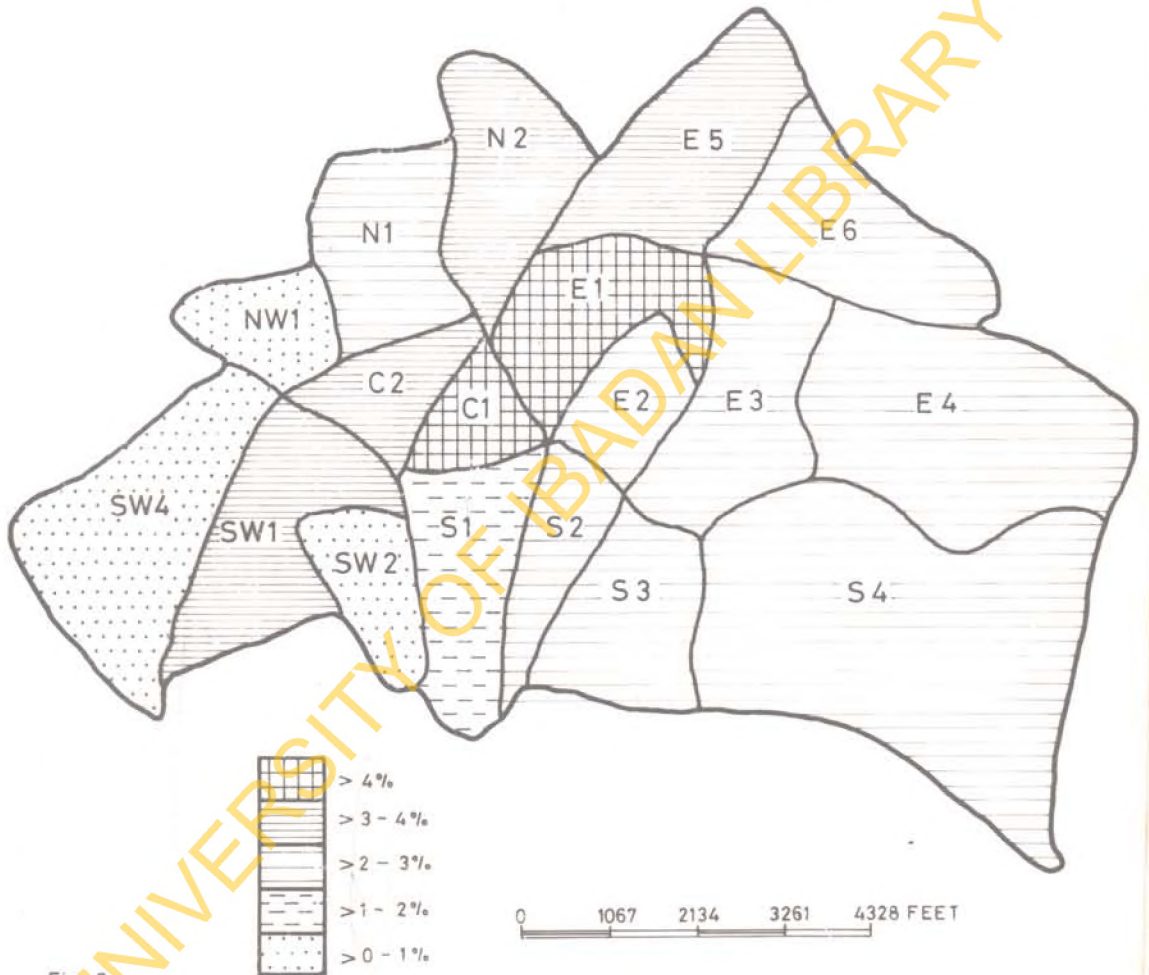
(wards C1 and E1) to other areas. Their percentages are 8.2
and 8.21 respectively. But a ridge of high values can be
observed from the south-western area through the central wards to
the north-eastern section of the study area. The whole of
the eastern sections show an homogeneous distributional pattern
with values ranging from 2 to 3%. The two most westerly wards
(SW4 and NW1) and ward SW2 send out the least percentage of
people, the values ranging from 0 to 1%.

The Map of Net flows on the other hand emphasizes the
non-reciprocal flows between zones of different environmental
nature (figure 8 and 9). Areas of negative net are areas
losing population more than they are receiving from other areas,
while areas of possitive net are areas receiving more people
than they are losing. The suburban areas, especially the
eastern wards and the northern and north-western wards, which
are rapidly adding new housing units are experiencing absolute
population growth due to in-migration. Conversely, the central
city and the south-western wards – where the number of housing
units is relatively fixed – appears to be losing population.

OTHER FORMS OF GENERALIZATION

It is of interest to examine the over all relationship
between volume of movement and distance, as well as the spatial
variations in the distance pattern.

NEGATIVE NET MIGRATION RATES

Fig. 8

Legend:
- > − 4%
- > − 3 to −4%
- > − 2 to −3%
- > − 1 to −2%
- > − 0 to −1%
- + Area of Positive net

Scale: 0   1067   2134   3261   4328 FEET

POSITIVE NET MIGRATION RATES

Fig. 9
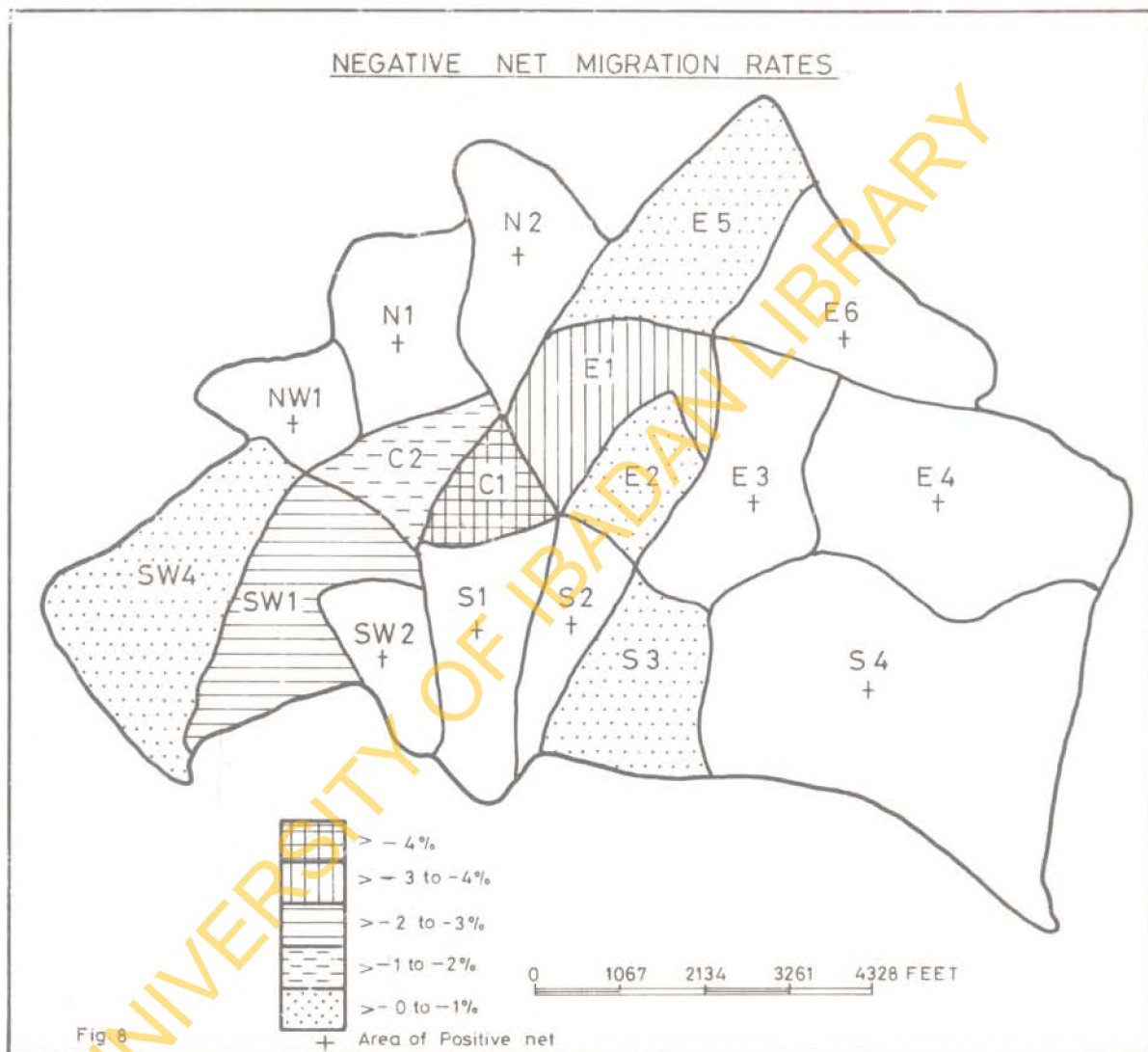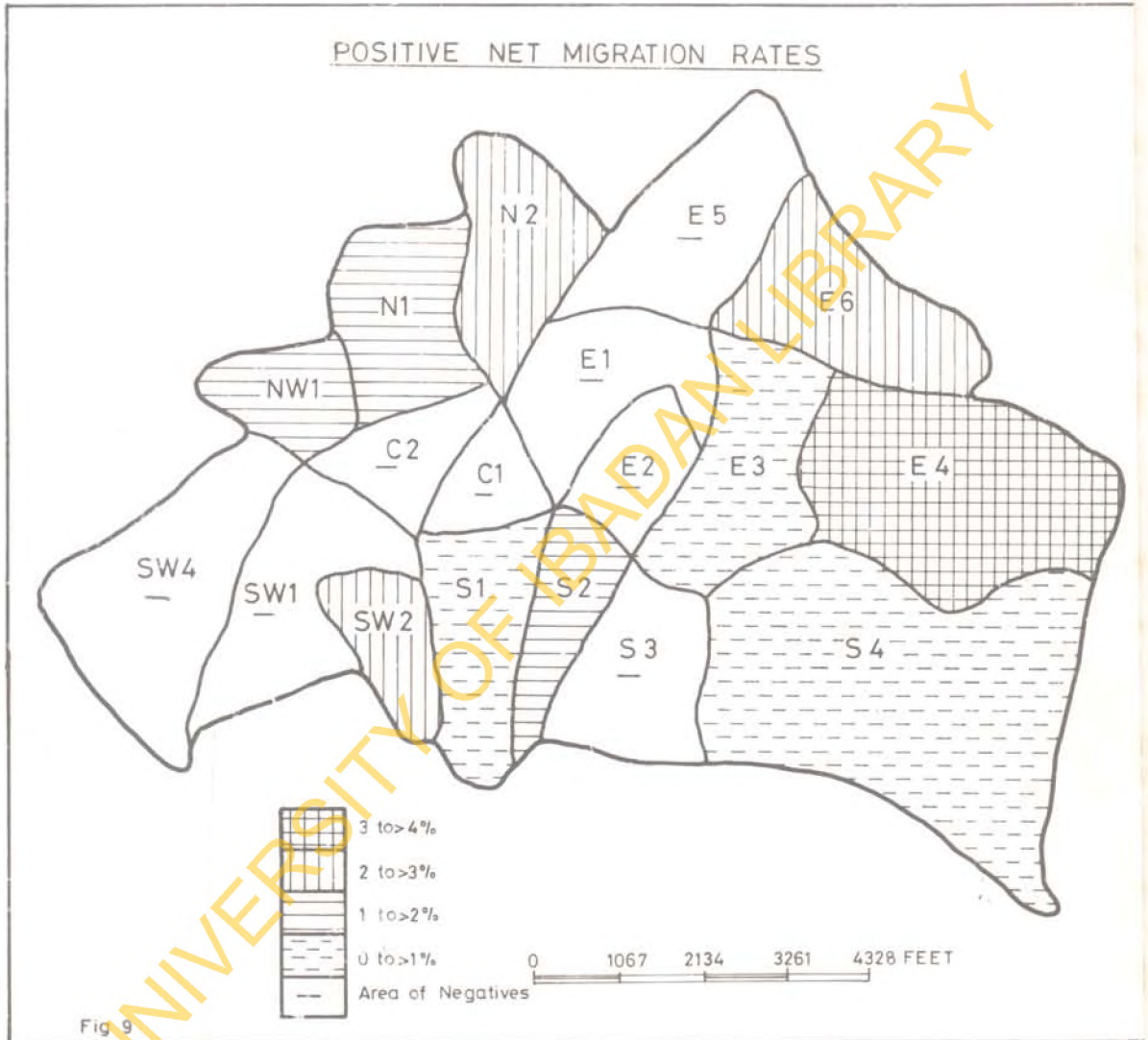
Figure 10 shows the distribution of the movers in eight
distance classes. Of these movers 48% had moved .16 kilometer
or less. The magnitude and regularity of decline are shown
clearly in Figure 10. All evidence indicates that most
moves are short occurring within familiar territory reflecting
an apparent or real satisfaction with both the neighbourhood
and the locations. As distance from the destination area
increases, a greater variety of socio-economic areas is
encountered and thus it can be said that the long moves are,
however, more likely to result from an "area oriented" decision.
But it should be recalled that the system boundary eliminates the
possibility of moves longer than 3.2 kilometers. For the system
as defined in this study the mean length of move is 1.6 kilometers.

