PREFERENCES OF BLACKS WITH RESPECT TO STREET LAYOUT, HOUSE TYPE AND HOUSE IMAGE

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The objective of this study was to examine and ascertain preferences with respect to certain key elements, such as house types, street layouts and house image, as a guide to future planning.

Preferences regarding street layout and house type were elicited through the use of scale models and house image preferences by using selected photographs of typical Black housing.

Whilst certain distinct preferences are noted with respect to house types, street layouts and house image, it is evident that a range of alternatives should be embodied in township layouts and that residents should be able to exercise a degree of choice.

As a means of solving the housing shortage the widest range of housing delivery systems should be examined and individuals and community leaders should be consulted and encouraged to actively participate in the process of upgrading the existing housing stock and in the building of additional housing.

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Die doelwit van hierdie studie was om voorkeure m.b.t. sekere sleutel-elemente soos huistipes, straatuitlegte en huisbeeld vas te stel, wat as riglyne vir toekomstige ontwikkeling kon dien.

Om voorkeure m.b.t. straatuitleg en huistipe vas te stel is van skaalmodelle gebruik gemaak, en om voorkeure m.b.t. huisbeeld vas te stel is van foto's van tipiese Swart behuising gebruik gemaak.

Alhoewel sekere spesifieke voorkeure m.b.t. huistipes, straatuitlegte en huisbeeld genoem word, is dit duidelik dat 'n reeks alternatiewes in die uitleg van dorpe geïnkorporeer behoort te word, en dat die inwoners 'n mate van keuse behoort te kan uitoefen.

As middel om die behuisingstekort die hoof te bied, behoort die wydste moontlike reeks van behuisingsleweringsisteme ondersoek te word en individue en gemeenskapsleiers behoort geraadpleeg en aangemoedig te word om aktief deel te neem aan die proses van opgradering van die bestaande behuising, én die bou van nuwe huise.

1. INTRODUCTION

This study forms part of a comprehensive survey undertaken in 1985, to examine the extent of overcrowding and to ascertain the housing preferences of the residents of Mbekweni: the Black residential area serving the Paarl, Wellington areas, which. outside the peninsula, is the largest in the Western Cape. (Welch: 1987; Welch: 1988) (Figure 1)

The part of the study which is reported on here was aimed at determining preferences regarding certain key elements, such as house types, street layouts and house image, as a guide to future planning.

2. PROCEDURE

2.1 STREET LAYOUT, HOUSE TYPE AND HOUSE IMAGE

In order to ascertain preferences as to street layout and house types a series of simple scale models mounted on boards was used.

The three-dimensional quality of the models allows for easier interpretation and the visualization of alternative configurations at a more simple level than is possible with line drawings, which require certain learned and sophisticated skills in interpretation at a higher level of abstraction (Stea and Taphanel, 1974).

Preferences regarding house image were elicited using a selection of black and white photographs depicting a range of houses, varying in materials used, type and size: a technique similar to that adopted by Hardie and Hart (1984).

2.2 SAMPLE SIZE

Housing types in Mbekweni can be broadly divided into four groups.

(i) Hostel accommodation for single males situated centrally and flanking the sport fields.
(ii) Row-housing, catering for the bulk of family living. (Marked A in Figure 2)
(iii) A limited number of older detached houses. (Marked B in Figure 2)
(iv) Some semi-detached and detached units recently completed or in the process of construction located on the edge of the township to the north and east and a cluster of temporary shacks to the north-west.

As this study was primarily concerned with the quality of family living, only the older row and detached housing units were included in the study.

In all, the area covered comprised 622 row-housing and 30 detached housing units (Figure 2) of which 213 row-housing and 19 detached housing units were included in the survey. At the time of the study all housing was rented; no ownership schemes were in operation.

The sex of the respondents was not considered critical, although it was anticipated that in practice the majority of respondents would be female; adult respondents of either sex, wherever possible either the husband or wife, were acceptable. As it transpired the sex of respondents with respect to the two groups was: row-housing – 79,8 per cent female and 20,2 per cent male; detached housing – 84,2 per cent female and 15,8 per cent male.

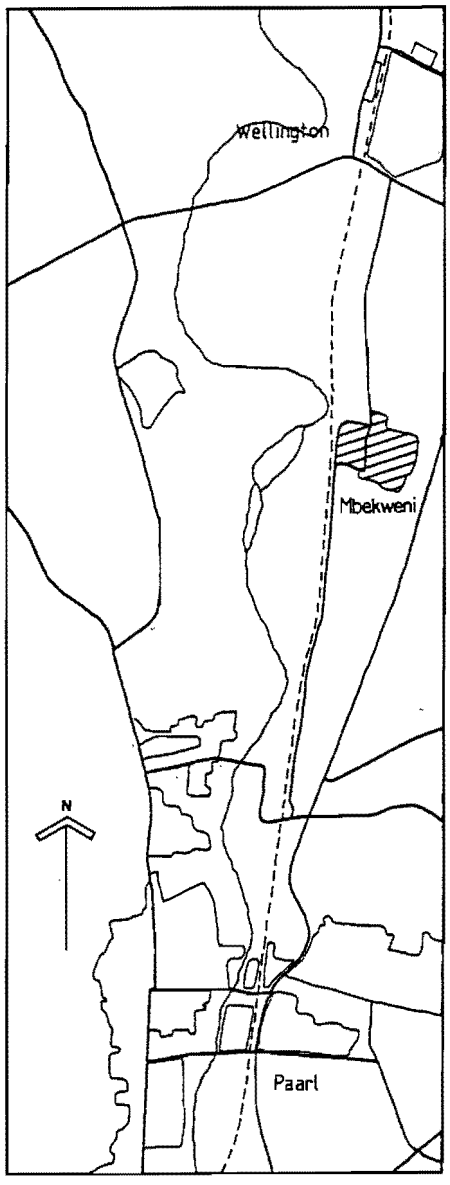

FIGURE 1

LOCALITY PAN: MBEKWENI

AREA	TOTAL UNITS	RESPONDENTS
A ROW-HOUSING	622	213
B DETACHED HOUSING	30	19

FIGURE 2 MBEKWENI: AREAS SURVEYED (ORIGINAL PHOTOGRAPH BY FOTOGRAMENSURA)

3. SURVEY FINDINGS

3.1 STREET LAYOUT PREFERENCES

Models

A series of simple models to a scale of 1: 500 was constructed and mounted on a board. Six basic street layouts were included. The options were clearly numbered, 1A; 1B; 2A; 2B; 3A and 3B for easy reference. (Figure 3)

Layouts 1A and 1B show a street of which a portion is straight and the remainder is curved. Simple blocks to represent the houses were positioned in a random staggered pattern along one side of the street and uniformly following the line of the street on the other. Each of the erven was numbered. A shop site was located at each end of the street and hatched to clearly distinguish it from the residential sites. In addition a large 'L' shaped block was positioned on the site to represent the shop.

