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SOME FACTORS ASSOCIATED WITH THE TRADE-OFFS
IN HOUSING CHOICE EXERCISED BY
A SAMPLE OF INFORMAL DWELLERS

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PREFACE.

This brief document presents an interim analysis of some of the data reflecting housing choice elicited from the sample survey of Malukazi by the Centre in 1977. The survey derived its initial sponsorship from the Natal Region of the Urban Foundation and subsequent aid and participation from the Economics Research Unit and Department of Architecture - both involved with the Low-cost Housing Research Project at the University of Natal, Durban. The present analysis appears in an interim format because recent developments with respect to informal settlements in the Durban Metropolitan Area, notably the new initiative at Inanda, herald a substantive urgency for information. In the particular case of Inanda we wish to direct attention to a Centre publication in our Research Report Series by Dr. Valerie Møller (1978) entitled "Mobility on the Urban Fringe: Some Observations Based on Seventy-two African Households in the Inanda Peri-urban Area".

Although the Malukazi Survey is really a case study of one among many informal settlements in the greater Durban Metropolitan Area its relevance is not limited to that locality as the social and demographic types identified in the study can be found elsewhere as comparison of the Inanda and Malukazi surveys demonstrates.

Any reader who is not familiar with the work of the Centre (and other University departments) should recognise that this document is not an isolated artefact but a part of an ongoing system of work from a data file. Our report on housing choice should be read in conjunction with a Fact Paper published by the Centre (Stopforth, P. 1978) entitled "Profile of the Black Population in a Spontaneous Urban Settlement near Durban"; an Interim Report from the Low-cost Housing Research Project at the University of Natal (Department of Economics/School of Architecture and Allied Disciplines) by Haarhoff, E. (1979) entitled "Spontaneous Housing in Malukazi: A physical study"; a Centre Document and Memorandum Series paper by Schlemmer, L., V. Møller and P. Stopforth (1980) entitled "Black Urban Communities, Socio-Political Reform and the Future: The Role of the Urban Foundation"; and, a Centre Research Report due to appear shortly after the present document by Møller, V. and P. Stopforth (1980) entitled "Aspirations, Experience and Needs in Informal Housing: Survey Observations in a Spontaneous Settlement near Durban". A more thorough treatment of Housing Choice, among other publications from the Malukazi Survey, is projected for 1980 and 1981.

In the Introduction to this paper we attempt to draw together strings of meaning which are not necessarily explicit in the data analysis - that is we attempt to provide the planner and policy maker with a set of implications which emerge, so to speak, from the research process. We try to answer the question "What is this data really telling us?" As for the explicit aspects of the analysis, some words of warning are due to the reader who is not a virtuoso research report critic. Our findings do not reflect imperatives or goals of identifiable, wider social groups as such, rather they direct attention to the differences among categories of aggregated individual variation and individual choice in a probabalistic way. Put another way, we have attempted in this brief communication to provide a statistically based outline of some strategic orientations to housing among blacks in an informal settlement. In the three chapters of the text we move from a sketch of the parameters of potential housing choice and residential trajectories through some of the determinants of these data, and then to a refinement of choices into patterns made up from a number of variables. Finally, an ordered set of conclusions is presented as an aide-memoire to what appears in the text.

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INTRODUCTION.

The statistical correlates of housing choice presented in the text have the power to inform far beyond their mere categorical juxtaposition if effort is exerted to interpret wider imperatives of meaning. Proceeding in this fashion we ask the question, 'what is the empirical data really telling us?' If we pre-empt what follows below it can be said immediately that there are no surprises for the reader who is conversant with the literature on informal housing among lower income categories of population; our interim report serves merely to confirm certain commonly accepted views in the field.

Although we have reported on the basis of statistical categories the differentiations of social type, especially relevant to urban settlement, are implicit in these data. The implication of differentiation is obvious - a homogeneous housing policy directed at a socially heterogeneous population, is, if nothing else, logically ill-conceived. We can identify three broad social types: urban township overspill, peri-urban mobile and/or static dwellers and rural-to-urban migrants (also potential urban-to-rural migrants). It is important to note that this finding parallels the differentiation analysed by Valerie Møller in Inanda at the same date suggesting that we might accept that these groups are common to the greater Durban Metropolitan Area. Unfortunately it is not a question of identifying and enumerating these groups in order to plan a housing policy package to fit - choice and potential consumption of housing is not necessarily isometric with social category. Other variables enter the equation; developmental cycle of the domestic unit, income, size of household, housing experiences, general social orientations and aspirations etc. Further, the very fact that housing policy is attached to general political and economic policy plays a part in determining how people perceive their future careers.

Given social differentiation, cyclical demographic circumstances and the present imperatives of political life, the choices that respondents in our survey make are substantively rational in that they attempt to maximise security, space, flexibility and fit with social orientation in a way congruent with their perceptions of ongoing experience. Most importantly, there is a projection of anticipated needs of consumption only to be found in the informal sector, and not as yet (or as then) commonly available in the inflexible arrangement to be found in public housing of the formal township. We are able to say this because these possibilities (for townships) are built into our research design even if

they do not pertain as a reality now or then. The present report shows transport to be the decisive limiting factor in potential housing consumption and we know from previous study that the availability of water is a complicating factor in the informal housing sector. Add these to security and flexibility where housing is seen as an entire entity and not in legally defined formal and informal sectors, and the parameters within which a consolidated urban housing policy can take shape will be sufficiently defined for such a task.