Figure II shows the directions of movement and the magnitude
of flow from five selected wards. Fig II 'a' and 'b' show the
typical conditions in the central wards. The people are sent to
all directions. A few people move to adjacent wards while a
larger number of people move to the peripheral areas. Fig II
'c' and 'd' show the situations in the peripheral wards. People
leave one peripheral area for another and only very few people
go back to the Inner city.

Another question that has been investigated is whether
mobility is increasing or decreasing over time. Figure 12
illustrates the situation from 1968 to 1972.

Fig 10

RESIDENTIAL MOVES BY DISTANCE

DISTANCES IN Km.

Scale —— 12·5 mm = 10 Persons

FLOW LINE DIAGRAM OF MOVEMENTS FROM SELECTED CENTRAL WARD

Fig 11 a

Scale of flow line — 1/10" = .48 % movement

0   1067   2134   3261   4328 FEET

FLOW LINE DIAGRAM OF MOVEMENTS FROM SELECTED CENTRAL WARD

Scale of flow line — 1/10" = ·48% movement.
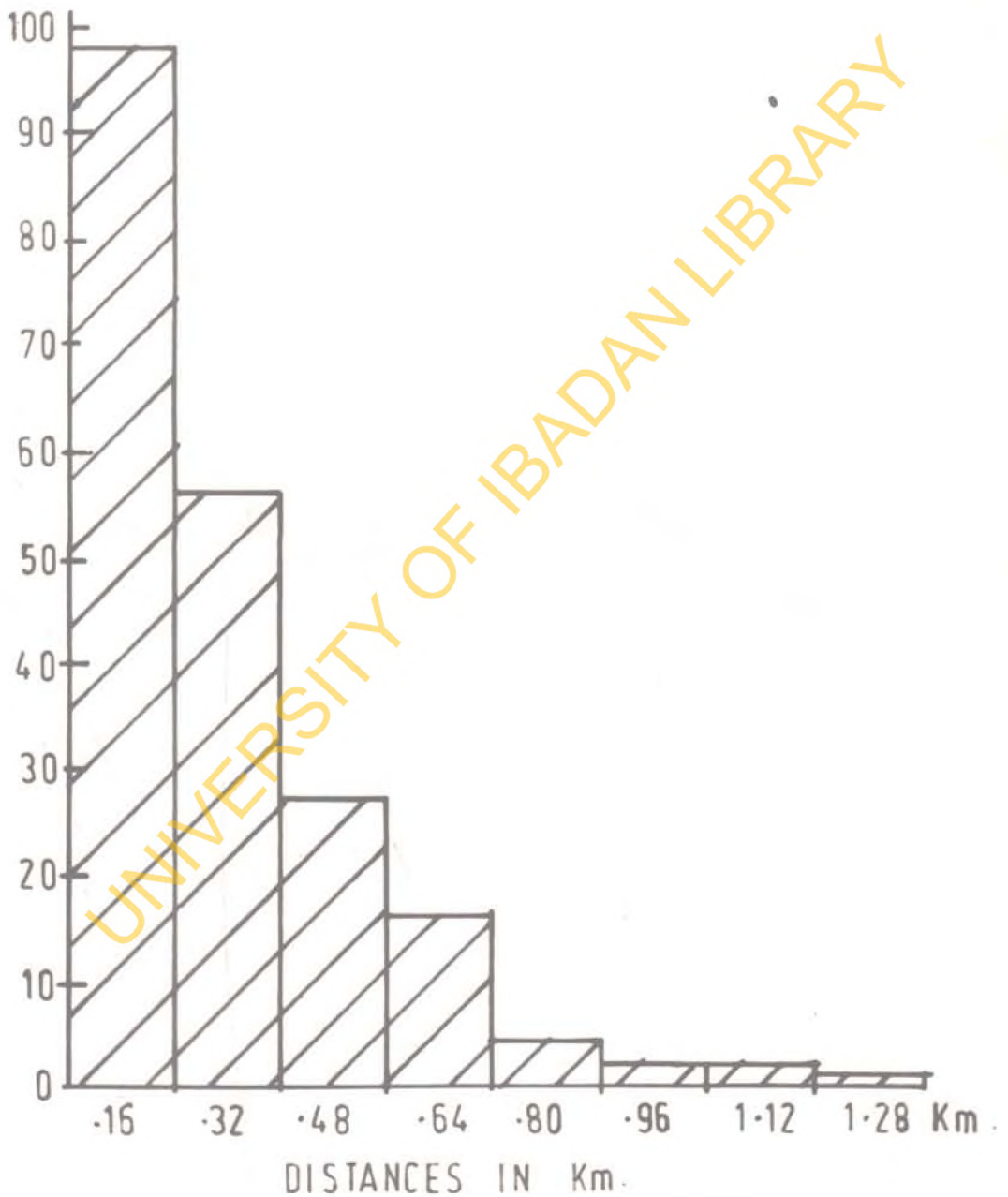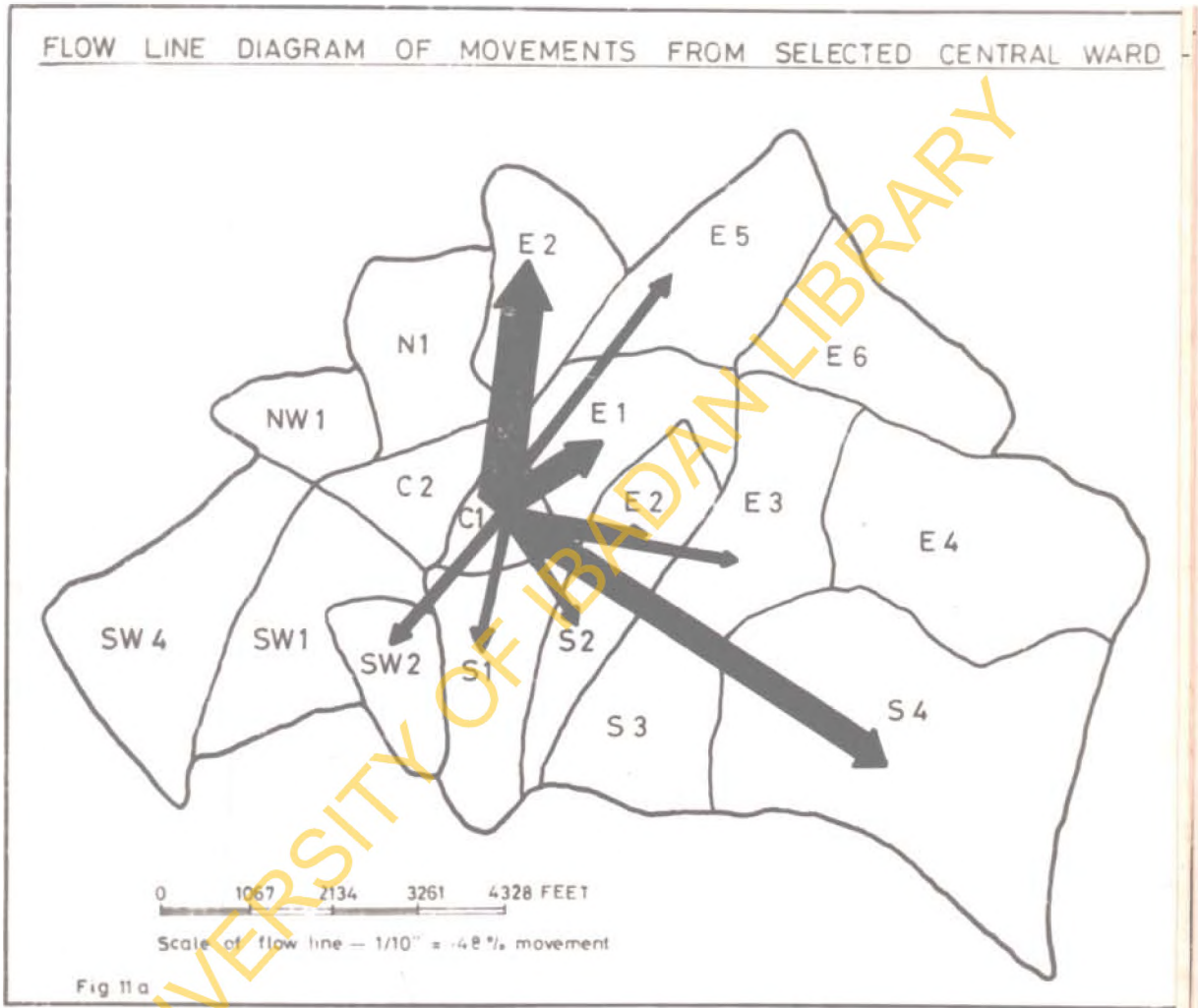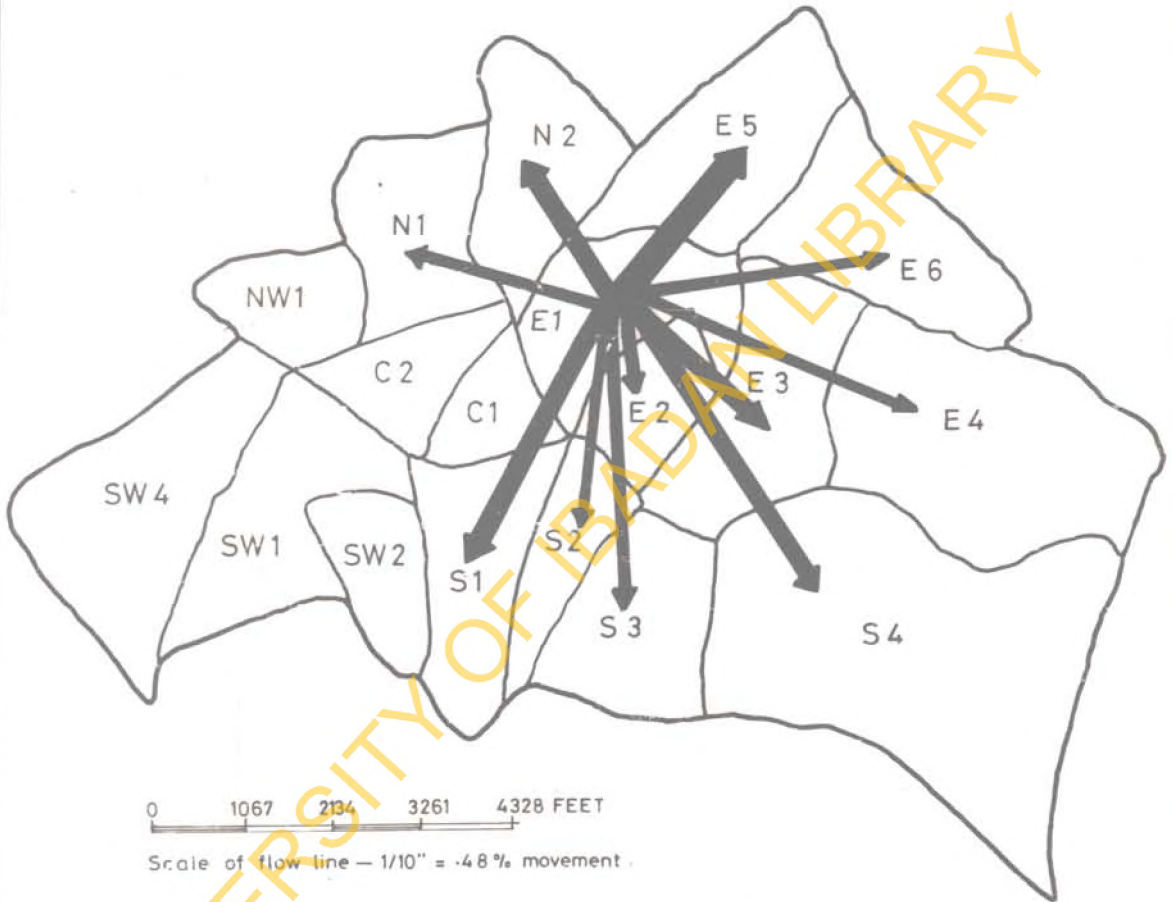
Fig. 11 b