Layouts 2A and 2B show two forms of traffic island, one and ellipse, the other a circle. Both portions include a number of pan-handle sites. Simple blocks representing houses were positioned in a variety of ways to depict the possible location of houses and the sites were numbered.

Layouts 3A and 3B show two culs-de-sac forms. As in the other layouts identical blocks were used to depict houses and their position of the sites.

Questionnaire

The layouts were presented in pairs; 1A and 1B; then 2A and 2B and finally 3A and 3B. Each of the layouts was briefly described to the respondents. In each case respondents were asked to indicate in turn the house or position which they considered to be the best, which they considered to have the worst position and which was the second best position.

They were finally asked which of the two alternatives they preferred and why. The respondents had merely to point to the house or position on the model and the interviewer recorded the erf number.

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After each pair had been presented the respondents were finally asked to choose out of all the street layouts the one they preferred the most, the one they preferred the least and the one they thought was second best and to indicate reasons for their choices.

Presentation of findings

Responses to the various questions are presented in the following forms:

(i) diagrammatically by means of symbols grouped on each site showing best position, the second best and the worst position as indicated by each respondent;
(ii) numerically for each site on the layout
(iii) in tables for both row and detached houses with respect to side of street, corner sites and those next to the shops.

The use of graphic symbols in the figures gives a useful overall visual picture of the respondents' choices and should be read in conjunction with the numerical data.

3.1.1 STRAIGHT AND CURVED STREET LAYOUTS 1A AND 1B

Preferences with respect to the straight and curved street layouts are presented separately for row-housing and detached housing respondents. (Tables 1 and 2)

Row-housing respondents

As to choice between staggered or uniform layout of houses there is a preference as indicated in both first and second choices for the staggered housing layout along the straight section of the road. The highest incidence of worst positions is related to the staggered layout in the curved section of the street, followed by the uniform layout in the same section.

Preferences for corner location are again higher for 1A than 1B with the worst position being given as 1A.

This pattern is again reflected in the data for the sites located next to the shops.

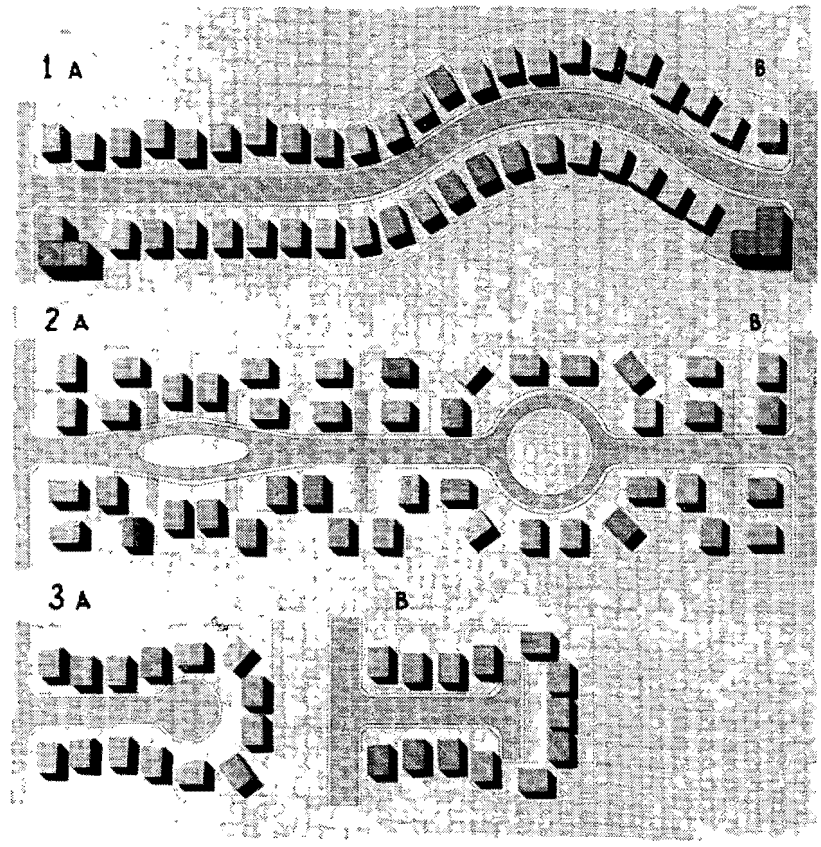


FIGURE 3 STREET LAYOUT MODELS

TABLE 1 SITE LOCATION PREFERENCES IN LAYOUTS 1A AND 1B

			Best position	%	Second	%	Worst position	%
Row Housing Respondents	Staggered	1A	75	35,2	83	39,0	21	10,2
		1B	28	13,1	37	17,4	75	36,6
	Uniform	1A	30	14,1	33	15,5	8	4,0
		1B	15	7,0	19	9,0	39	19,0
	Corner	1A	19	9,0	14	6,5	16	7,8
		1B	16	7,5	8	3,7	6	2,9
	Next to shop	1A	22	10,3	16	7,5	30	14,6
		1B	8	3,8	3	1,4	10	4,9
			N = 213	100	N = 213	100	N = 205	100

TABLE 2 SITE LOCATION PREFERENCES IN LAYOUTS 1A AND 1B

			Best position	%	Second	%	Worst position	%
Detached Housing Respondents	Staggered	1A	11	57,9	4	21,0	–	–
		1B	2	10,5	8	42,1	7	36,8
	Uniform	1A	3	15,8	4	21,0	1	5,3
		1B	–	–	1	5,3	3	15,8
	Corner	1A	–	–	–	–	3	15,8
		1B	–	–,	–	–	1	5,3
	Next to shop	1A	3	15,8	1	5,3	4	21,0
		1B	–	–	1	5,3	–	–
			N = 19	100	N = 19	100	N = 19	100

These latter two sets of data probably reflect an initial focus of attention on 1A, in that it is clearly preferred, resulting in a reduced interest or awareness of the corner site and shop in 1B, rather than because there is any real difference between them.

Detached housing respondents

With respect to the detached house respondents the majority show a preference in their first choice for the staggered arrangement in 1A, followed by 15,8 per cent choosing the uniform layout and the site next to the shop with only 10,5 per cent showing any preference for the curved section and then only with reference to the staggered layout.

However, in terms of second choice, 42,1 per cent for example, show a preference for the staggered layout along the curved portion.

The percentage giving the staggered housing in 1B as the worst is similar to the row-housing respondents whilst the percentage of those regarding the site next to the shop as the worst is higher.

A regrouping of these data to reflect the incidence of preferences, as percentages, for the best, second best and worst positions for the straight street 1A, and the curved street 1B, for the two groups is given in Table 3.

The percentage distribution of the various choices, in the case of row-housing respondents, reflects a clear and consistent pattern of preferred locations with respect to 1A and disliked locations with respect to 1B. The detached housing respondents show a distinct preference, in first choice, for 1A, but second choice and worst position responses are less clear-cut with respect to 1A and 1B.

However, in response to the specific question as to which of the two layouts is preferred, 79,9 per cent of row-housing and 94,7 per cent of detached housing respondents preferred 1A.