What our analysis shows more clearly than anything else is that whether people choose a formal township or informal settlement option as part of their housing trajectory they state their consumption needs in a common way: that is a wish for more space, flexibility in design, accessibility of transport and for many a self-building/ownership rather than renting mode. Now the only groups who appear to be satisfied with public housing as it stands (except that the size is considered too small) are young householders with very small families and older householders who intend to migrate to the rural area at a later date (the latter is a small group of five percent, the former group is cyclically replaced). The idea of two distinct separable housing sectors is obsolete given that the existence of the informal sector is more and more guaranteed by increasing formal overspill (the inability to increase the supply of public housing) and that for many (not only overspill) a township option remains desirable. Flexibility in housing policy is as apposite in the existing public housing estates as is the practice and experience of free housing conditions in the uncontrolled spontaneous housing settlements. Any viable policy must take into account the fact that what is missing in the informal market is security of tenure, in the formal sector the flexibility possible in the informal sector. It is really a matter of relaxing unnecessary control in the formal townships and increasing inputs in administration and infrastructure for the informal sector.

The essential point to grasp is the symbiotic relationship between the housing sectors which requires a holistic planning effect. In the particular case of Malukazi, most householders would prefer to live, under certain conditions, in Umlazi township. The irony of such a situation, given the clear fact that formal housing supply will lag behind demand for the rest of this century, is that the authorities are going to have to persuade people to accept informal settlement in the face of a policy which has proscribed such developments. Willy nilly, the faster

we can promote an urban housing policy which provides the best fit with social differentiation and conditions the more we will contribute to security in the widest definition of the term.

The unequal battle to meet the bill for 'instant modern standard' housing for lower income groups in the foreseeable future is beginning to manifest a sequel in some new initiatives in various places in the country. We feel that these initiatives can only gain momentum and substance if it is recognised that while it is almost impossible to find the billions necessary for the construction of public housing estates, it is a matter of goodwill to establish what is essentially lacking in urban settlement - that is "security". SECURITY OF TENURE is the key to organic development of housing and living in the townships as it is for the autochthonous urban settlements of this decade. Without security who will invest substantially in renovation and extension to a township house, who will take the initiative to upgrade freely developed communities, who will voluntarily leave a public estate in an attempt to upgrade 'housing performance' elsewhere, etc.? Provision of security, while probably not a sufficient strategy for increasing the supply of housing, is possibly the most necessary condition if the question of housing is to become a partnership between government and people.

Aside from the implications of our research findings what is becoming more and more difficult to understand is why relevant authorities persist in creating adversity from 'near failure' when they could be capitalising benefits of 'near success'! Compared with many Third World countries, our public housing effort among lower income groups could be viewed as a working housing policy with two defects, viz., inflexibility and inability to satisfy demand at present standards (leaving aside some very real political issues in the total situation). The tendency in the past has been to insist on rigid standards and physical regulations and to deny the real demand and supply issue; the result is that what was designed for success has become failure, on demographic grounds if no other. But as we suggest above, in concert with most of the literature on low-income urban housing, increments in success can accrue at least cost for greatest benefit if the 'two housing sectors' are amalgamated as complementary features of an overall strategy in the provision of urban housing. The choice seems to be between intransigence which will transform 'near success' into burgeoning failure or flexibility which will allow 'near success' to develop into a satisfactorily working system.

Table 1.

Percentage sample distribution of Trade-offs effected on five forced-choice alternatives associated with housing.

Alternative Choice*	100% : n=278
1. A. Ready-built, rented house in town	54
B. Self-built house on owned land in town	46
2. A. Large, more expensive house in a township	64
B. Small, less expensive house in a township	36
3. A. Poor neighbourhood with rights to extend house	57
B. Good neighbourhood, house plan fixed	43
4. A. Poorer house, near transport	71
B. Better house, far from transport	29
5. A. Poorer house, less expensive transport to city	73
B. Better house, more expensive transport to city	27

"No information" cases added to lower proportion - small number of cases.

*Alternative with greater proportion shown first.

A decisive datum for understanding the preferences of this community is that over 50 percent of the heads of households are what has been described as 'urban overspill' - that is, they derive from town (mostly Umlazi Township) in terms of prior residence. Further, 20 percent have claims of one sort or another to residence in or near the study area, some derive from peri-urban regions and only about 20 percent (more women than men) have arrived at Malukazi from further afield, usually a rural area. We will return to these variables later in the paper - for the time being we can pre-empt our discussion and suggest that strong urban orientations should not be a matter for surprise given the above. It is of course understood that our findings are not automatically transferable to a community revealing different features.

In Table 1 we show proportions of alternative choice associated with five paired dimensions relating to housing: 1. Housing Responsibility - Tenure of land; 2. Size of house - Cost of house; 3. Class of neighbourhood - Housing Flexibility; 4. Class of House - Access to Transport; 5. Class of house - Cost of transport. The following statements might be fairly made as interpretations from Table 1.

1. The propensity to choose the standard formal township house is greater than a choice indicating a site-and-service scheme although the split does not show any definite trend. What is reflected here, in a mixed category, is most probably experience of living in townships and building informal housing on the present or other sites.

