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THE TRANSITION BETWEEN THE LATE VICTORIAN AND EDWARDIAN SPECULATIVE HOUSE IN JOHANNESBURG FROM 1890-1920

Mark Richard Hindson

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ABSTRACT

This study examines the pattern and nature of speculative housing in Johannesburg between the years 1890 to 1920. Essentially embracing the various forms of small mass housing provided for the middle-classes, three broad categories of house types including detached houses -at the top end, through semi-detached to terraced houses at the lower end of the speculative market, will be identified and scrutinised. Since the time period is relatively wide for as newly an established and flourishing town as Johannesburg -(the centre of attraction for the world's gold production at the time), and covers the South African War, the effect of the resulting fluctuating social and political circumstances, which were to inevitably interrupt and alter the course of speculative practice in the region, will be examined. The intention here is to map the preference in domestic habit before the 1899-1901 war, and to explore the new and imposed changes wrought upon the speculative house thereafter.

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D E C L A R A T I O N

I declare that this dissertation is my own work. It is being submitted for the degree of Master of Architecture in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Mark Richard Hindson

August 1987

INTRODUCTION

'... to describe an object well enough for its historic and geographic connections to be accurately and completely revealed, any material object must be broken down into its components: fundamentally, it will have form, construction, and use. Of these basic parts the most important is form. The typological and cross-cultural classification of material culture must be based on form only... Any object's form can be separated into primary characteristics (those used to define the type into which the example fits), and secondary characteristics (other attributes of the form which, though they may be culturally significant, are not of use in the definition of the type). The primary characteristics of a usual American folk house type, for example, would be height and floor plan; stylish trim and appendages, such as porches and additions, would be secondary characteristics.

'Form is of utmost importance because it is the most persistent, the least changing of an object's components...' (1)

The speculative house during Johannesburg's first and formative years -between 1890 and 1920- was not restricted to a few favoured patterns that underwent slight evolutionary refinement. Although already established housing patterns were exploited almost unchallenged in the period before the South African War, the introduction of a host of radical new ideas shortly thereafter, resulted in almost wholly new patterns and -due to conservative client/developer attitudes- also in many mutations. With these radical aesthetic injections, the rapidity with which new speculative patterns were devised or amended -either hinging around or alluding to these- typifies domestic speculation during this period.

The fact that Johannesburg's population rose from about 3000 diggers in the original mining camp to over quarter of a million by 1914, and that its boundaries were stretched to embrace an eighty two square mile area in 1903 (-just 17 years after its establishment) suggests that the town had little other clear option but to rely upon pattern, to fulfil the consequent

demand for housing.

The primary characteristic or form -which Glassie referred to in the opening quotation- of Johannesburg's first houses, rested largely on local domestic practice (evident in the several developing urban centres in Southern Africa), and on the impetus of foreign architectural sources (most notably from England) (see note (2)). As a consequence of this, in this study, an examination of contemporary architectural language and its effect both internally and externally on house form, precedes the detailed description of an appropriate series of local house patterns.

If the form of the houses depended to a large degree (initially) on local precedent, the stylistic content was more thoroughly flavoured by a strong contemporary anglo-saxon influence. The stylistic embellishment which adorned most speculative houses was subject to rapid change and capricious mixing -a factor pertaining thus to the secondary characteristics mentioned by Glassie. The earlier mid-nineteenth century battle of the styles and the later search for relevant expression as was debated in the foreign schools of architectural theory was however, not of great concern in Johannesburg. The majority of local designers who were deeply involved in the speculative market between 1886-1920 rarely displayed much insight or originality, or were indeed willing. The luxury of the time required for cultivating a design of particular relevance and vitality in the context of a tight economic discipline, such as typifies speculative housing, was obviously as constricting then as it is now.

The time period for this study is contained by the years 1890 to 1920, although it will be found that those few examples referred to which fall outside this period still bear the semantic stamp of the era. The chosen terminology ought to be clarified at this juncture: That which was built after 1886 and before 1901 will be referred to as 'late Victorian', which it was in both character and in real time, since the Queen Empress reigned

from 1837 to 1901. Almost all of the late Victorian examples illustrated and examined here, date from after 1893 -the reason being that much of the housing in Johannesburg before this date was of a temporary and rudimentary nature. That which is termed 'Edwardian' will include examples built right up to 1922, even though King Edward VII died in 1910 -as the characteristics popularised during the period of his reign, lingered on until long after his death (a ready and mass-adaptable form for the new 'modern' aesthetic born early this century being still a little way off). By the late twenties however, the traditional domestic form either became infused with alien modern ideas, which was partially responsible for the loss of some of its clear aesthetic purpose (the desecration of the 'charming rural cottage'), or the vocabulary, through repeated use, lost its vitality. It is also not accidental that the South African War (1899-1902) is the dividing line of social and architectural change here. The fact that building activity in Johannesburg was completely suspended during this period, is significant, in that it broke the late Victorian rhythm, and with the subsequent declaration of peace and ensuing prosperity, allowed 'fresh blood' into the field -had the war not occurred it is doubtful whether the break would have been as swift and clean. (3)