On the basis of these data a number of clear patterns for both groups emerge:

* The majority of respondents prefer the straight street
* The staggered arrangement of houses is favoured
* Whilst corner sites and those next to the shops are highly favoured with respect to both first and second choices, a similar number of respondents regard these as the worst positions, particularly the sites next to the shops.

Data pertaining to the specific sites, as reflected in the symbol presentation in Figure 4, shows that sites flanking the street, as it enters the curve from the left, are clearly disliked.

TABLE 3 REGROUPED DATA BASED ON SITE PREFERENCES 1A AND 1B

	1A			1B		
	Best %	Second %	Worst %	Best %	Second %	Worst
Row-housing respondents	68,6	68,6	36,6	34,4	31,5	63,4
Detached housing respondents	89,5	47,3	42,1	10,5	52,7	57,9

The greater variety in the staggered arrangement offers a potential range of options and possibilities to satisfy individual likes and dislikes and presents a partial explanation of the consistently higher incidence of choices, recorded here, both positive and negative, over the uniform layout.

Distinct patterns are also revealed in the case of the corner site and that next to the shop in 1A, where the number of those who like and those who dislike these locations, is high but practically balanced.

3.1.2 TRAFFIC ISLAND LAYOUTS 2A AND 2B

As indicated by the stepped dotted line in Figure 5 the two sections were divided so as to give an equal number of erven in each half.

As reflected in the diagrammatic symbol presentation, a distinct pattern of preferences for the pan-handle sites and a dislike with respect to island locations emerges.

Reasons for the pan-handle sites being favoured are: set back, far from the street/quiet and not near the circle/less dangerous/cars must drive slowly in narrow street/cars are not racing "woer-woer" past/very quiet. The few who did not like these sites felt that they: were too quiet/were in the middle and surrounded by people/were isolated and one could not see what was going on around one.

Those who felt the circle was the worst location indicated that: it was dangerous for children to play in the street/cars driving around the island would crash into the houses/cars would crash into the island/many accidents/"everything comes and turns here" and that it is a very busy street. Positive responses included: cars will drive slowly/can easily see what is happening/children can play on the island/the island is beautiful, can be grassed and used for play.

With respect to the four erven with the narrow frontage onto the circle and located diagonally opposite each other, (114, 17, 36 and 39) only six first choices, thirteen second choices and three counts of worst position are given. One may be tempted to infer that the low 'worst position' count reflects a high degree of acceptance. However, the low 'first choice' rating, for example, indicates rather that for all practical purposes these erven are almost completely ignored; there being no strong response either way. This is again evident with respect to the detached housing respondents, who indicate no negative response and only one first and one second choice preference.

Preference for island form is by and large evenly split for both groups. However, it is clear that as regards site locations in 2A and 2B a considerably higher percentage of 'worst position' choices are noted for 2B. (Row-housing respondents, 42,0 per cent and detached housing respondents, 57,7 per cent)

3.1.3 CULS-DE-SAC LAYOUTS 3A AND 3B

Within reference to the diagrammatic symbol presentation in Figure 6 the following can be noted with respect to 3A.

Corner sites and the four sites at the end of the cul-de-sac score highly with regard to first and second choices. The corner sites and the two end sites, in

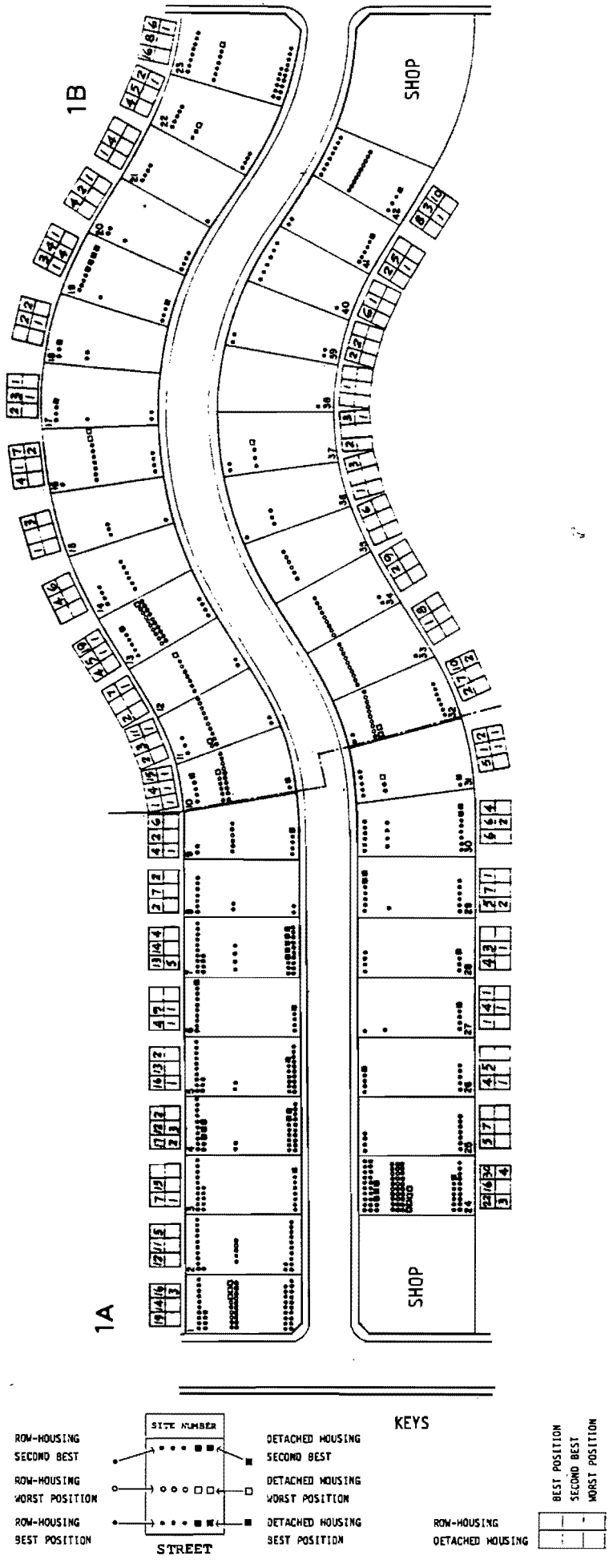


FIGURE 4 STRAIGHT AND CURVED STREETS:

PREFERENCE PATTERNS — 1A AND 1 B

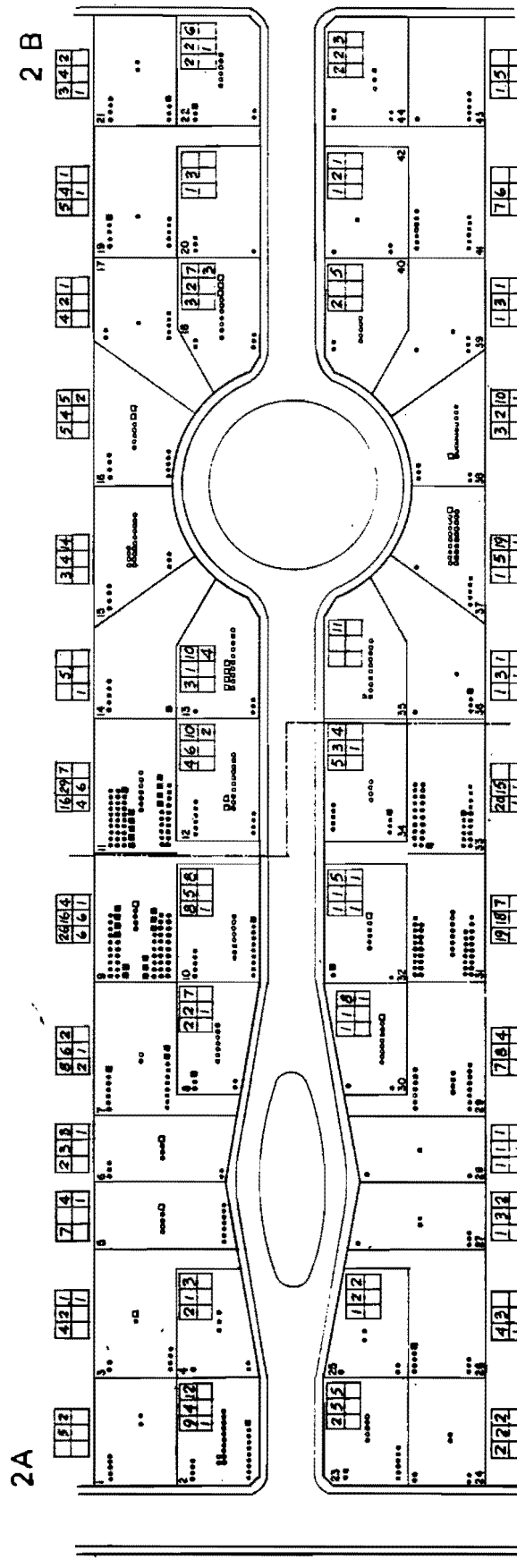


FIGURE 5 TRAFFIC ISLANDS:

PREFERENCE PATTERNS — 2A AND 2B

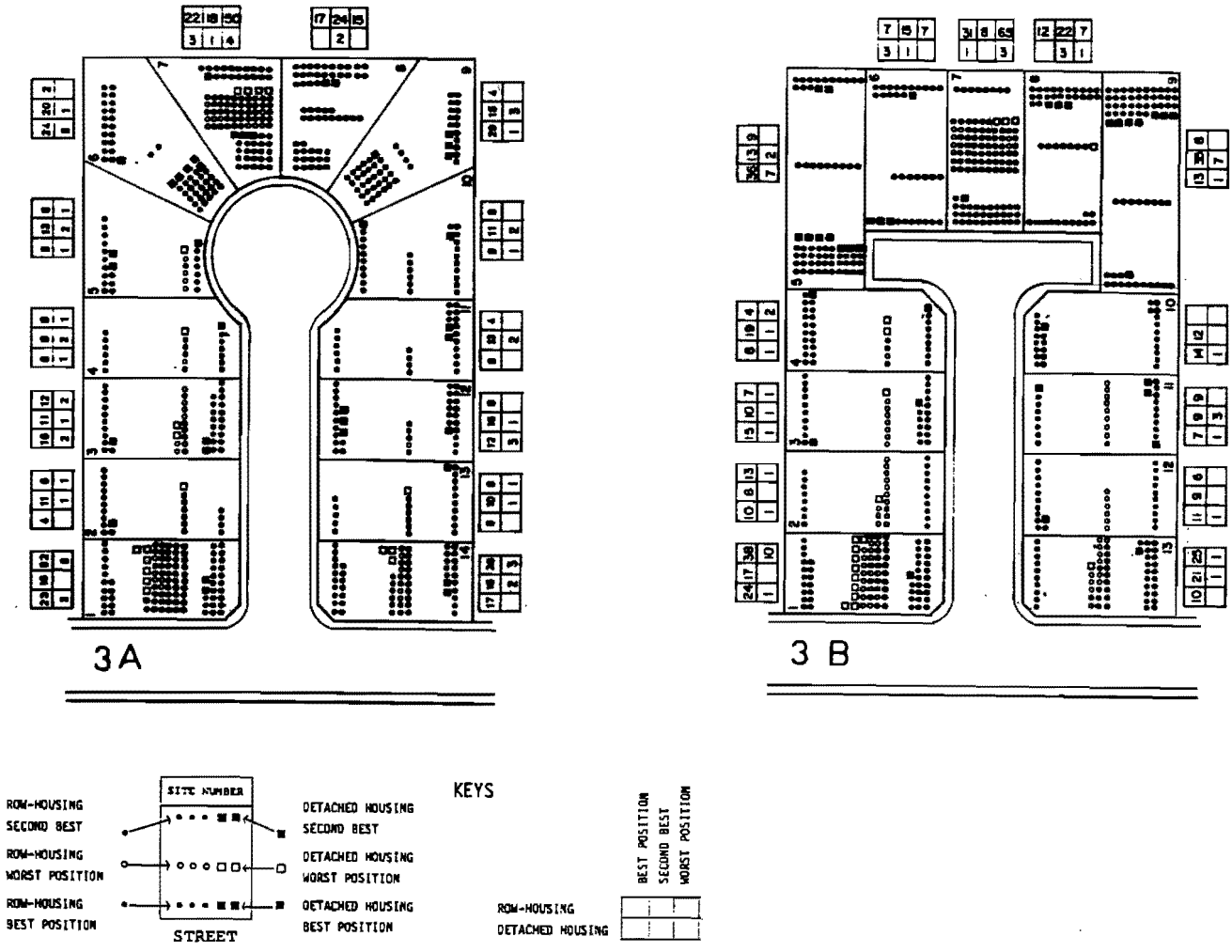


FIGURE 6 CULS-DE-SAC: PREFERENCE PATTERNS 3A AND 3B

line with the street are also strongly regarded as the worst locations.

The reasons given for the corner sites being favoured are generally that they are on the corner and not too far in i.e. not at the end of the cul-de-sac.

The opposite is given as the main reason as to why they are disliked, together with the fact that these locations are perceived as dangerous.

Whilst reasons given for the preference for the cul-de-sac end locations include: they are quiet; are set back from the main road; are safe; children can play in the street and that cars will drive slowly, these are also regarded as having the worst location as: cars driving at high speed can be dangerous because they won't stop; will crash into the houses; drunken motorists will drive straight on into the houses; too many accidents; dangerous for children and that cars may swish round and round at the end.

The perception that cars may not stop is clearly reflected in the high incidence of worst locations given for site seven, which is seen to be in line with the oncoming traffic. Note in this regard a similar pattern of preferences and the much lower negative response with respect to the adjoining site, which is in line with the opposite side of the street.

Sites 3 and 12 which are situated opposite one another, between the corner and the cul-de-sac, are also favoured. This is essentially because they are away from the main road and yet avoid the worst features of the corner sites and (the respondents' perception) of the dangers of the end locations.