2. When forced to consider size of house where cost increases with size our sample reveals part of a well-known trend among people faced with public housing (Township is constant for either choice): i.e. most public housing is too small for households at intermediate levels of the family cycle. The usual way out of this dilemma is to by-pass formal options and to optimise size at low cost in the informal sector. In our sample there is an indication that respondents are prepared to pay for increased increments in housing space. We suggest that the operative variable here is increased space - raising rents without increasing space might well represent a minus sum exercise in the minds of consumers.

3. Following up the size of house variable it would appear that the right to enlarge a house overrides the desirability of the locality of a house. More respondents would forego the security of an enhanced neighbourhood for greater size and flexibility of their living space.

4. Access to transport tends to sideline the issue of quality in housing. Our actual questions in the class of housing-transport items contained such words as 'nice' and 'poor', somewhat vague so that people could read their own ideas of housing quality into the variable. It would seem that type, quality, size, prestige, etc., of housing all come second to the issue of access to transport. Improving housing without direct access to transport would probably take on a white elephant effect.

5. Similarly, the greater majority of people take account of cost of transport before exercising increments in potential consumption of housing. Poorer housing associated with smaller transport costs are generally much more acceptable than better housing with greater transport costs.

An extrapolated profile from trade-offs among housing and related dimensions made by the Malukazi sample follows a well worn route in the literature on housing for the low-income group. A mixed strategy in the provision of housing, both as to tenure and prices will accommodate the range of variability likely in that 'low-income' group. Flexibility of size of house and right to increase size are highly valued and there is some suggestion that increments in income will be translated into improvements in housing. Access to and cost of transport override alternatives in housing choice for most informal dwellers and better housing will not compensate for relatively inaccessible and expensive transport.

The strong influence of transport on housing choices exercised by our sample reinforces the established view that locality defines a substantial part of 'performance of housing'. In the present case, bearing in mind our earlier description, the urban orientation of the population demands, as it were, links among the trilogy of housing, locality and city. Having a fine house with poor access to wage income, education and urban services would be an empty vessel for most in our sample - at the present time of course the reverse pertains in their situation. As we will show momentarily the residential trajectory of most people is directed at formal urban integration, but this trend is not equivocal. At the time of the survey (1977) the fate of Malukazi was uncertain and demolition a much mooted possibility. Anxiety and the wish for security must have made formal incorporation a desirable end. At the same time we elicited the following responses as to why people were not in fact living in a house in the township (summarised in Table 2).

Table 2.

Percentage Distribution of Reasons advanced for not occupying a house in the township.

REASONS	100%: n=278
Not qualified for township housing	38
General stated dissatisfactions with life and housing in township	25
On waiting list	24
Irrelevant option	13

Thirty-eight percent of household heads did not qualify for township housing, a figure greater than those with rights in the immediate area and considerably larger than the figure for unemployment. A further 25 percent stated a range of dissatisfactions with conditions in the townships consistent with a high overspill rate. Almost a quarter of the sample claimed to be waiting for formal housing and for 13 percent of the sample a township existence was irrelevant to their own ambitions. If we cross-reference Table 3 (item 2) at this stage the most we can say is that those on the waiting list will take a township offer whatever it is, some of the unqualified would move to a township if they could, former township dwellers would move back if conditions improved - usually not having to share with relatives - and the balance would continue with their present mode.

<u>Table 3.</u>	
Percentage sample distributions on three items testing possible trajectories out of the informal settlement.	
TRAJECTORY OUT	100%: n=278
1. <u>"If you leave 'the settlement' where will you go?"</u>	
Definite, Formal, Urban choice	48
Alternative residence rejected	41
Urban fringe and rural choice	11
2. <u>Free choice: "Where would you like to go and live?"</u>	
Definite, Formal, Urban choice	78
Urban fringe and rural choice	11
Alternative residence rejected	11
3. <u>Alternative housing type option</u> (5 options, maximum of 2 responses).	
Standard township house option (Multiple response)	54

In Table 3 we test trajectories in three different ways. Response to the neutral question "If you leave where will you go?" is difficult to interpret except for the 48 percent who claim a definite township trajectory - a recurring proportion of ca. 50 percent in our

The construction of the scale was a complex procedure in which we combined three variables simultaneously (those in Table 3 over the whole ranges of response) to give an ordinal scale of the strength of orientation to the formal township house preference. We have called this a scale of exodic trajectory because it denotes the likely strategies of moving from one place to another - there are therefore some connotations which must not be lost sight of. One of these is that people will for some reason move or be moved, another is that the present site will not be upgraded offering a completely different set of options.

Notwithstanding some reservations it is a reasonable interpretation that 28 percent of the sample in Malukazi would definitely be in the market for transfer to a formal township and public housing. A further 41 percent or a large proportion of the sample would be reasonably certain to accept township residence under a variety of circumstances given that of this combined 69 percent many will not at present qualify for township residence. There is an intermediate group of 10 percent whose trajectory is uncertain and it is probably best to think of them as floating between a township and an informal option. The 4th Order in our scale describes those who will not opt for a township but who will definitely remain urban oriented either by remaining in Malukazi or moving to some other area of the urban fringe. Only 5 percent appear to consider a rural residential trajectory.