FLOW LINE DIAGRAM OF MOVEMENTS FROM SELECTED PERIPHERAL WARDS.
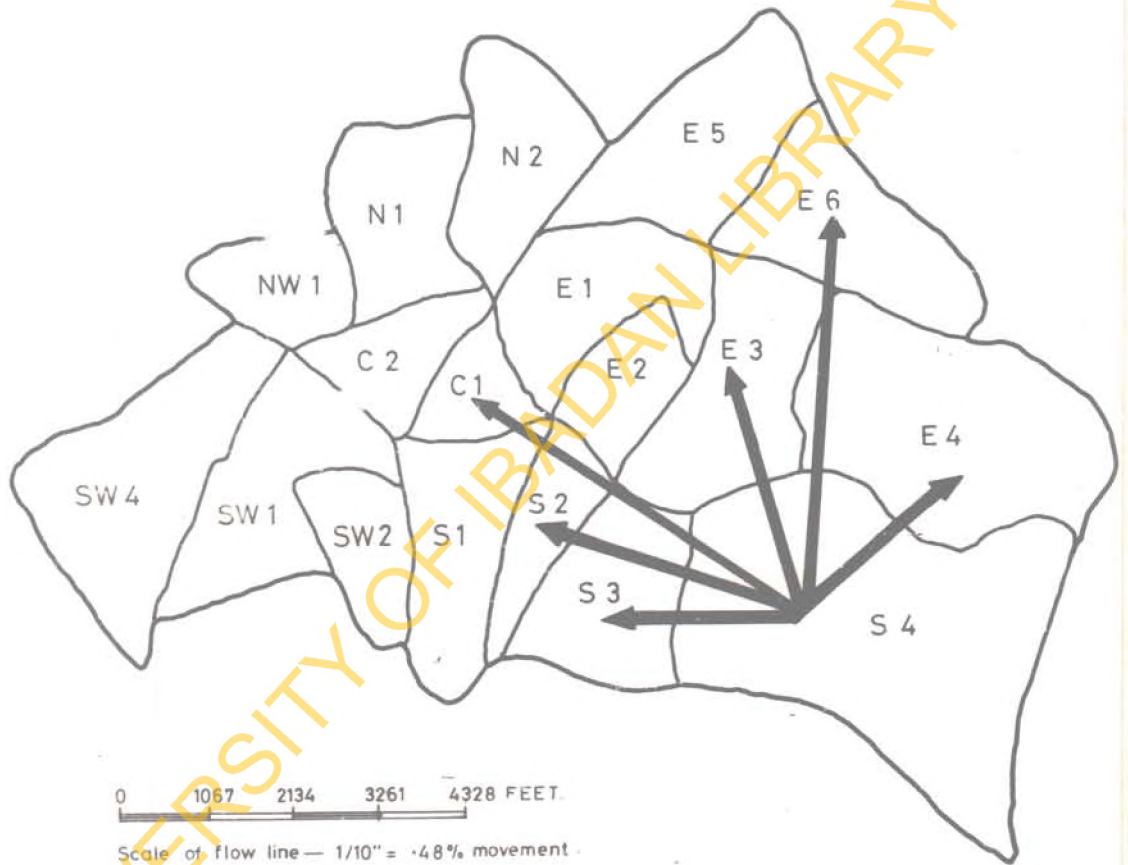
Fig. 11c

FLOW LINE DIAGRAM OF MOVEMENTS FROM SELECTED PERIPHERAL WARDS.

Scale of flow line — 1/10" = ·48% movement.
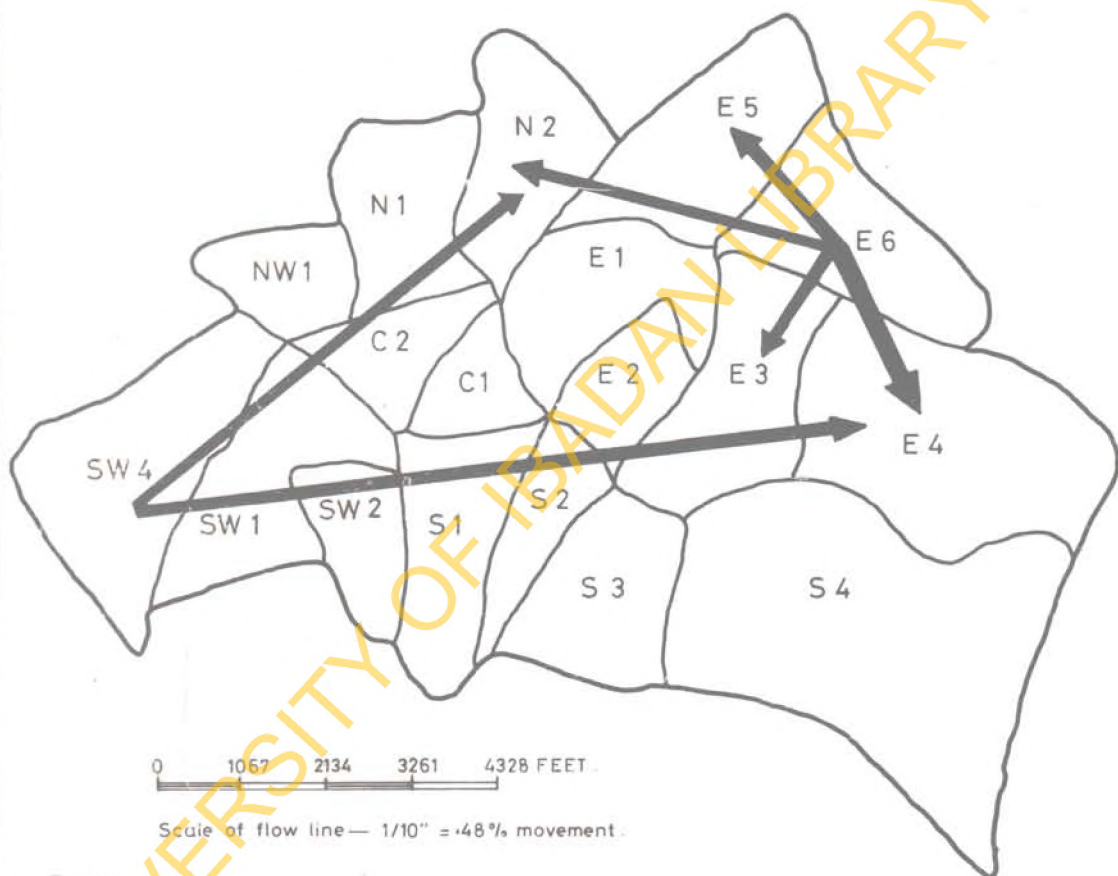
Fig 11d

Fig 12.

RATES OF MOVEMENT PER YEAR 1968—1972
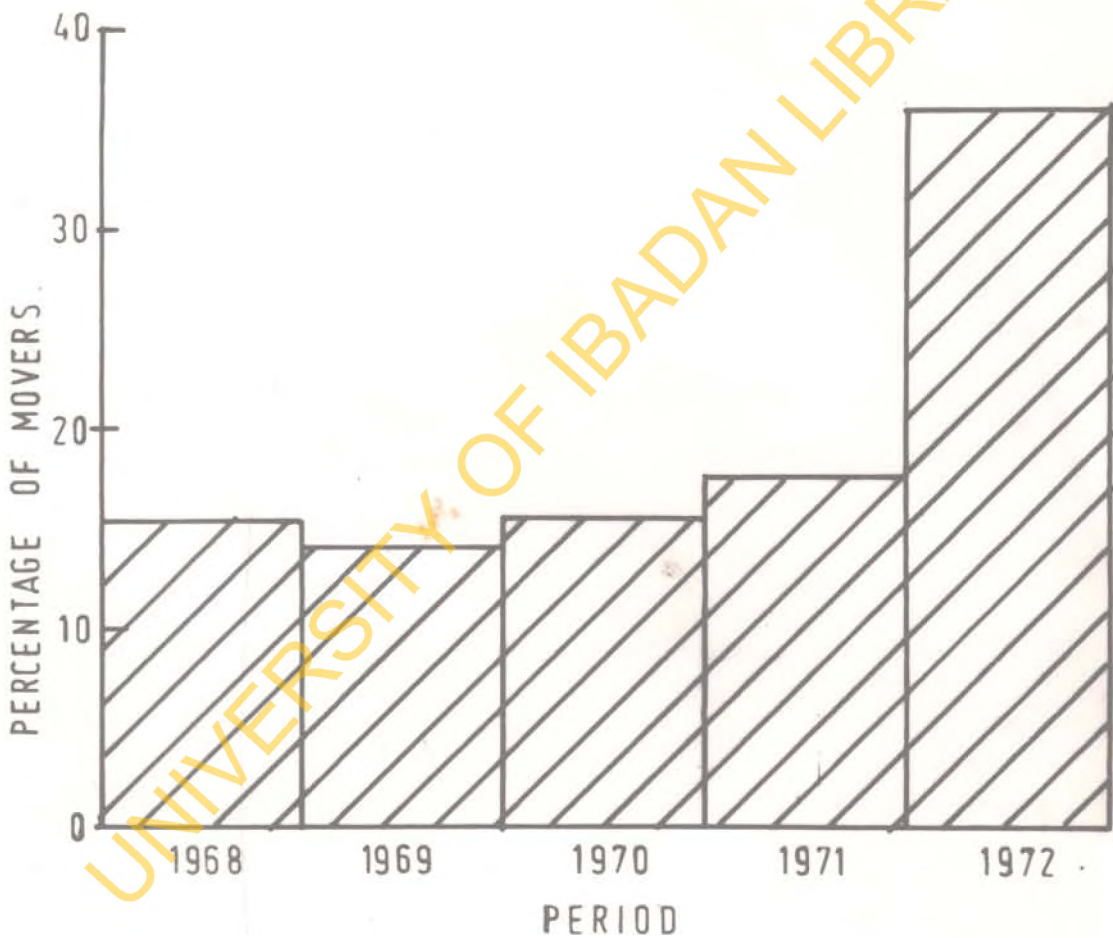
Though there was a higher mobility in 1968 than 1969, but after
1969 the rate of mobility has increased. The proportion of
movers rose, for example, from 14% in 1969 to 36.3% in 1972.

When we look at mobility rates by age categories (Figure 13)
we observe that mobility is highest for people in the age-group
of 25 - 34 years. These account for about 35% of all the moves
in the period 1968 - 1972. Those in the age-group 35 - 44 years
follow accounting for 27%. The least mobile people are the
people above 75 years old.

This chapter has dealt with the general structure of flows
resulting from intra-urban changes of residence. Particularly
the simple representation has shown the varying spatial distribu-
tion of the Population-turnover which one needs to explain.
In other words the distribution provides a justification for
asking the question "why does the turnover rates vary as to
wards". The explanation of this distribution shall be the focus
of the next chapter.

Fig 13.

RATES OF MOBILITY BY AGE 1968—1972.