Negative responses to these locations are generally related to the view that they are: too in the middle (surrounded by others) or that the houses are close to the street.

Accepting the different configuration of the cul-de-sac end, the overall pattern of likes and dislikes with respect to 3B is similar to that of 3A. Although site seven is rated highly as a first choice it also enjoys for the same reasons given for 7 in 3A the highest worst position rating. Almost a third of the respondents envisage cars not stopping and crashing into the house.

Sites 5 and 9 (located at the end in the corners) are with respect to high percentage of first and second choices and low worst position ratings, generally favoured. This is mainly due to the fact that they are large, set back from the street and are quiet.

From responses to the question regarding preference for the two culs-de-sac forms it is clear that both groups prefer 3A to 3B with 13,6 per cent and 31,6 per cent of row-housing and detached housing respondents respectively indicating that both layouts are equally acceptable. Only 6,6 per cent of row housing respondents indicated that neither is acceptable.

3.1.4 PREFERENCES: ALL STREET LAYOUTS

PREFERENCES: ALL STREET LAYOUTS
TABLE 4A MOST PREFERRED STREET LAYOUT

★ **ERRATUM**

		1A		1B		2A		2B		3A		3B	
		f	%	f	%	f	%	f	%	f	%	f	%
Row	N = 198	92	46,5	13	6,6	29	14,6	18	9,1	26	13,1	20	10,1
Detached	N = 19	5	26,3	-	-	5	26,3	3	15,8	5	26,3	1	5,3

TABLE 4B SECOND MOST PREFERRED STREET LAYOUT

		1A		1B		2A		2B		3A		3B	
		f	%	f	%	f	%	f	%	f	%	f	%
Row	N = 198	19	9,6	10	5,1	44	22,2	26	13,1	55	27,8	44	22,2
Detached	N = 19	2	10,5	1	5,3	-	-	3	15,8	6	31,6	7	36,8

TABLE 4C LEAST PREFERRED STREET LAYOUT

		1A		1B		2A		2B		3A		3B	
		f	%	f	%	f	%	f	%	f	%	f	%
Row	N = 198	27	13,7	64	32,4	24	12,2	44	22,3	15	7,7	23	11,7
Detached	N = 19	2	10,5	11	57,9	3	15,8	2	10,5	-	-	1	5,3

Preference patterns with respect to the six street layout options are reflected in Tables 4A, B and C.

Row housing respondents show a clear preference for 1A, at 46,5 per cent, followed by 2A and 3A at 14,6 per cent and 13,1 per cent respectively. In the case of detached housing respondents, 1A, 2A and 3A are similarly rated (26,3 per cent). Only 6,6 per cent of the row housing respondents give 1B as their first choice, and in the case of the detached housing respondents, none.

In terms of second choices: 3A, followed by 3B and 2A are moderately favoured by row-housing respondents whilst detached housing respondents favour the cul-de-sac layouts 3A and 3B.

Row-housing respondents regard 1B and 2B as the worst layouts whilst detached housing respondents clearly dislike 1B.

Although a number of clear preference patterns emerge it is also evident that whilst responses may be low with respect to the other options, these nevertheless reflect the preferences of a fair number of respondents.

3.2 HOUSE TYPE PREFERENCES

Models

To gauge preferences as to house types a model was constructed comprising pairs of three basic house forms: (A) simplex attached; (B) duplex attached and (C) single storey detached. Each of the types comprised the same accommodation, with similar scope for the addition of a bedroom and were constructed to the same scale (Figure 7).

The disposition of rooms, the extension possibilities and the position as to where a motor car could be accommodated on the site were carefully explained to the respondents. In the case of the duplex units this procedure was followed for both upper and lower floors seperately. By removing the upper floor and then repositioning it over the lower floor it was possible to show how access to the upper level could be gained by the stair.

In addition the upper edges of the boundary walls between units and the garden area were shaded on the model to clearly indicate the extent of each unit and its private outdoor space.

From the responses it is evident that the procedure followed was adequate as none of those interviewed indicated difficulties in understanding nor interpreting the characteristics of, or differences between the housing types.

Questionnaire

Respondents were asked to choose which house type they liked the most and the one they liked the least and to give reasons for their choices.

They were also asked as to whether the remaining type would be acceptable and whether the one they disliked the most would be preferable to the house in which they lived.

Findings

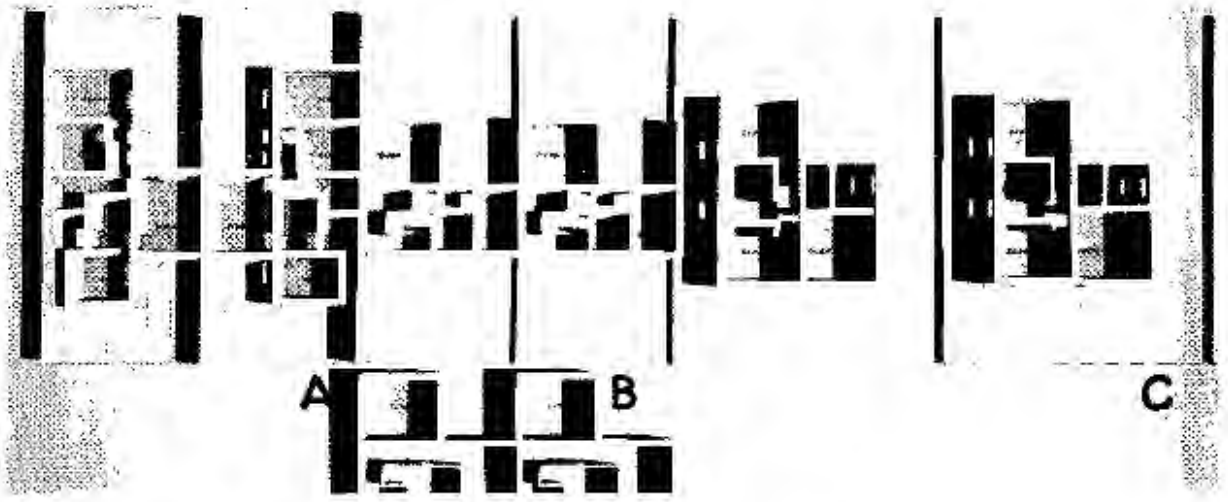
The detached house type 'C' was preferred by 92 per cent of the row-housing and all the detached housing respondents, i.e. almost to the total exclusion of either of the other two types. Only 3 of the total of 232 respondents liked the detached form the least. Reasons for liking the detached house are:

only family, no noise; can't hear neighbours; stands alone, more private; do not want to live against others; has bath and toilet in the house; has space on the sides; can walk around the house; place for children

The duplex unit type 'B' was disliked the most: 75,6 per cent of row-housing and 63,2 per cent of detached housing respondents like this form the least. It would appear that this dislike is based essentially on strong fears for the safety of children who they perceive would be exposed to the danger of falling and hurting themselves (66,5 per cent). Other reasons include: drunk people can hurt themselves; like a "flat"; too old for stairs; people will throw things on your head; "kan nie jou beeste boontoe vat nie"; or that they just don't like it.