This distribution is illuminating in the sense that it allows one to 'squeeze the sponge' and measure the run-off to a greater or lesser extent. Discounting 4th and 5th order trajectories for the moment we can compare the 79 percent of the first 3 orders of the scale with the 78 percent of formal urban choice reported in Table 3 (item 2) - some elements of demographic fallacy no doubt pertaining. At the first squeeze of the formal township proportion 10 percent will run off and be excluded, probably making up a new proportion with the peri-urban and static order. The next squeeze will, if sharp enough, probably eliminate a further 20 percent who will be somewhat township oriented but probably inured to their present condition. This leaves ca. 50 percent of the sample at a high level of township orientation. A further sustained squeeze will leave an urban township oriented coterie in the sponge of approximately 30 percent and exclude 20 percent. The harder one squeezes the closer one approximates to the status quo at the site - an ultimate squeeze will return one to the position where nearly 80 percent of formal township oriented people remain in informal housing.

The fourth order peri-urban and static group deserves mention. While investigating mobility history among other things in Inanda in 1978, Dr. Møller described as 'peri-urban mobiles', "all these household heads who have moved several times, chiefly in the peri-urban areas, and who hold no apparent record of township residence" ¹⁾ and the size of this group in her sample is ca.26 percent. If our 3rd and lowest order township proportion, 10 percent, are amalgamated with our peri-urban and static proportion (though this category is mixed) a similar size of group emerges (i.e. 26 percent). This is probably only a coincidence but it serves to show that it is likely that in any informal housing area a not insubstantial number of people will prefer a 'free' mode for their housing consumption behaviour. The small proportion of people likely to seek a rural solution to their future housing needs only points to the futility of policies relying on rural repatriation as a panacea for burgeoning urban problems.

As an aside, the irony that emerges on the basis of what is really a case study of one informal settlement is that while the authorities have confined their attention to public housing and have usually proscribed free, informal housing strategies in the face of mounting evidence for the necessity of the latter presented by university and other bodies, the inability to produce enough public housing may force those very authorities into the role of persuading people who now desire the public option to accept a free, informal housing policy. The fact that so many people appear to want to live in African townships despite the often cited insalubriousness of such places should provide food for thought: no doubt any intelligent sociological guess will plumb for an explanation involving security in the widest sense of its meaning, and if this is so, then the question of how security can be promoted might well be seen as an alternative approach to that of merely supplying an insufficient number of public houses.

1. Møller, V. 1978 *Mobility on the Urban Fringe: Some Observations based on seventy-two African Households in the Inanda Peri-urban Area*. Durban, Centre for Applied Social Sciences, University of Natal. (p.32)

KEY TO SELECTED VARIABLES, THEIR LABELS, CATEGORIES AND DISTRIBUTIONS
(SEE BOXES TABLE 5 AND STUBS TABLE 6).

		%
1.	<u>Age</u> (L) Low: 20-23 years	44
	(H) High: 40 years plus	56
2.	<u>Residential Status:</u> (R) Renter	25
	(S) Self-builder/owner	54
	(L) Local	21
3.	<u>Size of Household:</u> (S) Small: 1-5 persons	58
	(L) Large: 6 persons plus	42
4.	<u>Previous Residence:</u> (U) Urban	54
	(P) Peri-urban	35
	(R) Rural	11
5.	<u>Previous Residential Type:</u> (T) Township	34
	(S) Urban single quarters	20
	(I) Informal settlement	27
	(R) Rural	19
6.	<u>Exodic Trajectory:</u> Ordinal Urban-Rural 1st - 5th Orders	See Table 4 for distribution
7.	<u>Head's Income:</u> (L) Low: R0-149	51
	householder's income (H) High: R150 plus	49
	from formal employment	
8.	<u>Household Income:</u> (L) Low: R0-249	55
	all income from (H) High: R250 plus	45
	formal employment	

The stubs in Table 5 (left column) are carried over from the nominal entries in Table 1 and presented in the form of dimension labels previously discussed. The procedure now is to consider the significance of the selected variables as they relate to each of the five forced housing choices we administered to our sample.

Alternative Choice 1. (Housing Responsibility - Tenure of land)

- | | |
|---|-----|
| A. Ready-built, rented house in town | 54% |
| B. Self-built house on owned land in town | 46% |

1.1 Age. Younger heads of household are more likely to choose a rented, ready-built house in a township than are older heads who are likely to prefer being self-builders with tenure of land.

($p < .001$).

1.2 Residential Status. Self-builders/owners of their own houses in the study area are as likely to choose either of the alternatives. Renters are much more likely to choose a ready-built township house and people of local origin are much more likely to opt for self-builder status with tenure ($p < .001$).