Having briefly alluded to the speculative house's dependence upon pattern within a specific time period, the question as to who the clients were and how their aspirations were manifested within the fabric of their homes, can best be discerned by examining that which constituted and therefore typified the bulk of houses built. Whilst describing the many 'average specimens' is one of the principal tasks of this study, the adoption of a broader perspective of this mass provision would clarify this 'middle ground'. The extremes within domestic buildings were typified by either large, tailor made houses by architects -for the wealthier or ruling classes- and therefore beyond the scope of speculative housing, or by a so

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rudimentary -working class- housing, that from an architectural point of view these different housing types and their stylistic personalities belong to the more timeless world of basic shelter. Therefore the housing to be examined here bears the unmistakable stamp of the middle classes. The category 'middle class' however, is a wide one which embraces the range, lower-middle, middle, and upper-middle classes (4), and whilst the houses of the upper-middles will be largely ignored (this group not typically inhabiting small to medium sized speculative houses (5)) the dwellings of those even slightly below lower-middle class will be embraced -since occasionally working class housing could not help but display a measure of middle-class excess, as Olsen points out:

> '...no one can expect working-class housing to reflect working-class values and aspirations. The unskilled casual labourer took whatever he could get. The skilled artisan had somewhat more freedom to choose, but far less than the middle-class householder. And much of what he had to choose from reflected not so much his own wishes as those of the middle-class philanthropist or reformer. Working-class housing in a distorted but unmistakable way reflected middle-class values as much as middle-class housing did: at its worst by sharing what they were willing to tolerate, at its best by sharing the kind of environment they wished to impose on the lower orders.' (6)

For the middle class however, the speculator aimed at sating the trenchant and largely patriachal desire to dominate -being racked by insecurity, this was manifest by the desperate need to impress others:

> 'Location, size and rent were clearly important influences on the middle-class house, yet they were most certainly not major considerations. To a large degree the choice of a house was unconscious and irrational: it 'appealed' because it seemed to give physical expression to a set of values which the occupier felt was important for him to communicate to his family, his friends, relations and society at large. Better than any other symbol the house, conferred and announced status, and to a class whose familial origins and sources of wealth might be dubious, social goals held primacy over more rational considerations of size, location and cost.' (7)

Although the term 'speculative housing' implies accommodational provision without particular instruction or client, the definition has been stretched here to include the occasional small example that was commissioned. More specifically, that which is being studied here is the

small house of between 1-5 rooms, in the price range of approximately 700 to 1400 pounds, which either adhered to conventional planning and elevational traits, or was responsible for the establishment of new patterns -in other words the forms were exploited more by the speculators than anyone else. And although alternating periods occurred in which the speculative drive clearly influenced the form of the smaller custom made houses and vice versa, it's still the speculative impetus that realised aspiration, quantitively. Thus the term 'speculative' is occasionally used in a semantic as opposed to literal way.

The nature of this dissertation is predominantly descriptive, and as already hinted at, concerns itself with the shift in taste and pattern within the ambit of man's 'creative activities' that is traditionally very conservative. The use of pattern here is a tool for communication as well as observation -a measure typical of a typological approach.

> 'Typology is the examination of the characteristic built forms of a society. The use of the typological analytical tool implies that there are basic ways of manipulating space characteristics to any society. Such forms are sometimes described as 'generic forms' as, it is argued, all built form of a given society can be traced back to these types.' (8)

A typological approach in an architectural historical enquiry is valuable for its intrinsic discipline: importantly it systemises the mass of physical evidence -a necessity brought on as a way of 'coping' with the sheer wall of historical information -the overwhelming 'density' of historical fact is something of which anybody who has spared the time is painfully aware (9). The typological approach however, far from being narrow-minded and dogmatic, essentially provides a framework which can be continually built upon: a two handed process in which imagination plays a significant part although is always guarded by fact:

> 'History is not just like a catalogue of events put in the right order like a railway timetable. History is a version of events. Between the events and the historian there is a constant interplay. The historian tries to impose on events some kind of rational pattern: how they

happened and even why they happened. No historian starts with a blank mind as a jury is supposed to do. He does not go to documents or archives with a childlike innocence of mind and wait patiently until they dictate conclusions to him. Quite the contrary.