Whilst 80,8 per cent of respondents living in row-houses indicated that the third choice i.e. not the one they liked

B, WITH UPPER STOREY IN POSITION



B, WITH UPPER STOREY REMOVED

FIGURE 7 HOUSE TYPE MODELS: A, SIMPLEX ATTACHED; B, DUPLEX ATTACHED; C, DETACHED.

the most nor least, would be acceptable, only 36,8 per cent of those living in detached dwellings replied to this question in the affirmative.

The choice as to what represents an improvement over their present position is clearer for row-house dwellers than for those in detached units. This is more clearly revealed with respect to whether they would choose the one which they liked the least over their present house: 62 per cent of those living in row houses replied in the affirmative, whilst all of those in detached units replied in the negative.

It is clear that the choices of the groups are made with reference to their present circumstances, which serve as the datum against which options are evaluated as being an improvement or not. Hence a high percentage of those living in row-houses perceive even the one they dislike the most to be an improvement over what they have at present. The opposite is true of those living in detached dwellings who show a reluctance if not total rejection of those forms, mainly because the alternatives are attached forms.

3.3 HOUSE IMAGE PREFERENCES

Photographs

In order to gauge preferences with respect to "house image" eight photographs of postcard size depicting typical Black housing were selected, mounted on a card and numbered for identification. (Figure 8).

House 1A is typical of conventional detached housing, constructed of concrete blocks and is similar to types 2A and 3A except that these are constructed of brick. House 3A is a modified version of the latter two. Houses 4A and 4B are upgraded versions of standard housing units built in Kaya Mandi, Stellenbosch, whilst 1B is a corrugated iron unit erected as temporary shelter in the same township. Photograph 2B illustrates a series of row houses similar to those built in Mbekweni. Houses 2A and 3B which are almost identical were included as an internal control measure to gauge the consistency of the responses: i.e. if choices between these and a common alternative showed a consistent pattern then it could be considered reasonable to assume that choices exercised with respect to other options would also be reasonably representative.

As each of the eight photographs illustrates typical forms of Black housing, the series can be regarded as reflecting a reasonable cross section of house types and images with which the particular group can be assumed to be familiar.

Furthermore, none of the houses illustrated falls outside the bounds of what can be regarded as "affordable" by the various income groups of the population concerned.

As at no stage were comments received to the contrary it can be assumed that respondents perceived the houses illustrated as representative of current Black housing options, with respect to type and affordability.

Questionnaire

Initially the card with the eight houses was shown to the respondents with the request to indicate which house they like the most; which house they like the least and which one they regarded as second best, together with reasons for their choices, where possible.

In addition respondents were then asked to choose between pairs of photographs: first horizontally and then vertically i.e. eight pairs, excluding the 3A, 4A, 3B, 4B combinations.

It was considered that this latter procedure would be adequate to gauge preferences, without also comparing the six diagonal pairs, or asking respondents to place their choices in order of preference. Both of these were considered to be unnecessarily cumbersome and could result in confusion. Although the latter approaches would provide a better basis for statistical analysis, this was weighed against the practical problems of respondents not being able to or losing interest in making progressively finer distinctions or just simply becoming irritated and refusing to answer any further questions. The decision was therefore based on a compromise between the ideal and what was considered to be practical.

Findings

House Image Preferences: All Photographs

Numerical data pertaining to the answers given by both groups of respondents are given in Tables 5A to 5C, together with the main reasons for their choices.

It is evident, with respect to both first and second choices of respondents living in row houses, that 4A and 3A respectively are the most favoured. These are followed by 2A and 3B. House 4B is only preferred by 4,7 per cent and by 3,3 per cent as a second choice. Houses 1A and 1B are apparently not perceived as having an acceptable 'image', whilst 2B is totally disregarded.

This pattern is again clearly reflected in the choices of respondents of detached houses where in the case of first choice only 4A, 3A and 4B to a limited extent are considered. With regard to second choices, the preference with respect to 4A and 3A are, as in the row house responses, reversed, with 3B receiving 10,5 per cent of the responses. Preference for 4B, the duplex unit, is, as in the case of row-house respondents, similarly low.

Data pertaining to the house which is liked the least shows clearly that 1B and 2B are not favoured, with 4B, although not having a high percentage negative response being, nevertheless, also disfavoured. Except for 1A and 2A which, in the case of row-house respondents, have a slight (0,9 per cent) negative response, choices 3A, 3B and 4A elicit no negative response. In the case of detached dwellings no responses are recorded for all of the aforementioned examples.

On the whole these data reflect a preference for houses 4A, 3A and 3B in order of first choice percentages and 3A, 4A, 3B in order of second choice percentages. House images which are clearly disliked are 1B and 2B and to a limited extent 4B. With respect to the latter, it should be noted that the percentage of respondents giving 4B as a first or second choice is also comparatively low.

As no restriction was indicated as to affordability it is of interest that:

* choices appear to have been influenced and tempered by the respondents' perception as to what was potentially within their financial means and
* although the double storey house was obviously the largest their generally expressed strong fears with regard to stairs and safety, obviously influenced their choice against this house.

1

A

B

2

A

B

3

A

B

4

A

B

TWELVE HOUSE IMAGE PHOTOGRAPHS.

TABLE 5A MOST PREFERRED HOUSE IMAGE

		1A	1B	2A	2B	3A	3B	4A	4B
	N = 212	1	1	30	–	55	25	90	10
Row	%	0,5	0,5	14,1	–	25,9	11,8	42,5	4,7
	N = 19	–	–	–	–	5	–	13	1
Detach	%	–	–	–	–	26,3	–	68,4	5,3

1A. Will suit me.
1B. Suits my income group.
2A. Others are too expensive/scared I will have to pay too much for the house/taste/beautiful site.
3A. Looks big/big site/place for the car/has a roofed stoep/nicely built/ stands alone/big windows/lots of play space/neighbours won't annoy you.
3B. Not too expensive/suits me/stands alone/attractive/convenient/not big windows-cannot throw things in – "tsotsies".
4A. Stands alone/beautiful/very attractive/big/can't hear what the neighbours say/private/can make a very nice garden/like the architecture/ big windows/far back on site.
4B. Big with garage/stands alone/ convenient-young people can sleep upstairs/like a double volume.