1.3 Size of household. Number of people per household exercises a small effect in that smaller households are more likely to choose a rented township house while larger households are likely to choose self-builder with tenure: ($p < .05$)

1.4 Previous Residence. Two-thirds of the urban overspill wish to 'return' to a township. Somewhat over half of peri-urbanites (which includes people claiming rights in the area) prefer a self-builder with tenure option as do the majority of people who hail from the rural area. It can be noted that over 40 percent of the peri-urban previous residence category would choose to rent a house in the township. ($p < .001$)

1.5 Previous Residential Type. The significance of this variable is reasonably clear. People who previously lived in a township or in single quarters or "white" areas in town are more likely to want to live as renters in a township house than people who are used to living on the urban fringe or the rural area and who are likely to choose the alternative of building their own houses on land to which they tenure. ($p < .001$)

1.6 <u>Exodic Trajectory.</u>	Ready-built rented %	Self-built tenure %
1st	77	23
2nd	53	47
3rd	22	78
4th	43	57
5th	58	42

First order urban-oriented heads of household are most likely to choose the ready-built option. The second order are likely to choose either ready- or self-built houses. The intermediate third order are most likely to choose tenure and self-building while the lower orders are likely to go either way. ($p < .001$)

1. 7 and 8 Head's Income and household income. While the income of the head of household from formal employment has no effect on choice the total household income from formal employment exercises a large influence: in households with lower total incomes, heads are much more likely to opt for a ready-built rented house while those where higher incomes prevail are more likely to choose self-building with tenure. (p < .001)

Profile of the potential self-builder on land owned in town.

Older head of household, who is probably already a self-builder with experience of informal areas, who has a larger household and can envisage a trajectory which is marginally urban in housing terms. A higher household income (larger household) will enable him to meet larger intermittent outlays than those which would be required to pay a monthly rent.

Alternative Choice 2. (Size of House - Cost of House)

- | | |
|--|-----|
| A. Large, more expensive house in a township | 64% |
| B. Small, less expensive house in a township | 36% |

2. 1, 2, 7 and 8 Age, Residential Status, household heads and Household Income.

Age and residential status do not influence the majority choice of a larger more expensive house against a smaller less expensive house. There is a slight tendency for younger heads of household to trade-off space against cost and a very faint indication that older heads would pay for more space which would be consistent with differences in household size. This tendency disappears when total household income is brought to bear on the size - cost variable: in fact the corrected chi square value is zero (significance at unity) indicating that respondents who choose smaller, less expensive housing often do so for reasons other than cost factors.

- 2.3 Size of Household. The significant effect of household size is expressed by the fact that the greater majority of those choosing the small, less expensive option in township housing are heads of smaller households - the inference to be drawn being that potential housing consumption is viewed as elastic in relationship with size of household. (p < .01)

2.4 Previous Residence. While heads of household who have previously lived in urban and peri-urban localities expectedly choose the expensive more spacious option, urban more so than peri-urban categories, heads who have come in from the rural area are most likely to choose a small, inexpensive house in a township; bearing in mind that this category overall accounts for only 11 percent of the sample. The difference is however significant. ($p < .001$)

2.5 Previous Residential Type. Among the four categories of previous residence statistical differences are not notably large but the gradient in descending order of magnitude in the line Township, Urban Single Quarters, Informal settlement and Rural measured as a proportion of those choosing the expensive more spacious option is consistent. This reinforces the argument that previous experience is a factor in people's perception of their own future housing consumption. ($p < .05$)

2.6 Exodic Trajectory.

	Large, Expensive Township House	Small, Cheap Township House
	%	%
1st	85	15
2nd	63	37
3rd	30	70
4th	76	24
5th	61	39

Comparing size and cost of house with the earlier ready-built, rented and self-built, tenure dimensions for distribution on the trajectory variable the 3rd order of urban oriented category which has been described as an intermediate group is once again out of step with the main trend. Previously they were over-represented in the self-builder category, now they are over-represented in the small, cheap township house choice. It appears that this group of people recognise their own marginality and make choices which allow most flexibility in urban participation. The large category of 2nd order urban oriented are more likely than the 1st order to choose cheap housing as are the rural oriented. Not unexpectedly, the peri-urban/static order plumb for large size of house in their choice - no doubt an effect of experience from their free-building mode of satisfying housing needs. ($p < .001$)

Alternative Choice 3. (Class of Neighbourhood - Housing Flexibility)

A. Poor neighbourhood with rights to extend house	57%
B. Good neighbourhood, house plan fixed	43%

3.1 Age. In the lesser moiety choosing a good neighbourhood but a fixed plan dwelling, young householders are as likely to make this choice as older householders. However older householders are much more likely to make the choice to live in a house where they are permitted the flexibility of extending the dwelling even if this means living in a poorer standard neighbourhood or environment. (p 4.05)

3.2 Residential Status. Although the differences with respect to residential status are not statistically significant the trend is in the expected direction. While renters are not more prone to choose either alternative, steady increments of recent self-builder owners and people with long standing rights in the settlement are represented in the overall proportion choosing flexibility/extendability in housing design even though the condition of this choice is a poor neighbourhood. The implication of this is that the longer people live in the free-housing informal sector the more difficult it will become for them to accept fixed plan housing - especially if this does not satisfy the criterion of space.

3.3 Size of Household. The effect that shows up on this variable is that the flexibility of extension choice occurs more frequently among heads of larger households.

3.4 and 5 Previous Residence and Residential Type. The trend, though not statistically significant, is consistent with that shown for the variable residential status (3.2): choice of extendable, as opposed to fixed plan housing, is more prevalent among categories with less experience of formal township or city dwelling as such; these are the peri-urban, informal settlement and rural categories.