TOTAL MOVERS (Including In-Migrants)

PERCENT

YEARS OF AGE
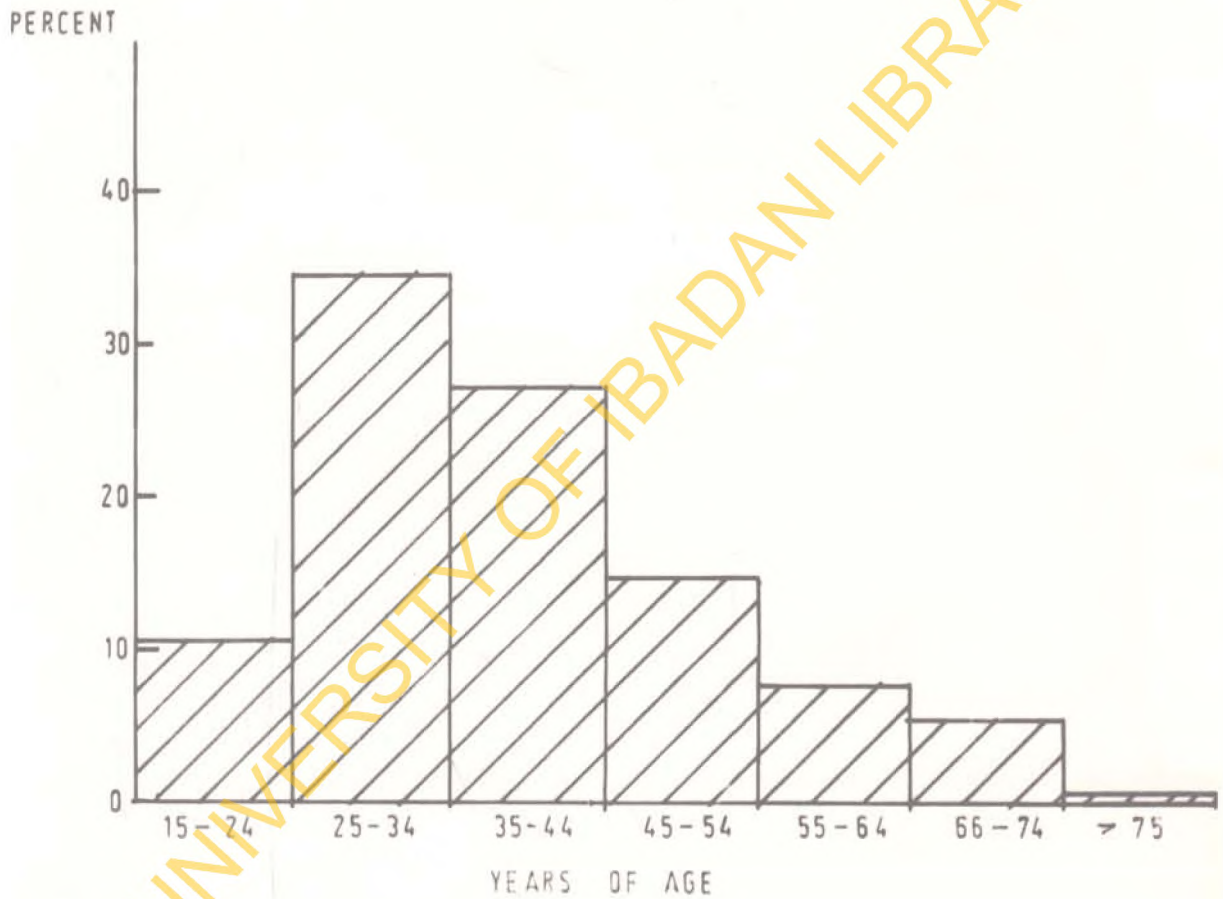
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C H A P T E R   F I V E

Explanations of the Variations in the
Movement rates (The Population-turnover Rates)

So far some simple properties of a pattern of movement rates
have been described in a specific context. In explaining the dis-
tribution of these rates one must go further and seek to identify
the nature of the processes generating the pattern of movement
response.

The most common approach to the explanation of areal
variation in movement propensity has been to apply correlation and
regression proceedures to areal data for movement rates and for
selected socio-economic and physical variables. In order to per-
form the operations, some propositions must be formulated and
tested.

(a) The Propositions:

The following propositions regarding aggregate movement
patterns in the old core of Ibadan can now be formulated and tested.

(1) There seems to be in the housing market a dominant
preference for new housing. Population-turnover
depends primarily on the rates at which new
accommodation units are created or become vacant.
Therefore the higher the percentage of new houses in
an area the less will be the population-turnover.
Since new houses should be occupied by out-movers from
some-where, it then stands to reason that the higher
the proportion of new houses the more people will move
in and the less people will move out of that area.

(2)   The greater the proportion of houses having modern

social amenities in an area the less will be the

population-turnover. The Index of houses possessing

electricity will be used to measure the standardness

of housing units. If a house possesses electricity,

other things

all things being equal, there will be the related

housing facilities; and since people do not like

moving out of a place having the comforts of life,

the tendency is that more people would be attracted

into such an area than would want to move out of it.

(3)   The greater the proportion of people who perceive

their residence as dirty and old the greater will be

the population-turnover. The opinion any person

has of his environment greatly influences his action.

Satisfaction or dislike is so related to ones

perceptions that the desire to move is a function of

ones perception. So the more people dislike an area

the greater will be the movements off that area.

(4)   It can be hypothezised that the greater the proportion

of owner occupied houses in an area the less will be

the population-turnover. People who own their residence

outright are often better pleased with their environ-

ment than those who rent their accommodations. The

stake of owners in their location is greater than

others, so they probably feel a greater commitment

to their area and move less. The cost of moving is

also far greater.

(5) The greater the proportion of large family households
in an area the greater the tendency for the grown-up
dependants to move, thus the higher will be the
population-turnover. Young people are less satisfied
with their environment (i.e. the extended family
system) and have different preferences from older
people.

(6) The higher the density of population per room
(i.e. average room of 10 x 12ft) per ward, the
greater the stresses and the more likely the tendency
to move out. Hence the greater the population density
the greater will be the population-turnover.

(7) Since the population we are dealing with are rela-
tively poor, it can be said that the higher the rent
in a ward, the greater will be the propensity to
move to cheaper areas. This hypothesis is related
in particular to renters in each different ward.

(b) The Tests of the Propositions:

The explanations for the observed patterns can be
attempted based on the following variables derived from
the above propositions.

(a) Percentage of new houses in each ward.

(b) Percentage of houses having electricity per ward.

(c) Percentage of people perceiving their residences
as dirty and old.

(d) Percentage of houses which are owner-occupied in
each district.

(e) Percentage of households that are very large (when large means
here households of more than 10 people).

(f) Density of population per room of 120 sq. feet of living space.

(g) Average rent per room in kobo.

All these variables will represent the Independent Variables while
the Population-turnover represents the dependent variable in the
simple and multiple regression analyses that are performed.

The operations give the following equations (Tables 9 and 10).

(6) The Explanation of the Regression Analyses

Each equation should be read as 'y' (the Population-turnover)
equals the Constant i.e. the intercept plus the regression
coefficient. R^2 (i.e. the coefficient of determination) equals
the multiple correlation squared. This measurement tells us the
amount of variation explained by the explanatory variable. The
figures in parenthesis give the standard error of the regression
coefficient.

The results of the simple regression analysis show that five of
the Coefficients are properly signed i.e. they conform with the
a priori expectation (Figs. 14 - 18) Variables 1 and 2 have
strong negative correlation with the Population-turnover, while
variables 3, 5 and 6 have strong positive correlation with the
Population-turnover. When the 't' values are tested for these
5 variables they are all significant at the 5% level.

The two variables that are not significant in explaining the
Population-turnover are the percentage of owner-occupied houses and

TABLE 8

Data for the Calculation of the Correlations and Regression Analysis

Wards	Y Population Turn Over	XI Percentage of New-Houses	X2 Percentage of houses having Electricity	X3 Percentage of People Perceiving their Residences as dirty & old	X4 Percentage of Owner Occupied Houses	X5 Percentage of large family	X6 Density of Population per 120 sq. ft.	X7 Average Rent Per Room in Kobo
E1 - - -	13.52	8.5	21.6	48.9	93.8	38.5	4.30	33.7
C1 - - -	9.17	3.3	20.0	50.0	80	36.7	5.51	22.5
E5 - - -	7.74	7.6	36.7	33.5	60.6	37.5	2.47	32.9
M1 - - -	7.74	4.4	43.8	43.3	53.3	29.2	2.36	27.7
M2 - - -	6.75	9.5	45.1	49.0	46.6	27.3	2.16	47
SW4 - - -	5.80	18.3	46.7	25.0	42.8	30.0	1.57	45
E3 - - -	5.79	12.2	40.0	25.5	88.4	31.5	3.85	28.75
S4 - - -	5.78	14.5	50.0	21.1	88.8	20.0	2.07	36
SW1 - - -	5.32	14.7	37.7	17.8	68.8	33.3	1.60	28.3
C2 - - -	5.31	6.1	49.1	26.5	82.8	36.7	3.09	13.3
E2 - - -	4.83	13.4	38.7	17.5	51.7	22.6	1.71	32.2
S2 - - -	4.35	16.7	49.2	19.6	45.0	21.2	1.63	22.4
S3 - - -	3.86	16.9	42.5	16.5	43.7	19.4	1.51	38
E4 - - -	3.86	12.2	57.2	20.0	81	20.9	1.41	28
E6 - - -	3.38	30.0	66.7	6.5	52	6.7	1.04	33.6
NW1 - - -	3.38	17.1	65.8	12.8	16.7	13.4	2.04	33.3
S1 - - -	1.93	17.3	31.1	6.4	92.0	23.3	2.39	25.0
SW2 - - -	1.45	19.0	35.2	18.1	92.9	28.6	3.07	22

Y = the dependent variable   X1, X2, ...X7 are the independent variables.

TABLE 9

Simple Regression equations between the dependent variable "The Population-turnover" and each of the Independent Variables

Eq. I $Y = 9.38 - 0.29 X_1$

$$(0.064)$$

$R = 0.64859 \quad R^2 = 42.12$

Eq. 2 $Y = 10.57 - 0.12 X_2$

$$(0.047)$$

$R = 0.52101 \quad R^2 = 29$

Eq. 3 $Y = 1.21 + 0.17 X_3$

$$(0.027)$$

$R = 0.8464 \quad R^2 = 72$

Eq. 4 $Y = 4.13 + 0.02 X_4$

$$(0.031)$$

$R = 0.17484 \quad R^2 = 03$

Eq. 5 $Y = 0.19 + 0.20 X_5$

$$(0.062)$$

$R = 0.63048 \quad R^2 = 40$

Eq. 6 $Y \;=\; 2.12 + 1.41X_6$

$$(0.499)$$

$R \;=\; 0.57710 \quad R^2 = 33$

Eq. 7 $Y \;=\; 3.79 + 0.06X_7$

$$(0.084)$$

$R \;=\; 0.16861 \quad R^2 = 03$

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Fig 14.

REGRESSION OF P.T.O. AND PERCENTAGE OF NEW HOUSES PER WARD.
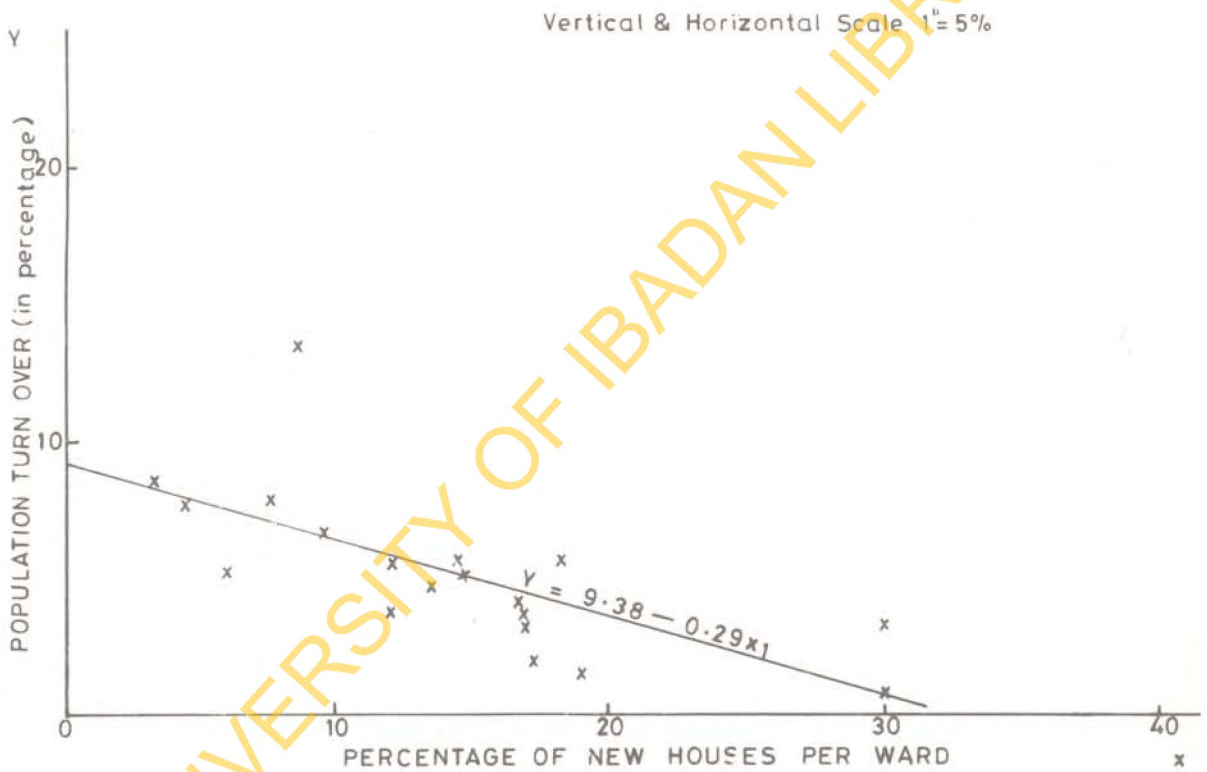
Fig 15.