TABLE 5B SECOND MOST PREFERRED HOUSE IMAGE

		1A	1B	2A	2B	3A	3B	4A	4B
	N = 212	3	2	27	–	91	28	54	7
Row	%	1,4	1,0	12,7	–	42,9	13,2	25,5	3,3
	N = 19	–	–	–	–	10	2	6	1
Detach	%	–	–	–	–	52,6	10,5	31,6	5,3

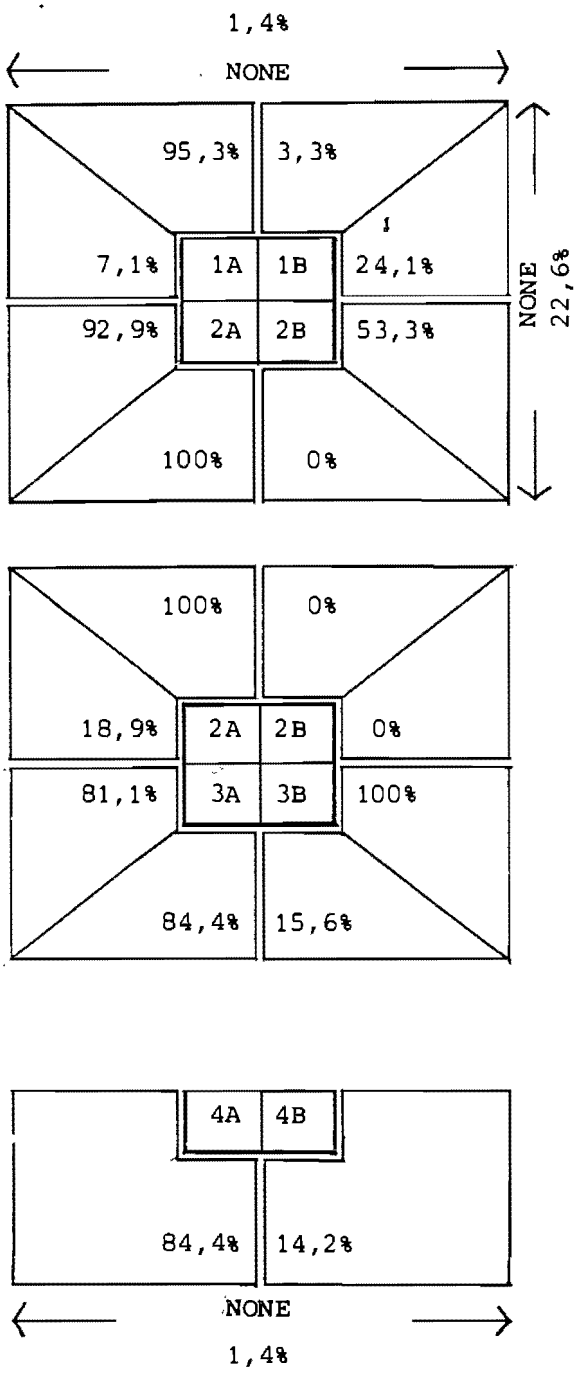
TABLE 5C LEAST PREFERRED HOUSE IMAGE

		1A	1B	2A	2B	3A	3B	4A	4B
	N = 212	2	127	2	63	–	–	–	18
Row	%	0,9	60,0	0,9	29,7	–	–	–	8,5
	N = 19	–	15	–	3	–	–	–	1
Detach	%	–	78,9	–	15,8	–	–	–	5,3

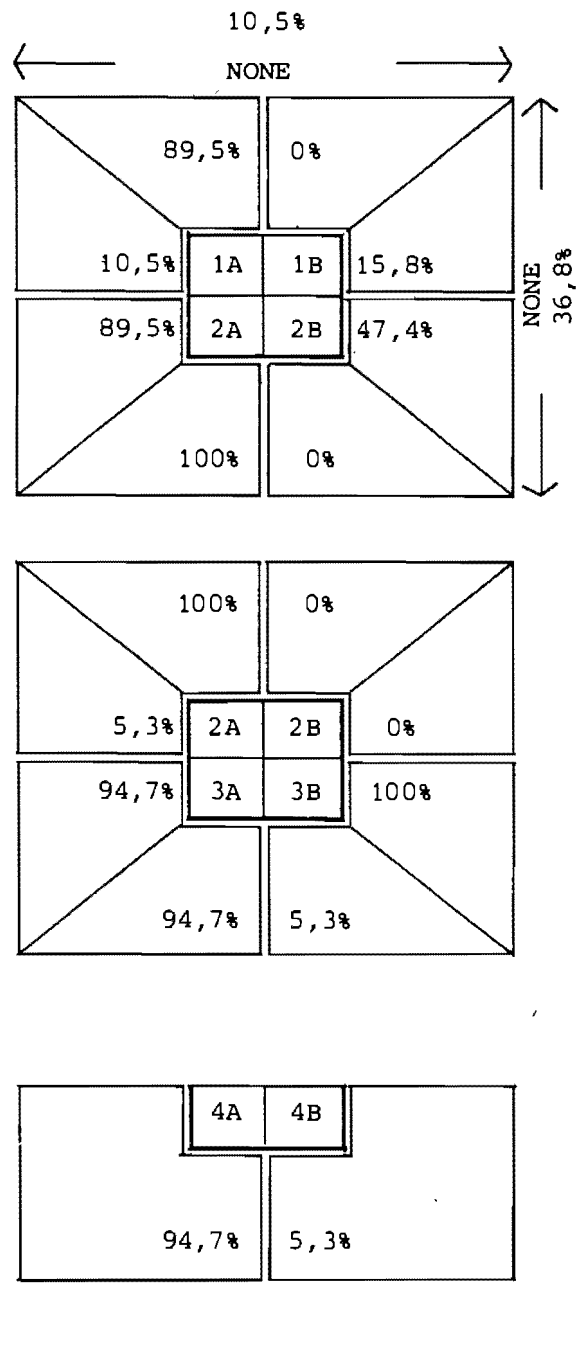
1A. Looks nice but is not nice to live in.
1B. Do not like-zinc sheets/very hot and cold/'crossroads'/burns easily/ does not look nice in towns.
2A. Rent is too high for a big house/too near other house.
2B. Attached/truck house (railway carriage) worst of all/hate the barracks/if one burns they all burn.
4B. Double storey/stairs are dangerous/ children will fall/must go up and down all the time/people can throw things from above.

House Image Preferences:
Paired Photographs:
Preferences in terms of the paired photographs are summarised diagrammatically as follows:

ROW-HOUSING RESPONSES



DETACHED HOUSING RESPONSES



The data pertaining to the paired photographs compared to the data for all eight photographs reveals similar overall preferences. However, the data for the paired photographs focuses attention on a number of important observations which are not revealed in the overall pattern.

The scores of 1A and 1B for all photographs are similar and are the lowest scores with respect to first and second choices whilst 1B has the highest score with respect to the one disliked the most. The data for paired photographs reflects a similar lack of preference, except that the paired comparison reveals for row-housing respondents 95,3 per cent preference for 1A over 1B with 1,4 per cent liking neither. In this regard the detached housing respondents, indicate a 89,5 per cent preference, with 10,5 per cent liking neither i.e. neither is acceptable. Although 1B, at 60 per cent (row-housing respondents, Table 5C) is dis-

liked the most, followed by 2B at 29,7 per cent, it is of interest that 24,1 per cent prefer 1B, the corrugated shack to 2B the row-housing with 22,6 per cent finding neither acceptable.

Comparison of the data for 4A and 4B again indicates a clear dislike of the double storey unit. The 1,4 per cent reflects those who would choose neither, (mainly because both are beyond their means).