3.6 Exodic Trajectory. The significant difference here confirms the overall trend. Lower order urban orientation groups (except the last order of rural orientation) consistently choose the freer alternative in housing option. Again the intermediate, marginal group of the 3rd order category show the highest proportion, 74 percent in the distribution. The choice among the small category of rural oriented, of a fixed plan

house, is probably explicable as a 'least involvement' option. (p <.05)

3. 7 and 8. Access to higher rates of income, especially higher household income is significantly related to choices involving flexible housing options, viz., the right to extend a house. The trend with respect to personal income derived by household heads from formal sector employment is not strong but in the direction stated above. In probability terms the difference in household income related to housing flexibility is very strong (p <.001). This is consistent with the earlier significant response (1. 7 and 8) where householders associated with higher household incomes would choose to be self-builders with land tenure rights rather than opt for ready-built, rented accommodation.

This is not a surprising result because, as already mentioned, one must envisage relatively large, intermittent expenditure in free - self-builder modes. But, this effect of income must not be brushed aside in the thinking on 'low-cost-income' housing. It has been established in many studies that the only option open to the lowest income group is the informal housing market; here we draw attention to a preference among the top end of 'low-income' informal dwellers for an option that is really only feasible in informal housing areas (except for special self-builder areas for high cost housing in some townships). Without debating questions such as 'control' it is clear that 'freedom' and 'self-building' are concepts that can readily be included even in formal packages for some low-income cadres in the population.

Profile of the householder who chooses flexibility in housing (this carries a self-builder connotation).

Older heads of householders with larger families where household income is greater are more likely to fall into this category: recall that this alternative is chosen by 57 percent of respondents. There is a persistent indication that experience in the free, informal housing market predisposes people to make an independent choice in housing matters.

Alternative Choices 4 and 5. (Class of house - Access to/Cost of Transport

4 and 5 A. Poor house (4) near transport (5) cheap transport	71%
	73%
4 and 5 B. Better house (4) far from transport (5) expensive transport	29%
	27%

advantages of self-builder options.

Younger householders are likely to want to pay less (and probably have to pay less) for housing than older householders.

Older householders are more likely than younger people to perceive the benefits of flexibility in being able to extend their houses than younger householders who would be satisfied with a fixed plan dwelling.

Residential Status.

Renters of accommodation in the informal settlement are more likely to want to become renters of formal public houses in a township. People in the settlement who built their own houses and people who have bought their own houses are more likely to want to be self-builders in the future - i.e. they are more likely to want to own their land, build their own houses and have the right to extend a house if they wish.

Residential status has little bearing on people's ideas of size in housing.

Size of Household.

Small households are more likely to be associated with renting of township accommodation, larger households with a self-builder mode. Potential consumption of space in housing is elastic with respect to household size - the larger the household, the more larger size of house will become important. Expectedly larger households have heads who perceive benefits in the right to extend houses.

Previous residence and type of residence.

People who have lived in formal township housing or in other types of housing in the city (hostels, 'white' suburbs) generally are more likely to want to return to or take up residence in a formal township.

This does not mean that few experienced peri-urbanites will exercise such an option if they could. In this sample nearly half might well take up residence in a township house if the occasion arose - presumably for the 'security' this offers.

By and large, people with more rural background see advantages to smaller costs for housing over space factors - in their perception cost increments would not be compensated for by more spacious housing.

Experience of informal accommodation is likely to be a factor which influences people's perceptions of flexibility in housing. Experience in the informal market is related to a greater propensity to prefer the alternative of being able to extend a house rather than the acceptance of a fixed plan option. This effect is not very strong.

Exodic Trajectory.

This variable is most instructive because it is built-up out of variables denoting housing and mobility choices - therefore it should be consonant with forced-choice housing alternative variables (the latter of course are not part of the construction of the exodic trajectory variable), which it is in some measure (the text *passim*) - and irregularities in comparative distribution should then illuminate foci which might otherwise be overlooked. Where householders are judged to exhibit a high order of orientation to formal incorporation in the urban sector, especially with regard to housing - and this is probably motivated by a wish for security it is not surprising that most envisage an ideal trajectory which leads to a ready-built, large house in a township (in this case usually Umlazi) which they will be prepared to rent and where the overwhelming desire is for the opportunity to be able to renovate and extend such a dwelling. The pattern among peri-urban oriented is not so clear: they are slightly more inclined to reject the ready-built option, but definitely value size and space in housing with a similar desire for flexibility in planning of housing space.

The marginal group intermediate to the high order urban and peri-urban orientations (3rd order Urban/Township) is of focal interest because the pattern of housing choice revealed here is closest to the paradigm of informal urban settler. Among this relatively small group (10 percent) in the present sample, 78 percent express a wish to build their own houses on land to which they can obtain tenure. If they have to make a choice where the condition is living in a formal township 70 percent would choose a smaller, cheap house rather than a larger more expensive one. This group registers the highest proportion in the sample, 74 percent, opting for flexible as opposed to fixed-plan housing.