REGRESSION BETWEEN P.T.O. AND % OF HOUSES HAVING ELECTRICITY.
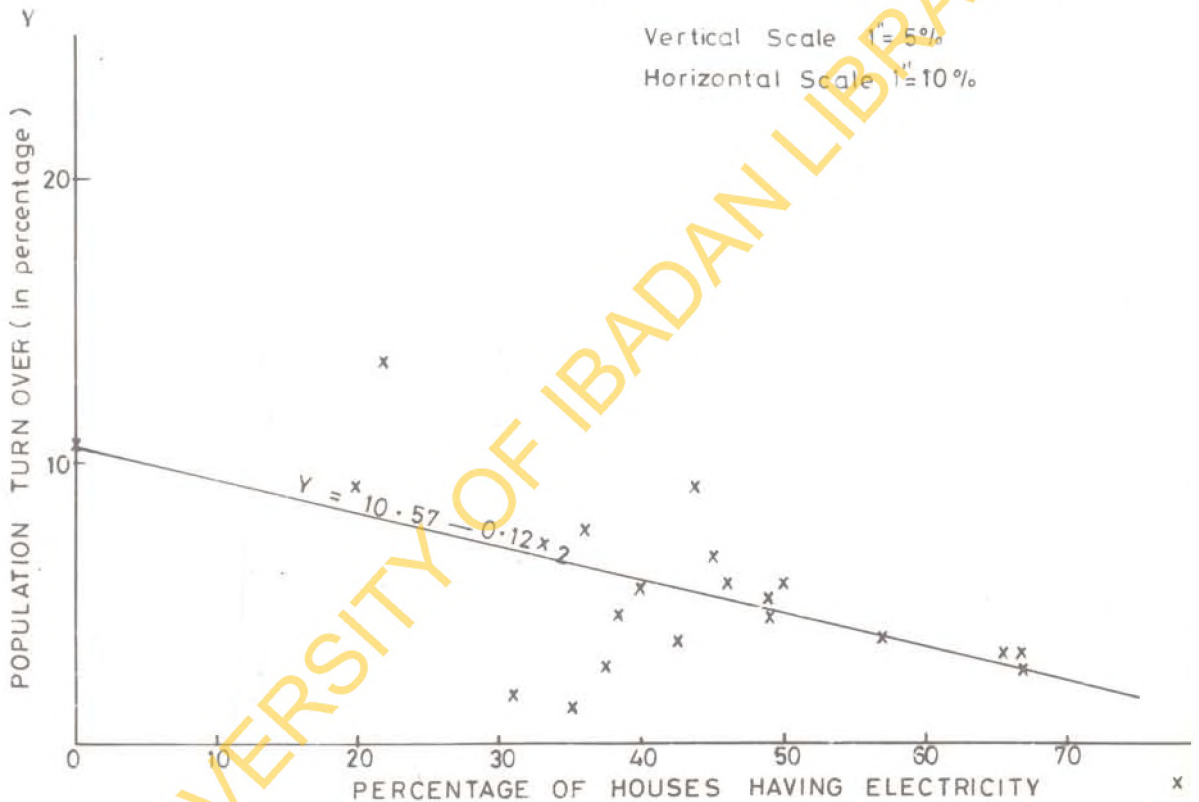
Fig 16.

REGRESSION BETWEEN P.T.O. AND PERCEIVING THEIR
RESIDENCES AS DIRTY AND OLD
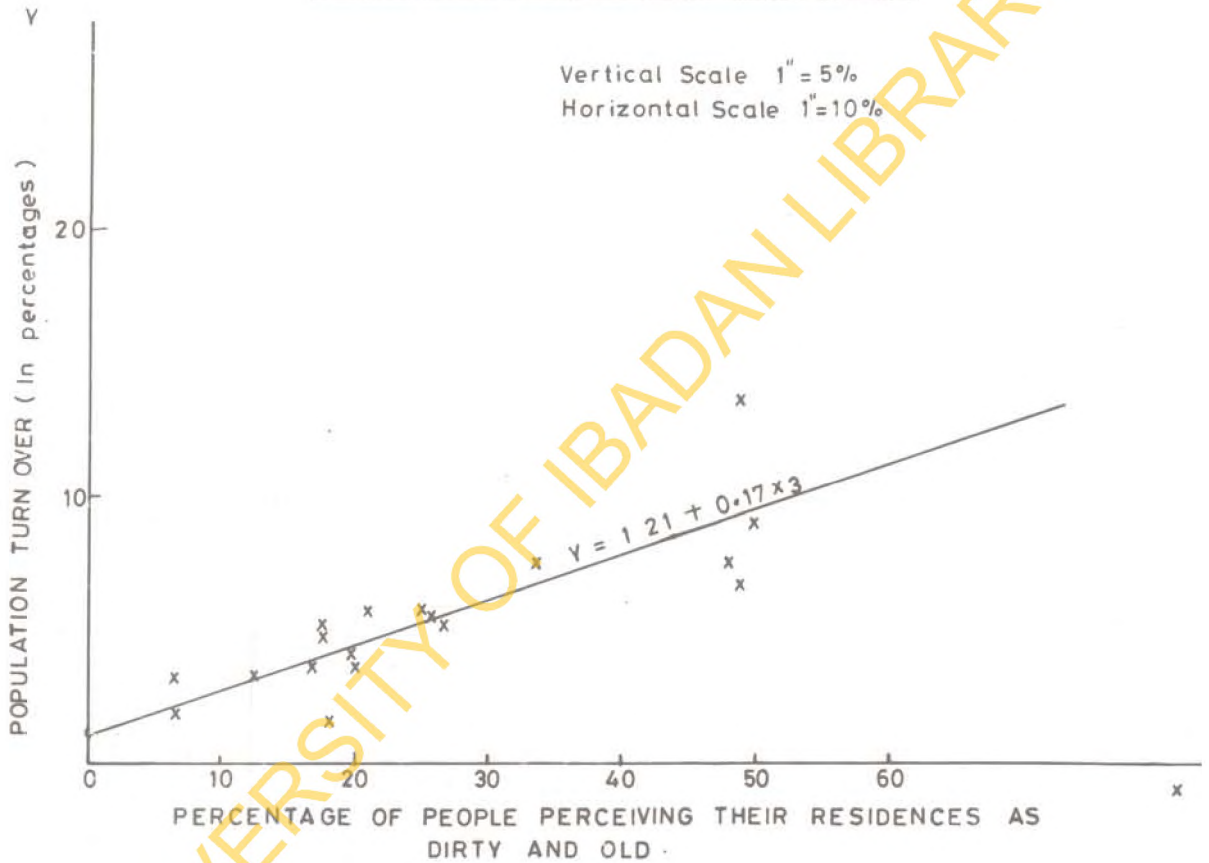
Fig 17.

REGRESSION OF P.T.O. AND % OF LARGE FAMILY.
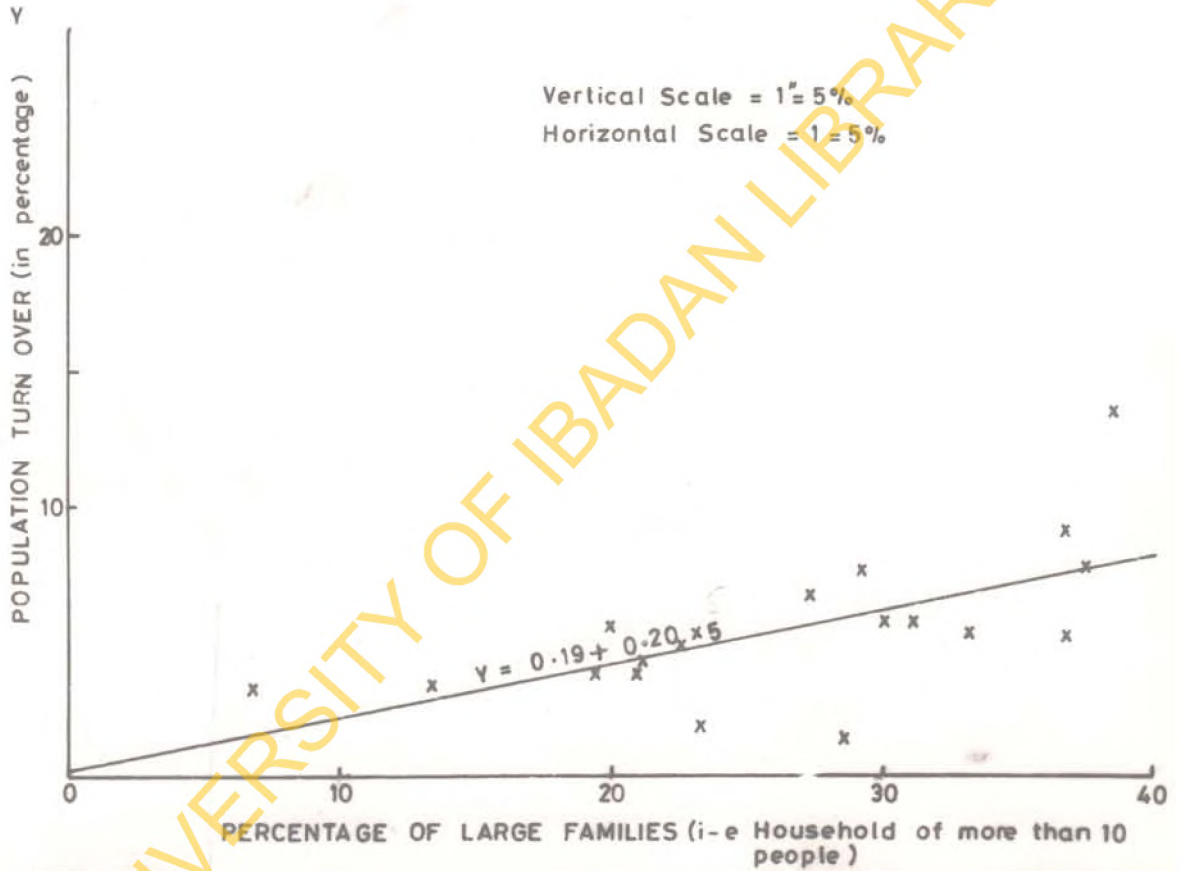
Fig 18 ·

REGRESSION OF P.T.O. AND DENSITY PER ROOM
(120 sq. ft)

Vertical Scale 1" = 5% .
Horizontal Scale 1" = 1 Person per room .