Furthermore, comparisons between detached housing examples 2A and 3B with the row-housing example 2B, show a 100 per cent preference for the former over the latter. This is the case for both respondents of row housing and detached housing.

A comparison between 2A and 3A and 3A and 3B shows that in the former pair, 3A is preferred by 81,1 per cent and in the latter pair by 84,4 per cent. As house types 2A and 3B are for all practical purposes the same and were included in the series of eight photographs as a control measure it is reasonable to assume that as percentages relating to 2A and 2B are closely matched, that percentages relating to the other paired choices are probably also reasonably representative, as too the data pertaining to responses to the series as a whole.

On the basis of an analysis of all the data the following house image preferences emerge.

Preferred House Image

4A Substantially upgraded standard house
2A Standard detached dwelling
3B
4B Upgraded doubled storey house (Favoured by only a very small minority)

Disliked House Image
1B shack
2B Row-housing
4B Upgraded double storey house
1A Cement block house

4. DISCUSSION AND SUMMARY OF FINDINGS

4.1 STREET LAYOUTS

Although there are similarities between this study and the NIPR study of Hardie and Hart in-Mangaung, Bloemfontein (1984), certain procedural differences, and specifics relating to street layouts do not allow for direct comparison. However, certain tendencies and overall patterns are nevertheless of interest and are noted here.

	MANGAUNG: NIPR SUTDY			MBEKWENI:			
	First	Second	Sixth	First	Second	Worst	
Straight through street	28%	12%	22%	46,5% 26,3%	9,6% 10,5%	13,7% 10,5%	Row-housing (R) Detached (D)
Curved through street	11%	24%	12%	6,6% –	5,1% 5,3%	32,4% 57,9%	Row-housing (R) Detached (D)
Dead-end street	25%	23%	1[illegible]%	13,1% 26,3%	27,8% 31,6%	7,7% –	Row-housing (R) Detached (D)
		N = 84		$N_R = 198$		$N_D = 19$	

Whilst similarities exist with respect to the straight and the dead-end street forms in the case of detached dwelling respondents, there are marked discrepancies with respect to row-housing respondents. Discrepancies generally with respect to curved through streets, and particularly as to the worst rating, are even more pronounced.

Although the reasons given in both studies for disliking the curved street are similar, the Mbekweni residents appeared to be particularly apprehensive concerning the safety of this layout. As similar apprehensions are noted with respect to the traffic islands, corner sites and houses at the end of culs-de-sac, one may be led to believe, that the negative attitudes are founded on direct experience of accidents occurring in similar locations.

However, on further enquiry, the housing manager of Mbekweni informed the author that motor accidents of any form occurring in the township are extremely rare. The comparatively low car ownership figures also tend to indicate that these fears are 'imagined' rather than real.

Whether the one or the other, that these perceptions exist is nevertheless important as they can influence the range of possible layouts which would be acceptable to the residents. Even if these hazards are 'imagined', this renders them no less real, if perceptions lead to anxiety concerning the safety of children.

As children in particular have difficulties in estimating distances and speed of vehicles, discerning from the sound from which direction a car is coming and recognizing the "shape of the movement" of vehicles they are particularly vulnerable (Ward, 1979; Nel, 1985).

Although children can learn kerb drilling by rote this does not mean that they understand it or that they can apply it in practice: some 10 year olds, for example in a study undertaken in Stockholm, were unable to grasp the meaning of "keep to the left" (Ward, 1979:123).

Children are obviously a source of concern for the planner. However, if in order to offset the problems of monotony in township layout it is essential that a variety of road forms be incorporated and if perceptions are at variance with the actual intent or where these are incongruent with road designs to improve safety, it is clear that programmes such as that described by Nel (1985) should be more widely applied, so as to teach the residents how to live and survive in an urban environment and to inculcate good driving habits in motorists. Whether is be poor driving skills, recklessness or driving under the influence of alcohol or a combinations of these, there must be some justification for the perceptions of residents with respect to: vehicles swerving out of control on a curved street; crashing into traffic islands; crashing into houses at corners and at the ends of culs-de-sac, most of which are designed to reduce speed and improve safety.

Accepting the divergence of opinion with respect to choice of sites there is a need to allow residents to exercise a degree of choice as to where they would

prefer to live rather than simply allocating sites.

4.2 HOUSE TYPES

The single detached house type is preferred almost to the total exclusion of either of the two attached types. Of the latter two types the duplex unit is disliked the most, mainly on the grounds of fears for the safety of children.

Row-housing respondents are so negatively disposed towards their present accommodation that even the house type they dislike the most is perceived to be an improvement over what they have at present. Those living in detached dwellings at present totally reject both attached forms.

4.3 HOUSE IMAGE

Preferences regarding house image indicate a number of clear likes and dislikes. In regard to the latter, although the corrugated iron shack is disliked by 60 per cent of the row-housing respondents as against 29,7 per cent disliking the row-housing example, when the two types, 1B and 2B, are paired, 24,1 per cent of these respondents and 15,8 per cent of the detached housing respondents indicate a preference for the shack over the row-housing - 22,6 per cent and 36,8 per cent of row and detached housing respondents respectively, found neither acceptable. The double storey and the cement block houses are also not favoured.

Those preferred are the substantially upgraded house (4A), the moderately upgraded standard house (3A), the standard detached dwelling (2A + 3B) and by a very small minority, the upgraded double storey house (4B).

It is of interest to note that although no limitations with respect to affordability for example, were placed on the respondents, their choices appear nevertheless to be tempered by rational and realistic perceptions of what, in this case, they could possibly afford. This tempering of what one could assume to be the ideal, is similarly reflected in their replies concerning the actual number of bedrooms their family required. (Welch: 1988)

5. CONCLUSIONS

Although residents clearly prefer detached dwellings, other forms, including row-, courtyard and double storey housing, may well be acceptable if not preferred, albeit by a minority. Similarly, as regards street layout and house image, whilst certain preferences are evident, the opportunity to exercise choice as to where they would like to live and what their house should look like, is fundamental to satisfying preferences. Even though specific preferences may not always be met, that they are able to exercise some degree of choice renders alternatives more acceptable.

As reflected in the realistic perceptions vis á vis number of bedrooms required, it is clear that their aspirations are not unreasonable. Hence, even comparatively minor changes, as seen in house image 3A, to the standard house type, can alter the acceptability of these units considerably.

Arising from the study it is evident that road safety is a source of anxiety. Whilst road hazards appear to be largely imagined, as they are apparently not supported by a high accident rate, they are, in terms of the individual's perceptions, nevertheless, very real. Apart from the clearer designation of roads and sidewalks, improved traffic signage and other engineering aspects which will clarify the rights and movement patterns of both pedestrians and motorists, a road safety programme along the lines advocated by the Nel (1985) would enhance social development and improve the residents' abilities to negotiate the urban environment.

With respect to the improvement of the built environment and the quality of life of these residents it is clear that guidance and assistance, to help them achieve their objectives, is essential but the processes should not be overshadowed by ethnocentric notions of others as to what should and should not be.

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