To pre-empt some findings reported in Chapter 3 we discover that householders in this marginal category are older, established informal self-builders, with a background of rural experience, having low personal

incomes (although household income appears to be reasonably high - probably older children working). So that although the group is a small one in the Malukazi sample it represents a much larger category to be found in the greater Durban Metropolitan Area and, if future population increase has to be absorbed by urban areas, a burgeoning category throughout the rest of this century. The dogsleg in housing choice as it relates to different categories of people is completed by the pattern which emerges among householders who can perceive a rural trajectory in their future lives. They take the line of least resistance in urban housing consonant with a likelihood that their choices will not be final: they are somewhat likely to opt for a large ready-built house (in a township) and 77 percent of this small group seem disinterested in the possibility of extending or renovating the housing they might find themselves consuming. These patterns manifest once again the inherent dangers of linear thinking when housing concerns and low-income groups are the subjects of planning.

Personal and Household Income.

The level of personal income from employment in the formal job-market exercises little influence over the choices householders make with respect to tenure, size, responsibility for and flexibility of housing. However, personal income is decisive when householders are forced to consider transport as part of a housing equation. Only among higher income groups to a limited extent do increments in housing benefits offset increases in transport costs. Household income has a similar trend but the effect is relatively weak. Household income does however exercise a very strong influence on perceived housing strategies: the higher the household income the more likely it is that householders will choose to be self-builders on land that they have bought and correspondingly, in another dimension, they will choose housing where the possibility of extension and renovation exists.

For purposes of the present analysis we identify four patterns of choice as follows:

Pattern 1. Large, ready-built, flexible plan housing

Pattern 2. Small, self-built, flexible plan house

Pattern 3. Large, self-built, flexible plan housing

Pattern 4. Large, ready-built, fixed plan housing

Table 6.						
CATEGORIES OF 7 VARIABLES SHOWN AGAINST THE SCALE OF EXODIC TRAJECTORY (the latter as proxy for a Housing-Pattern Variable).						
The category labels appearing in the cells are explained in the Key in Table 2.						
(- = $p > .05$; * $p < .05$; ** $p < .01$; *** $p < .001$)						
Selected Variables (See key in text). Chapter 2	p over XTAB	Urban - Rural Order of Exodic Trajectory (See Table 5, Chapter 2)				
		1st	2nd	3rd	4th	5th
1 Age	**	L	/	H	H	H
2 Residential Status	***	R + S	S	S	S + L	R + S
3 Size of Household	-	S	/	/	S	S
4 Previous Residence	***	U	U	R	U + P	U + P
5 Previous Residential Type	***	T	T + I	F	I	R
7 Head's Income	*	H	/	L	L	L
8 Household Income	**	L	/	H	/	L
The Trajectory Variable is proxy for Housing- Pattern Variable		Pattern 1	Pattern 2	Pattern 3	Pattern 4	
		Description of pattern in text.				

In Table 6 we can now identify housing patterns with exodic or residential trajectories and advance some explanations for the variance associated with 'patterns of choice' among alternatives in housing relying on the independent variables selected for this report. Scrutiny of Table 6 will reveal immediately that of the 7 variables tested against the trajectories (proxy for pattern-choices) only size of household is not statistically significant. (We have exercised some license in amalgamating 1st and 2nd Order trajectories for the sake of simplicity - it should be recognised however that there is a scale of orientation built into this category). The letters entered in the cells of Table 6 correspond to the categories of selected variables the key to which can be found above in the text (variable number, variable label and variable categorisation). These letters denote only roughly proportional size of response and it is wise to read the accompanying text for qualifications to the indicators. A diagonal stroke in a cell indicates a rough parity between proportions of the independent variable against any trajectory.

It is now possible to embark on an attempt to show that choice among alternatives in housing, reconstructed to form a pattern, is not a random artifact but that certain categories of people tend to be associated with particular patterns. Care should however be taken not to fall into the trap of thinking that having identified a person as corresponding to any category he or she will automatically choose a certain pattern as an appropriate way to satisfy future housing consumption - we are dealing with variable proportions, not invariable associations.

Categorisation of the Householder who is likely to choose a Large, Ready-built, Flexible plan House (Pattern 1 - 1st and 2nd Order Trajectory).

Younger householders who are at present renting accommodation in the informal housing sector are most likely to make this choice: these households are likely to be small, they will previously have lived in a house or elsewhere in an urban township and the householder's personal income is likely to be comparatively high, though small numbers will make for lower household incomes. The picture begins to blur when other likely categories are taken into account: somewhat older householders who have built houses in Malukazi and who are thus more experienced in living in the informal sector are also in the market for consumption of ready-built housing. The decisive factor here is whether or not they have previously lived in a township which many have. Of course 'ready-built' is qualified by size and

flexibility of the housing plan - if these criteria are not met it is difficult to say just what people's actual behaviour will be if offered a place in a small, fixed plan house in a township.

Categorisation of the Householder who is likely to choose a Small, Self-built, flexible plan house (Pattern 2 - 3rd Order Trajectory).

Most, 82 percent, will be older householders who are already established self-builders in the informal settlement. They have an even chance of having lived in the rural area, their personal incomes from formal employment are likely to be low but household income is high by our definition in most cases (probably older children working).

Categorisation of the Householder who is likely to choose a Large, Self-built, flexible plan house (Pattern 3 - 4th Order Trajectory).