$Y = 2.12 + 1.41 \times 6$
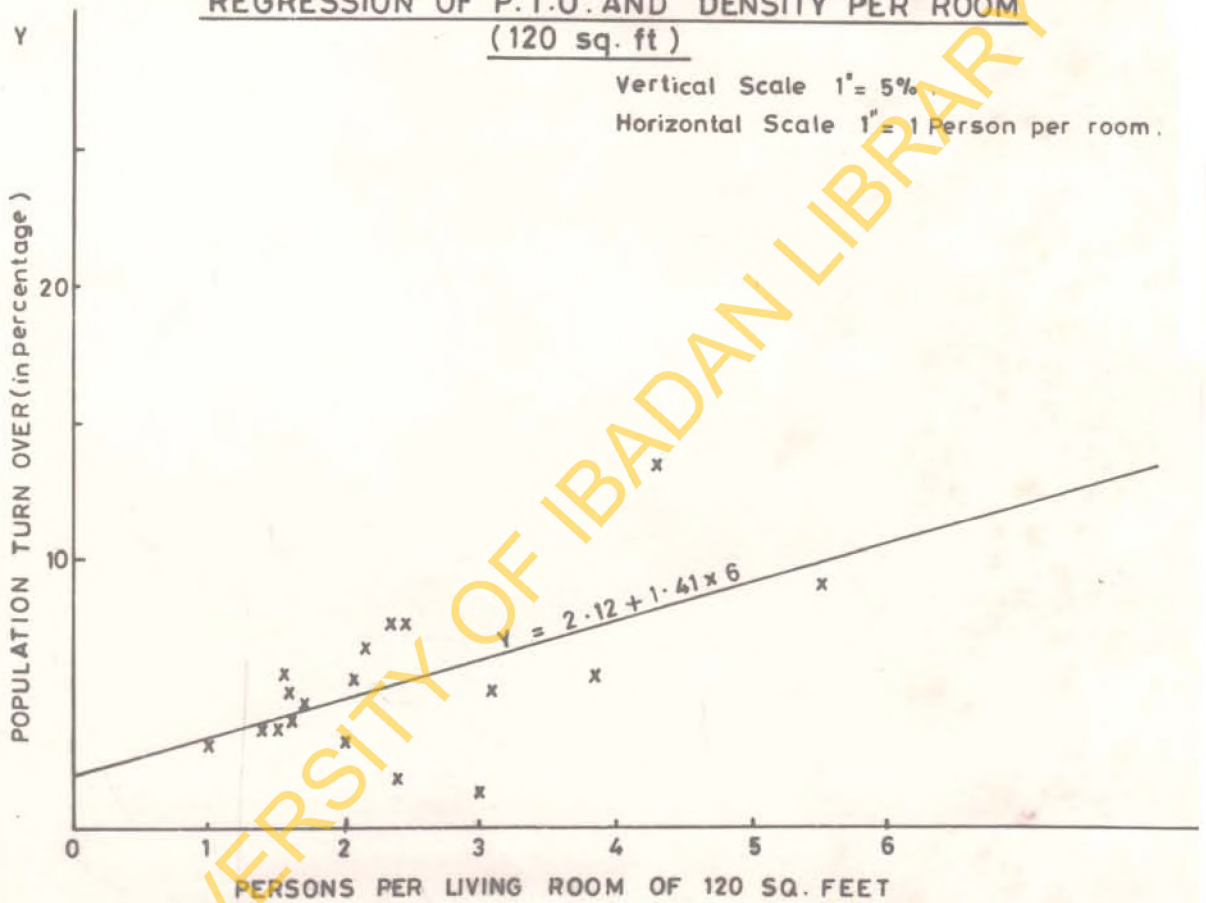
TABLE 10

Step-Wise Multiple Regression Equations Between the Dependent Variable 'Y' and All The Other Independence Variables

Eq. 1 $Y = 10.998 - 0.23_{X_1} - 0.06_{X_2}$

$$(0.097) \qquad (0.049)$$

$R = 0.68191 \qquad R^2 = 47$

Eq. 2 $Y = 1.71 + 0.05_{X_1} - 0.03_{X_2} + 0.17_{X_3}$

$$(0.103) \qquad (0.037) \qquad (0.047)$$

$R = 0.85351 \qquad R^2 = 73$

Eq. 3 $Y = 1.28 + 0.05_{X_1} - 0.02_{X_2} + 0.18_{X_3} + 0.003_{X_4}$

$$(0.108) \qquad (0.046) \qquad (0.051) \quad (0.022)$$

$R = 0.85375 \qquad R^2 = 73$

Eq. 4 $Y = -0.21 + 0.07_{X_1} - 0.01_{X_2} + 0.17_{X_3} + 0.001_{X_4} +$

$$(0.126) \qquad (0.055) \qquad (0.053) \qquad (0.023)$$

0.04_{X_5}
(0.098)

$R = 0.85552 \qquad R^2 = 73$

Eq. 5 $Y = -0.28 + 0.07_{X_1} - 0.01_{X_2} + 0.17_{X_3} + 0.0008_{X_4} +$

$$(0.132) \qquad (0.061) \qquad (0.059) \qquad (0.026)$$

$0.04_{X_5} + 0.03_{X_6}$

$$(0.103) \quad (0.658)$$

$R = 0.85555 \qquad R^2 = 73$

$$\text{Eq. 6} \quad Y = -1.96 + 0.02_{X_1} - 0.003_{X_2} + 0.14_{X_3} + 0.005_{X_4}$$

$$(0.154) \quad (0.065) \quad (0.079) \quad (0.028)$$

$$+ 0.04_{X_5} + 0.26_{X_6} + 0.05_{X_7}$$

$$(0.107) \quad (0.768) \quad (0.085)$$

$$R = 0.86143 \quad R^2 = 74$$

the average rent per unit of living space. The first assumption

that the higher the proportion of owner-occupied houses in an

area the less the population-turnover is found not to be

satisfactory. This is probably because the whole area of

investigation is an indigenous area where proportion of rented

houses is very small. The non-movers and the movers are almost

all occupying their own houses.

The second assumption not justified is that the higher

the rent in an area, the lower would be the Population-turnover.

This is probably so because the rent in the whole area is almost

uniform and there are no particularly high rental areas. Since

rents are generally low the population do not seem to be

influenced in this regard by the rent situation in the area.

Of the five single variables that are significant in

explaining the Population-turnover rates, it is observed that

the way in which people perceive their environment counts most in

movement propensity. This variable alone explains 72% of the

total variations, while there is no other variable that explains

up to 50%.

At best what the simple regression tells us is the relations

between each of the independent variables and the Population-

turnover. But in order to know the contribution that each of

the variables makes to the aggregate variations one resorts to

the step-wise multiple regression, Table 10. When the percentage

of new houses and the percentage of houses having electricity

are correlated to the Population-turnover it is observed that the

two variables combined explained 47% of the total variations and
only the percentage of new houses is significant in explaining
the pattern of the population-turnover at the 5% level. When
the perception of people is added to the former two variables the
percentage of variations explained rose steeply to 73%. This
great addition to the explanation of the variations by this third
variable reinforces the former conclusion that the perception of
the people is the singularly most important variable explaining
the pattern of the mobility rate. (Eq. 2) in fact when this

third variable is added to the former two variables, its effect
suppresses the importance of those two variables and it becomes
the only significant variable among the three.

        The addition of the fourth, fifth and the sixth variables
has no impact at all on the explanation of the variations,
equations 3-5. The addition of the last variable is only able
to increase the percentage of the variations explained from 73%
to 74% (equation 6). At this aggregate level, it is that same
variable three that is the only significant variable when their
't' values are tested at the 5% level.

        On the basis of this observation, one can then conclude that
the way people perceive their environment is the most crucial
factor in explaining the pattern of movement in the old core of
Ibadan. This conclusion indicates that it would be most useful
to look into these people's perception of their environment in a
later chapter in order to get a good grip of the whole problem.

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C H A P T E R   S I X

Reasons for Movements

Residence changes occur for many reasons. They serve a
variety of functions for different people and any attempt to
represent a specific experience as "typical" would be futile.

The decision to move can be examined from several points of
view. The social psychologist sees the household as acting under
various kinds of stresses; the economist views the move as
maximizing satisfaction of the household requirements; and the
human ecologist treats it as an element in a larger pattern of
movements or as part of the processes of growth and succession
(J. W. Simmons 1968). From any point of view, however, the
decision to move is complex.

The main focus of attention in this section is the identifi-
cation of the reasons why particular households choose to look
for somewhere else to live. First we assume that each individual
possesses a set of values regarding personal life style, housing
conditions and neighbourhood characteristics. Although these
values may be regarded as unmeasureable for our purposes as they
are both generalised and highly personal to the individual; their
existence permits the individual to perform three operations.

(1)   To provide a set of specific expectations regarding the
      attributes of the dwelling in which he is to live. The
      expectations specify the level of each attribute, such as
      size of dwelling, which is deemed acceptable to that
      individual.

(2) To provide a valuation of the dwelling in which he now
     lives. This valuation is based not only on such factors
     as the physical condition of the dwelling, the number of
     rooms and the size of the yard but also on accessibility
     to shops, schools and the characteristics of the neigh-
     bourhood population. In geographic terms it includes
     both the site and the situational characteristics of
     the dwelling.

(3) To provide valuations of specific alternatives among
     housing opportunities such that a preference ordering
     of such opportunities can be made. This preference
     ordering provides a basis for applying a rule of choice.

With reference to these three operations we can regard the
decision to seek a new residence as being motivated in these ways
(Table 11).

Housing needs generated by life-cycle changes cause the
greatest percentage of all the movements and produce high rates
of out-migration in all parts of the city. The major complaint
reported concerns the dwelling conditions, particularly the
available living space. This represents the major source of
dissatisfaction with the previous residence. This reaction
occurs mainly during the formative period of the family i.e. when
a man marries or start having children. This reaction to too
little space can be seen in Table 12 (when one holds the size of
the rooms constant). About 60% of the respondents had more rooms
after movements while only about 6 percent had fewer rooms

T A B L E 11

REASONS FOR MOVEMENTS

Reasons for Movement	Percentage of respondents who gave the reason
1. Changes in housing needs due to marriage and birth	21.6
2. Ability to build a house	18.4
3. To man fathers' house	15.8
4. Forced movements	11.2
5. Desire to shorten journey to work	9.2
6. Wish to be near friends and relations	8.3
7. Desire to run off socio-economic commitments of the extended family	7.5
8. Lack of amenities in the previous house	3.5
9. Changes due to increased financial status	1.8
10. Desire for accessibility to Roads	1.7
11. Changes due to reduction in financial status.	1.2
Total	100%

Source: Result from field work.

TABLE 12

Relationships between the living Spaces before and after the movements

Living Space	Percentage of People involved.
From shared room to one Room	17
Proportion of people having the same number of rooms before and after movements	19.9
Proportion having fewer rooms after movements	6.2
Proportion having more rooms after movements	56.9
Total	100%

Source: Result from field work

A further analysis is made of the proportion of people who have

more rooms after movements than before (Table 13).

Table 13

Matrix of Rooms before and after Movements (in Percentages)

Rooms Before \ Rooms after	1	2	3	4	5	6
1		44	20	4	4	4
2			4	12	4	4

Source: Result from field work

One would observe that the movements from a single room into double rooms dominate the movement trends. It is also obvious that the majority of the households, irrespective of size, occupy two to three rooms. In the category of those people who maintain the same number of rooms about 70% moved from one room into another one room.

The condition of increased number of rooms is also reflected in the rent paid by the Movers before and after movements. Table '14' illustrates this.

TABLE 14

Rent Conditions after Movements

Rent Conditions	Percentages of those involved.
Decreasing Rent	9.0%
Constant Rent	9.2%
Increasing Rent	81.8%
Total	100%

Source: Result from field work.

The 81.8% of those with 'increasing rent' after movement should not only be interpreted to mean that of increase due to additional rooms but it must be noted that many people who moved into the same number of rooms looked for better rooms which cost higher than the previous rooms. So it can be concluded that both increased number of rooms and choice of better accommodation after movements account for the increased rent.

Next in importance in the reason for movement is "the ability to build". Though this is an economic reason, it is wrapped up with social notions. Many of these people are not allowed by their parents and relations to move except they have got their own personal houses. Moving from ones extended family house is disliked in some quarters. In order to run off the socio-cultural problems many embarked prematurely on building their own houses. Many of these houses are usually poorly-built mud houses and are, at times, never completed until after 20 years of occupation.

While about 18% of the movers were running away from the extended family system to their own private houses, about 16% were coming back to the extended family houses to act as heads of households. Irrespective of whether one lives in ones own house or rents the house, when the father dies one may be compelled to come back home to take care of the family. A majority of these people compelled in such a way to come back to the old core area did not like the coming back, but had no alternatives.