His picture, his version of events, is formed before he begins to write or even to research. I am told that scientists do much the same. They conduct experiments to confirm their ideas. They do not sit openmouthed until an idea falls into it... Certainly we guess. We are writing to shape into a version a tangle of events that was not designed as a pattern... When an historian is working on his subject, the events or statistical data or whatever he is using change under his hand all the time and his ideas about these events change with them ...We never actually invent, though we sometimes practise sleight of hand. History, just like historical fiction, is an exercise in creative imagination, though in our case the exercise is restrained by the limits of our knowledge...' (10)

The typological framework is one in which more and more possible variations can be generated with each successive examination, indeed stimulating and inciting the imagination ...the means of a foothold to climb higher. Thus a denial of its role would, apart from stunting the formation of a base upon which future study can rest, casts a doubt as to the value of precedent or collective experience. And any assumption based on the belief that 'the new' is totally original, is a misconception, as each action of necessity therefore would have to be perpetually of 'a new world', unrelated to anything in the past -clearly improbable - 'The thing that hath been, it is that which shall be; and that which is done is that which shall be done: and there is no new thing under the sun'.

The principal 'by-product' of a typological enquiry is however, the catalogue - useful for many things, and particularly pertinent to the understanding of architectural episodes in which pattern was actively pursued. Under such a light, recognition of the manifestations derived from a tradition of pattern books (perhaps characterised by an 'idee fixe' and a host of stylistic variables) would certainly be made plain.

Of recent times the typological approach has been roundly castigated (11), the main criticism being that it is a reductive process which emphasises certain aspects to the exclusion of others. Certainly in the

sense that reductivism relates to a dependence on the manifestations or 'spin-offs' of a society, without looking at that which shaped them, is of dubious intention. But typology, if seen as a method of ordering information is not necessarily reductive, as it inherently facilitates inspections of pre-assembled material, and permits successive layering -a capacity which ultimately enhances the overall richness and complexity of a subject. And as with all hypotheses it is constantly challenged, revised and informed by the revelation of fresh material. It is a framework for study, not necessarily a set of blinkers. Apart from this, the condemnation of using pattern as a means of observing runs perilously close to anaesthetising that faculty which is tuned to spotting periods in history in which pattern may possibly have existed.

Having said all this, it is not the intention to leave this study at form alone, as aspects of its content look beyond form to that which influenced it. However, for the most part it classifies and categorises buildings -and for the benefit of the anti-typologists, this is because the growing middle-classes, many of whom were by no means totally sure of themselves, hunted for some form of identity which the pattern partially remedied -in fact exploiting it in the act of reducing the world about them to a reference framework that they could readily manipulate!

N O T E S

(1) Glassie, Henry, Pattern in the material Folk Culture of the Eastern United States. Ed. not stated. Philadelphia: University of Pennsylvania, 1968. p.7-8.

(2) Despite the growing independence of South African building practises, they were inextricably bound to foreign influence. It is thus that many quotations which pertain to foreign situations have been included in this study: They have been found to have direct relevance in South Africa (where they don't, it is discussed) and merely verbalise that which I would have said perhaps less effectively!

(3) The Edwardian period has here included what some see as an almost separate architectural era -the Union Period. Inasmuch as this era was

typified by a nationalism which thrust, most notably, Cape Dutch architecture to the fore -its application to every building type being totally unrestrained, this was an exaggerated extention to an impetus initiated even before the South African War. Other strains that may have fallen under the Union period have however not been covered.

(4) Burnett, John. A Social History of Housing (1815-1970). Newton Abbot: David & Charles, 1978. p.186. Although this is essentially a description of the British middle classes, the white South African middle classes bore a great deal in common: 'Here, then, was not a single social class, but a tier of sub-classes stretching from bare sufficiency to extreme wealth. Yet although there were major differences between top and bottom there were enough things in common to warrant a single label. Some margin of income over necessary expenditure, a strong sense of 'respectability' associated with work, sobriety, polite manners and broadly Christian observance, the ability to keep a wife who did not work outside the home and could employ some help within it, and a central deeply rooted belief that the family and the home were the pillars of a good society and of private happiness, united these disparate elements into a group ...Above all, the home, and the house which accommodated that precious institution, were of central interest and importance...' and 'At the top were the great industrialists, merchants and bankers, with incomes as large as many of the landed gentry. In the middle were the members of the professions, both old and new, the lesser factory-owners and the senior clerks, not yet elevated to 'managerial' designation. At the base were the petty tradesmen, shopkeepers and book-keepers, the little masters of sweated workshops...and the craftsmen retailers in old, unrevolutionised trades -men whose earnings were often little greater than those of skilled workers, but whose habits, tastes and aspirations set them into a world apart.' p.95. Those described as being of 'extreme wealth' have, in the South African context, been regarded as being the ruling classes and have little part in this study.