As with the previous group, householders in this category are generally older, one difference being that about 38 percent claim rights in the local area and are therefore very firmly established. Their households are only very marginally smaller than the intermediate group above. Previous residence, with only two exceptions, is either urban or peri-urban, the largest group having extensive experience in informal urban housing. Householders' personal incomes tend to be low while only 51 percent of the category fall into the higher household income group. This latter effect might well indicate that established existence in the peri-urban zone has favoured more domestic fission resulting in slightly smaller households.

Categorisation of the Householder who is likely to choose a Large, Ready-built, fixed-plan house (Pattern 4 - 5th Order Trajectory).

Here the emphasis falls on the fixed-plan option, and the expressed rural orientation, as mentioned earlier is probably sufficient explanation for this deviation compared with other categories. Householders are definitely older in this group, 43 percent are renters in the informal settlement, most of the balance self-builders. Seventy-one percent have smaller households. Although their previous residence is urban or peri-urban this has been an intermediate step into Malukazi (possibly many steps) from rural origins. Both personal and household incomes are low. Although there is some resemblance to the category of people in the 2nd Pattern of Choice the direction appears to be different - the earlier pattern suggests consolidation in the urban environment while it

is likely that the 4th pattern represents a temporary strategy in town. If we now return to the model of patterns of having choice above an overview of the thrust of our findings is easy to establish. For most purposes we exclude the ready-built, large, fixed-plan option of the 5 percent of rural oriented (for whom most probably the present formal housing provision was intended) noting only their preference.

Where people are apt to choose ready-built housing this is generally accompanied by a preference for a larger size of dwelling and the right to extend and renovate the structure i.e., flexibility.

Self-builder status is considered to be a viable option by nearly half our sample and many already have the experience for this.

In general (given that present size of township housing is the referent) people would prefer to have larger houses.

Consonant with size, there is a very strong expression of a wish for flexibility in housing - the right to extend dwellings.

Carrying over from Chapter 2; just about all housing choice is contingent on cost and accessibility to Transport.

SOME CONCLUSIONS.

1. Past experience exercises an influence on projections of potential housing consumption: the effective categories are previous habitation of a township house or a history of informal settlement.
2. There is a clear indication that conventional public housing is too small - especially for families at the intermediate stage of the developmental cycle of the domestic unit.
3. The right to extend/enlarge a house overrides the desirability of locality of the house.
4. Access to and cost of transport sidelines the issue of quality of housing - people take account of transport before exercising increments in potential consumption of housing.
5. There is an indication that increments in income will be translated into improvements of housing.
6. Transport is the cement that links the trilogy of housing, locality and city.
7. In this particular sample there are a number of indicators which suggest that half the informal dwellers would prefer to live in a township while the other moiety seem destined to careers in informal circumstances on the urban periphery.
8. In this particular sample only 5 percent of household heads anticipate an ultimate rural residential trajectory.
9. There is evidence in our data (which compares with a previous survey in Inanda) that there exists a firm core of ca. 25 percent of householders who would choose a 'free option' (really only available in the informal housing sector at present) in housing consumption rather than incorporation into a public housing estate.
10. The potential self-builder with tenure is likely to be older, already a self-builder in the informal sector, with a larger household and household income.

11. While the potential consumer of a small, cheap house in the township is somewhat likely to be younger with a small personal income, the decisive variable appears to be household size - the larger the household the bigger the housing space demanded. Previous township experience exercises a strong influence as well.
12. It is important to note that a desire for flexibility in housing plan - the right to extend - is associated with higher household incomes among other variables.
13. While household income is often a decisive variable associated with housing choice, when transport is introduced as part of the housing package, personal incomes play a greater role in determining choice - transport dominates choice among householders with smaller personal incomes and there is an indication that its influence wanes as personal incomes improve.
14. A very important finding is that options not usually associated with public housing estates (townships) in South Africa - land ownership, self-builder alternative, flexibility and extendability in house plan are in fact options desired by many householders whose residential trajectory is definitely directed at entry into a township. That is, the extra-township alternatives which are usually discussed in terms of housing policy packages are potentially as viable within the township structure as without.
15. It is important to read the text where we establish the fact that differentials in housing choice are not arranged in some orderly or linear set of gradations. The associations with housing choice are often curvilinear where opposite values reflect the same choice: a good example is young, highly urbanised householders who make the same choice as older, rural oriented householders; viz. a rented house in the township.
16. Whether people would choose ready-built or self-built housing, further qualifications to the choice of dwelling persistently emphasise the wish for more space (larger size) and the potential for extension (flexibility of size) of housing.

17. Among other patterns of housing choice and further details to patterns we have identified four in the present analysis:

Pattern 1. Large, ready-built, flexible plan housing

Pattern 2. Smaller, self-built, flexible plan housing

Pattern 3. Large, self-built, flexible plan housing

Pattern 4. Large, ready-built, fixed plan housing.

18. During 1977, renters (lodgers) of accommodation in Malukazi were paying ca. seven rand for a room in a dwelling. It must be assumed that respondents in the survey made comparisons of their housing situation with those in the township, notably the subsidised rate at which houses are rented and the physical qualities of such housing as well as direct access to services such as water. It is not improbable that for the impecunious, especially those not eligible for township housing, subsidised (and secure) public housing is a rational aspiration. Yet for others it would seem that subsidies to public housing are not sufficient to offset the freedom and flexibility associated with informal settlement. Decreases in subsidisation will, in both cases, make the formal, public housing option less attractive.

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