Of little importance in the reasons given is the desire to shorten journey to work. Only about 9% gave this reason. This is not surprising as many of the people usually cover very short distances to work in terms of minutes spent (Table 15). Most of the people live and work in the traditional area or within loca-tions very close to it. Almost half of the people live within 10 minutes working distance from their places of work.

TABLE   15

Walking distances from homes to job Places in Minutes

Walking distances in Minutes	Percentage of People Involved
0 - 10 mins	49%
11 - 15 "	14%
16 - 20 "	10%
21 - 25 "	1%
26 - 30 "	14%
31 - 35 "	2%
36 - 40 "	3%
45 - 60 "	5%
60 "	
Total	100%

Source: Result from field work.

So it matters very little to them where they live in the

traditional area, since the distance to be covered will still

be almost at a trekking distance or at the most where a taxi or bus

can take them to at cost of only few kobo.

Treking, using the extremely narrow short-cut foot paths

is the most important mode of getting to work places (Table 16).

This is less surprising when one notices that these are poor

people of very low skills. Many of them can-not afford a

transport fare of any type.

TABLE   16

Mode of Transportation to Job Places

Mode of transportation	Percentage of respondents Involved
By trekking	44
By bicycle	5
By car	5
By buses and taxes	39
Staying and working at home	7
Total	100%

Source: Result from field work.

Majority of these people usually wake up early so as to do the trekking before the sun comes up. Next in importance are the buses and taxes. The distance covered by the buses and taxes for many of these people are also such that the time taken is not more than 10 - 20 minutes if there is not the usual hold-ups during the rushing hours to duty in the morning. About 11% of those who go to duty in taxes or buses make their return home journey on foot as can be observed from table 17 showing the cost of transportation per day by the heads of households.

About half of the people spend about 10 Kobo travelling to and from their work places daily (Table 17).

TABLE 17

Costs of transportation per day in Kobo	Percentage of People in each group
5 kobo	11
10 kobo	45
15 kobo	6
20 kobo	21
30 - 40 kobo	15
50 kobo	2
Total	100%

Source: Result from field work.

Very few people spend more than 30 kobo per day to go
to and come back home from their work places.   The shortness of
distances covered to work places explains why job location is never
crucial factor in influencing the location of residential places.
Those people classified under forced movements are those who are
unable to afford housing costs.   Although this is of a significance
for a few families, the over-all effect of housing costs on
movement desires appears to be weaker than might have been antici-
pated, although this is less true for renters than for owner-
occupiers.   In fact as can be seen from Table '14' over 80% of the
movers spent more on housing after the move than they did before.

For some time it was thought that desire to be near friends and
relatives was a vital factor in the location of households.

(Moore 1972)

Apart from the elderly, whose ability to get around the city is often limited, few respondents considered accessibility to friends and relatives to be important in relocating. However, discussions such as that by Jane Jacobs (1961) of Boston's North End, suggest that more attention should be given to the qualitative aspects of social interaction rather than to the more existence of certain numbers of spatial linkages.

But least in importance are "changes in housing needs due to reduction in financial status" and "changes in housing needs due to increased financial status". But one has to note that statements about financial status were not easily obtainable from the entire population. So any statement made about either reduction or increase in financial standing of the respondents should be looked at with more a critical eye.

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Perception of the Residential Quality and Environment by the Inhabitants of the old core of Ibadan

In measuring people's attitude to or perceptions of the quality of their residential environment, one wants to know how strongly the attitude is held. How the inhabitants of the traditional area perceive their dwellings and environment must be studied in relation to what eminent scholars have written about the area. Two of such works shall be looked at first.

Mabogunje (1968) emphasizes that much of the core region is occupied by slum dwellings. These are dwellings usually built of mud, having no identifiable sanitation facilities and generally in conditions of physical deterioration. In this slum area over 70 per cent of the buildings have a deteriorated structure. To this is added part of the newer suburbs both in the east and the north-west where jerry-building has been very common and the structures are deteriorating rapidly. The areal extent of the slums, however, does not adequately emphasize the serious nature of the problem; for the slum areas have not only the highest housing densities but also the highest population densities in the city. It is therefore more realistic to talk of some 70 - 80 per cent of the population of the city living in virtual slum conditions. More-over, a large proportion of the slum-dwellers are indigenous Ibadan. Unlike in

many developed countries, the slum areas are, however, not
coincident with areas of moral and social deviance, criminality
and deliquency. As a result, their impact on public conscience
has been rather weak. In fact, life in the slum area is particu-
larly integrated, satisfying to the full the warmth of intimate
human relations. As a result, discontent with the slum conditions
comes from those living outside rather than inhabitants of the
slum area itself.

Ade Onibokun (1972) says that the heart of Ibadan city is
like an Island of poverty in a sea of relative affluence. The
situation in Ibadan illustrates the typical housing and environ-
mental problems plauging most of the large indigenous urban centers
in the under-developed countries of Africa, Asia and Latin
America. The core of the city is dominated by a cluster of
compactly built dwellings and, except for the intervening land
which is often flooded, open spaces are almost non-existent in the
entire built-up area. Apart from the main road which divides the
core, and the few roads which have been cut through the original
compounds, access within the area is, in most cases, by means of
extremely narrow footpath systems which are inadequate to cope
with modern traffic generation.

As a result of old age, poor construction and poor main-
tenance, it is estimated that over 40% of the houses are
dilapidated, growing derelict and shabby in appearance with

parched walls, leaky roofs and smoke-blackened ceilings.
Besides the small percentage of houses which can be regarded
as 'modern', all other houses within the core area need repairs
of one form or another. As a result of poor sanitations,
environmental neglect, lack of adherence to basic hygiene codes
and abject poverty, the environment is entirely "unhealthy,
filthy, crowded and highly susceptible to any epidemics".
There is no doubt that the core of Ibadan is a chronic example
of a slum par excellence, which ever, yardstick is used.
In the light of these back-grounds the perception of the
inhabitants of the core area shall be examined and compared with.

How the inhabitants of the traditional area of Ibadan
perceive their dwellings and environments is quite different
from the observed conditions by these able scholars.
Reference Table 18.

Table 18

Perception of present state of the Residences among
inhabitants of old Core of Ibadan

Classifications of Views held	Percentage of sample Population holding the views
(a) Old and dirty	24.40
(b) Old and clean	32.3
(c) Delapidating	.3
(d) New and dirty	5.2
(e) New and clean	20.4
(f) Crowding	9.3
(g) Spacious	8.1
Total	100%

From these distributions one sees that majority of people
see their dwellings as old and clean. Despite the fact that
the observed percentage of delapidating houses in the previous
studies is 40%, (P. N. Troy 1973) only very negligible percentage
of the inhabitants themselves see their dwellings as delapidating
or the area as crowded. But since these conditions are stressors
in the environment to which the inhabitants have been exposed
for a long period of time and have therefore been accustomed to,
they may be unaware of them or at least may not have a critical
attitude to them because they take the situation to be "normal".
People living near filthy gutters and stinking piles of refuse
have often become immuned to the odour level and therefore do not
notice it. Similarly, there are aspects of the environment which
people may not be aware of but which condition their attitudes.
This is called a kind of "subliminal perception" (P. N. Troy 1973)
and refers to low level stimuli which over a period condition their
views of the environment.

The extent to which a person feels internally or externally
controlled may also affect the way he perceives an environment.
By internal control one means a person who feels that his
prospects and rewards are closely related to his own activities
and abilities whereas external control means a situation where the
rewards and benefits are a result of the operation of the social
system, or chance effects, or are pre-ordained. The people who
believe that their successes are related to their own abilities

and activities are more likely to be optimistic about improvements
and can therefore afford, psychologically, to be critical,
Unfortunately many of the inhabitants of this traditional core
of Ibadan are fatalists, who believe that "you can not beat the
system". They are not optimistic about improvements and therefore
tend to adjust their expectations downward.

But a major weakness in any survey approach which examines
people's attitudes to their present environment is that there is
a strong self-selection process in operation. Those who dislike
the environment strongly should have moved away. In essence one
is only interviewing those who are unable to leave their environ-
ment, with the stayers who are integrated in their community.
This limits ones ability to generalize the survey results.

People's perception of their environment is also at variance
with reality on the observed conditions. (Table 19)

It is surprising from the table that the majority of people
believe that their environment is clean despite the fact of the
unhealthy, filthy and crowded environment in which these people
are living. In variance to the expectation very few people see
their environment to be noisy and dirty.

Using different criteria as indices for categorizing attitude
of people to their present dwelling. Table 20 shows the great
variance of people's perceptions to the observed conditions.

(Table 19)

Perception of the Environment by the Inhabitants
of the old core of Ibadan

Classification of views held	Percentage of sample population holding the views.
(a) Noisy	6.1
(b) Quiet	5.3
(c) Dirty	25.8
(d) Clean	29.4
(e) Noisy and dirty	15.1
(f) Quiet and clean	5.1
(g) Noisy and clean	6.4
(h) Quiet and dirty	6.2
(i) Indifference	.6
Total	100%

Table 20

Perceptions of People to their present dwellings
in the old core of Ibadan city

Classification of views held	Percentage of sample Population holding the views
(a) Excellent	20.7
(b) Good	27.8
(c) Fair	41.0
(d) Undesirable	10.5
Total	100%

The very many people who believe that their dwellings are excellent and good are so obvious from the above data. It is only a negligible fraction of the people who sincerely think that their dwelling places are undesirable.

From the various perceptions of the people about their houses and environment, it can be seen that the inhabitants of the old part of Ibadan are yet largely lethargic of the magnitude of the prevailing environmental and sanitary defects in the area which are basically due to their negligence. There is a wide gap between their present environment and the specified minimum standard of environment which is desirable. The health implications of these sub-standard environmental conditions are apparent.

A household, within the limits of its income, seeks adequate accommodation as convenient as possible to the primary social groups, friends and people of same social class, restricting its search to those areas in which it can expect to be socially satisfied. Poor households do not seek houses in rich areas even if rent plus travel costs equal that in poor areas, nor do rich households look for accommodations in poor areas.

After a household has settled in an area, its satisfaction with the area becomes increasingly a function of its satisfaction with the social environment and how well it gets on with its neighbours. The physical environment does not affect the original

decision to move in this traditional core Area of Ibadan except
as secondary considerations. Assuming that there is no change in
the social environment changes in the physical environment will
not cause people to move because of the following two main reasons.
First is that by their nature most of such changes, whether
improvements or deteriorations occur over a considerable period
of time and people have the time to become conditioned to the
changes. The second is that there are considerable costs of
movement in terms of the social dislocation involved and the cost
of finding out about alternatives.

Even if rents change as a result of changes in the physical
environment people will stay in the area by adjusting their
valuations upwards or downwards unless the rents actually exceed
their capacity to pay. Even if there are changes in the household,
so long as the social environment is not changing rapidly and the
household does not become terribly too large for the space it
occupies, the household will not move. At no stage in the attitude
formation or decision - making process is there a heavy weight
attached to the physical aspects or the environment other than
the dwelling itself.

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C H A P T E R   E I G H T

C O N C L U S I O N

(A) EVALUATION OF THE METHODLOGY

In order to obtain some understanding of the impact of intra-urban moves on the residential structure of the traditional core of Ibadan city, a framework has been established for organizing the observations. In this thesis moves have been represented in an origin - destination table. A major concern is placed on the variations in the value of the Population-turnover and attempts to provide an explanation for the variations in the movement rates followed the path of regression analysis.

Most questions of practical import in mobility studies relate either to levels of Population-turnover or to the net changes which are a consequence of the detailed flow structure; although such changes are theoretically derivable from a structure such as that represented in this thesis the observational proccedures are not yet sufficiently strong as to lead to final conclusions.

Another characteristic of the model is that it does not directly incorporate the factors leading to the particular destination chosen by a household. This issue shall definitely be taken care of in a later research project.

Attempt to provide an explanation for the variations in
the Population-turnover have followed the path of correlation
and regression analysis. Although such proceedures are useful
when interpreted within some prior theory of movement behaviour,
they have seldom led directly to the formulation of new theoreti-
cal statements regarding mobility. In part this stems from the
arbitrary areal frameworks which have provided the data basis
for the study and in part from the high degree of intercorrelation
between the mobility rates and other socio-economic and physical
variables.

But the main function of constructing a model of intra-city
flows such as this, is to provide a reference-point for our
thinking, a general structure which, as it is refined, will yield
greater insights regarding the relation between change of residence
and urban structure.

(B) <u>SUMMARY OF THE MAIN FINDINGS</u>:

For the most part then the conclusions must await more
detailed analytical work in a later project. Tentatively,
however, the following generalizations emerge:

(i) The study shows that many of the people of the old core
of Ibadan are stable and have little cause to move within
the delimited area. A greater percentage of those people

who have the desire to move are not financially strong
enough to rent accommodations; hence they have no
alternative than to stay in the extended family's houses.
Very few people therefore move within the delimited
area of study.

(ii) The moves exhibit strong distance biases in that a large
proportion of moves are terminated within the area of
origin and, in general, the intensity of interaction
decreases with increasing distance from the origin area.

(iii) Although there are counter flows for every flow, moves
tend to be biased away from the centre. This reflects
a net suburbanization for individuals living in the city.

(iv) Among the voluntary moves, dissatisfaction with the
amount of space in the dwelling (whether perceptual or
real) is the most important factor generating movement.

(v) From the analysis of factors responsible for the varia-
tions in movement rates, it is obvious that the percep-
tion of the people plays a very great role in bringing
about the variations.

(vi) A very remarkable aspect of the intra-urban mobility is
the stability of the social characteristics of the
neighbourhoods. The tendency of movers to relocate
nearby helps in maintaining this social equilibrium.

(C) <u>AREAS OR ISSUES FOR FURTHER RESEARCH</u>:

Though this thesis has provided a conceptual framework for
the study of residential movements within the urban area, a
number of implications have been derived for further research.

It is evident that an extensive research effort is needed
if adequate understanding of the decision processes relevant to
intra-urban mobility is to be attained. Regular, consistent
measures of area-to-area flows are critically needed for a better
understanding of intra-urban location. Current census data give
none or limited information about this phenomenon. But the
development of models that will explain and predict patterns of
flow and hence spatial change, within the city will require a
full matrix, identifying flows from every other subdivision.
The problems of filing and storing such information become
enormous, since 'n' areas will generate 'n^2' possible flows and
one metropolitan area might comprise several hundred census tracts.

A fundamental suggestion is that prime emphasis in data
acquisition must be on the utilization of survey studies focussing
upon the decision-making characteristics of the individual house-
hold, viewed in both a spatial context and a mover-stayer frame-
work. This should provide valuable guidelines and specifications
for the development of more efficient studies of intra-urban
mobility at the aggregate level, including a basis for designing
models which are both more plausible and more effective than those
which are now in use.

There is also a great need at the present time to develop a more rigorous approach to analyzing the processes relating mobility and residential change in urban neighbourhoods, processes for which we have some intuitive feeling. The processes of filtering down of vacancies to groups of lower socio-economic status, the ageing of suburban populations, and mechanisms by which certain districts retain their socio-economic or demographic attributes, at least in the short run, should be identified. Also however, the factors which regulate the spatial and temporal magnitude of these processes, the factors which accelerate the deterioration of inner city structures, and control the out-movement rate from the inner city core need to be subject of more critical analysis if our present level of understanding is to be extended.

Most of the analysis undertaken in existing studies is of a bivariate nature leading to statements such as "the probability of change of residence for a given household is a function of the stage in the family life cycle". In examining these complex situations one possible strategy is to:

(i) Identify those combinations of attributes which are associated with very high propensities to move

(ii)   Identify the converse - those situations in which
        mobility is very low, and

(iii)   Attempt to come to grips with the very difficult
        question of what is the expected rate of movement
        for a given type of household in a given
        environment such that situations which deviate
        greatly from the expected rates can be identified.

Furthermore, if one is concerned with explaining why some
households move in a specified time period and others do not,
it is important to consider why households do not move when
a move might be strongly anticipated on the basis of prior
knwledge of the factors affecting the propensity to move.

(D) IMPLICATION OF THE STUDY FOR PLANNING:

Since most of the Indigenous Population live in this central
core and have no notion for moving out as the study shows, then
there must be suggestions as to how to improve the lots of these
people where they are. Urban renewal and comprehensive redevelop-
ment programmes can hardly solve the problem because the people
are greatly attached to their land and traditional houses. It can
be observed that clearing slums and moving the occupants elsewhere

would not reduce the people's poverty nor radically change their way of life.

It then seems that the immediate task is to try and reverse the undesirable environmental situation. There are many prevailing environmental and sanitary defects in the area which are basically due to the negligence of the inhabitants themselves. Smoky ceilings and walls, dirty, fly-infested cooking utensils, bits of excreta strewn around the compounds, stinking bathrooms and latrine abandoned to dirt, squalid compounds and rubbish-invaded kitchens that are left unswept (all of which are characteristics of some of the dwellings within the Core area) are defects that can be conveniently eradicated at no expense other than the investment of the people's efforts.

However, the citizens will not shoulder these basic domestic responsibilities unless they are aware of the social and health implications of the wide gap between their present environment and the "specified minimum standard" of environment which is desirable. This awareness and involvement can only come through up-grading of the values, goals, and the standards of decency accepted hitherto. What is advocated here is a social planning process which stimulates the interests of those at the grass-roots and which elicits their support in achieving environmental development goals. Such involvement can be secured through the imparting of basic and comprehensive civic education. This embraces direct persuation by social workers, explanation of basic

health issues to the community, discussions and meetings at

neighbourhood levels. Utilization of the opinion leaders

in each ward, and several other inducement techniques.

The most pressing needs of most residential areas of

Ibadan City are more and better designed roads, storm drainage

facilities, more public water, standpipes with better service,

sanitary sewer systems and better refuse and night-soil

collection in order to improve the lote of these indigenous

people of the central core of Ibadan.

A P P E N D I X

CONFIDENTIAL QUESTIONNAIRE
SURVEY OF RESIDENTIAL MOVEMENTS

_____

_____

_____

_____

Dear Sir/Madam,

    I am, H. O. Adesina, a research student in the Department of Geography, University of Ibadan. We are conducting a survey to investigate the patterns of Residential Movements in the old core of Ibadan city.

    We shall be grateful if you could supply us with the requested information to the best of your ability and knowledge.

    Thanks for your cooperation. Your answers will, definitely remain strictly confidential.

<div align="right">Yours sincerely,</div>

<div align="right">H. O. Adesina</div>

_____   _____

Date :   Sheet No.

_____   _____

THE QUESTIONNAIRE IS MEANT FOR HOUSEHOLD HEADS

1.

WARD	Date Moved into
Present Address	
Any former Address	

Questions Relating to Socio-Economic Characteristics of the Household Head

2. Home origin of household head _____

Fill in the appropriate letter in the Blank Spaces

3. Approximate Age _____

    (a) 15 - 24   (d) 45 - 54

    (b) 25 - 34   (e) 55 - 64

    (c) 35 - 44   (f) 65 -

4. Marital Status in

Previous house
Present house

    (a) Single   (e) Married with One wife

    (b) Married with no child yet   (f) Widowed

    (c) Married with one to two children   (g) Divorced

    (d) Married with more than 2 children

5. Educational Standard when in _____

Previous House
Present House

(a) Illiterate   (c) Above school Certificate

(b) Primary 6 and under   (d) Teacher Cert. III, II or I.

(c) School Certificate   (e) Graduate

(f) Other (Specify).

6. Occupation and Rank when moved into.

Previous House	
Present House	

7. Family Income in

Previous House	
Present House	

(a) Less £100   (c) £500 - £1,500

(b) £100 - £500   (d) > £1,500

8. No. of Children of

Ages	When Moved into Previous House	When moved into Present Residence	No. living with you	
			Then	Now
Less than 3 years				
3 - 6				
7 - 17				
17 and above				

Questions Relating to the Characteristics of the Houses

Tick right in the appropriate spaces

9.

9.

House Form	Type	Four Corner	Compound	Others
Present	No. of Storey			
Previous	No. of Storey			

Fill in the appropriate No. in the blank space

10.

Approximate Age of House	
	Present
	Previous

(1) 0 - 5 years   (4) 16 - 20 years

(2) 6 - 10 years   (5)   20 years

(3) 11 - 15 years

11. ### Tick right in appropriate space

Outer Walls		Present	Previous
	Mud, unplastered		
	Mud, plast.		
	Brick, Unplast.		
	Brick, Plast.		
	Conc. Block, Unplast.		
	Conc. Block, Plastst.		
	Other		

Fill in the correct figures

12.

No. of Rooms in the House		Present	Previous
	Habitable Rooms Occupied		
	Hab. Rooms Vacant		
	Hab. Rooms as Storage		
	Kitchens		
	Toilets		
	Others (specify)		

13. Fill in the correct figures

No. of Persons living in the House		Present	Previous
	Adult Males		
	Adult Females		
	Children Males		
	Children Females		

14.

Amenities in the House		Present	Previous
	Electricity		
	Pipe borne water		
	Dug Well		
	Water system toilet		
	Dug pit toilet		
	Bucket toilet		
	Joint kitchen		
	Separate kitchen		
	No Toilet		
	No Kitchen		

15. Owner-owned or Rented

Present	Previous

16.

No. of Rooms		Size of Rooms
	Present	
	Previous	

17.

Total Rent Paid	Present	Previous

<u>Questions relating to work-place of House and other social</u>
<u>Amenities</u>

18.

Work-place of head of household	Present Dwelling	Previous Dwelling

Fill in the appropriate letter in the blank spaces.

19. Usual means of transportation to Work Place _____

In Present Dwelling	
In Previous Dwelling	

(a) Trekking

(b) Bicycle

(c) Motor Car

(d) Bus

(e) Others (specify)

20. Cost of transportation to Work place in

Present Dwelling	
Previous Dwelling	

21. Length of time taken to journey to
Work place from

Present Residence	
Previous Residence	

22. Which schools(s) do your Children attend ....

....

....

23. Which school(s) were they attending in Previous house

....

....

24. Which Market(s) do your wives buy and sell? _____

_____

_____

25. Which Market were they attending previously? _____

_____

26. Which Hospital do you usually attend now? _____

_____

27. Which hospital were you attending before _____

_____

28. Address of three close relations:

     (1) _____

     (2) _____

     (3) _____

29. Address of three close friends:

     (1) _____

     (2) _____

     (3) _____

Reasons for Movements

30. Write 1,2,3, (in order of Importance) in front of the reasons below that you believe made you left your former Residence.

Reasons	Nos
Eviction by landlord due to inability to pay rent	
Collapse or deterioration of the building	
Changes in housing needs due to Marriage or addition to family due to birth	
Changes in housing needs due to increased financial status	
Changes in housing needs due to reduction in financial status	
Long-distance job changes	
Desire to shorten previous journey to work	
Desire to run off socio-economic commitment of extended family	
Others (specify)	

Source of Information about Housing

31. How did you get to know about:

Previous House accommodation	
Present accommodation	

(a) Through Friends   (c) Personal Search

(b) Through Relatives   (d) Others (specify)

Fill in the correct letter.

Information On the Perception of the Dwellings and Their

Environment

Fill in the appropriate word(s) in the blank spaces.

32. Which of the words below suits _____

The Present Residence	
The Previous Residence	

(a) Old and dirty   (e) New and clean

(b) Old and clean   (f) Crowding

(c) Delapidating   (g) Spacious

(d) New and dirty   (h) Other (specify)

33. Which of the words suits: _____

The Present Environment	
The Previous Environment	

(a) Noisy   (c) Dirty

(b) Quiet   (d) Clean.

34. Which of the following words suits your attitude to:

The Present dwelling	
The Previous dwelling	

(a)   Excellent   (d) Indifference

(b)   Good   (e) Undesirable

(c)   Fair

35. Are you intending to move out of the present dwellings

in the next one year ? _____

_____

36. If 'yes' to above questions list three areas of your choice

in order of preference:

(i)   _____

(ii) _____

(iii) _____

37. If 'no' to the same question list three major advantages
you are deriving from the present location of Residence:

   (i) ....

  (ii) ....

 (iii) ....

Subsidiary questions for Potential Movers

38. How many sons/daughters have you now trying to move out
within the next one year? ....

39. To where are they moving ....

40. Why are they moving ....