(5) The houses or housing units mentioned in this study embrace from 1-3 bedrooms, from 1-2 living or entertaining rooms, and a kitchen. The Census of 1904 relates the number of houses in Johannesburg to the rooms contained therein -and although no definition of 'room' is ventured, it seems to refer to habitable rooms (excluding the kitchen) which would include dining room, drawing room and bedrooms:

1 roomed houses	-	1 100
2 roomed houses	-	4 900
3 roomed houses	-	4 101
4 roomed houses	-	5 583
5 roomed houses	-	4 340
6 roomed houses	-	2 641
7 roomed houses	-	1 535
8 roomed houses	-	914
9 roomed houses	-	516
10 roomed houses	-	356
11 roomed houses	-	229
12 roomed houses	-	192
13 roomed houses	-	100

figures for larger houses drop off rapidly hereafter.

(6) Olsen, Donald J. The Growth of Victorian London. Hammondsworth: Penguin, 1979. p.269.

(7) Same reference as (4), p.107.

(8) Van Skaik, Leon. Personal notes made in 1977.

(9) Lewis, C.S. Fern-seed and Elephants .7th ed. Glasgow: William Collins Sons & Co Ltd., 1981. p.54. 'Each of us finds that in his own life every moment of time is completely filled. He is bombarded every second by sensations, emotions, thoughts, which he cannot attend to for multitude, and nine-tenths of which he simply ignores. A single second of lived time contains more than can be recorded. And every second of past time has been like that for every man that ever lived. The past... is its reality, was a roaring cataract of billions and billions of such moments: any of them too complex to grasp in its entirety, and the aggregate beyond all imagination...At every tick of the clock, in every inhabited part of the world, an unimaginable richness and variety of 'history' falls off the world into total oblivion.'

(10) Taylor, A.J.P. Essays in English History. 5th ed. Hammondsworth: Penguin Books. 1984. Chapter entitled 'Fiction in History.' p. 10-12.

(11) Van Skaik, Leon. Reflections on the Study of Indigenous or Self-made Architecture. Architecture SA. May/June 1983. p.36-37. 'Would it be sufficient to record a community's interaction with space and meaning in a series of plans sections and elevations? ...Many such typologies are in print ...such studies throw out as unnecessary noise the essential reality of what is there to be observed ...Reducing the world about us to a reference framework that we can readily manipulate. Leon Krier, for instance reduced the complexities of the spatial organisation of an ancient city into five house types, a street and a square and a detailing system. Clever, reductive and sterile, and yet symptomatically such acts of sleight of hand are applauded and admired... The forms are shallowly derived... (and yet that is what we bring away with us!) whereas the [true] ordering system is part of the deep culture, of the communal world's view ... that system is of greater subtlety and interest than the temporary, even irrelevant fashion-content of the physical forms... Evidently reductive observation is no observation at all...'

CHAPTER ONE

BACKGROUND TO SPECULATIVE HOUSING IN JOHANNESBURG

A. THE SPECULATOR -HIS RAISON D'ETRE AND PERSONALITY

The speculative builder, no matter how expedient his practise may seem, answers to, and provides for, one of the most basic of human needs -that of shelter. His response obviously differs in ways appropriate to his time and circumstance. In Johannesburg between 1890 -1922 however, he catered for demands which lay beyond the mere provision of basic shelter, into the realm of low architectural fashion; the type borne of imported Victorian and Edwardian middle class habits and values:

> '...to congregate about in his dwelling and domain all the means of domestic comfort, is a prominent feature of the character of an Englishman: and he there lays up his chief resources against the cares of life. His home is the depository of his most interesting pleasures, the anticipated enjoyment of which gives energy to his mind, and cheers his exertion towards the accomplishment of his undertakings: he eagerly embraces its pleasure and repose during the intervals which he can spare for recreation, and flies to it as a welcome retreat from the bustle and toils of life, when desirous and prepared to transfer them to more youthful energies. Thus the suitableness of his dwelling becomes...the measure of an Englishman's enjoyment...' (1)

Quintessentially English, and perhaps an indication of how well the English bore their 'Englishness' into foreign territory, the sentiment contained in this description, could well have been expressed by any expatriate in one of her colonies. The epigrammatic tone of much of the contemporary writing on housing which soaked into the minds of the public, was favourably accepted, not so much for its gimmick value -the

offering of a 'different and fresh' approach- but for its verbalisation of an innate human desire, and a hint of a promise for realising it. Once defined and spread amongst the wider populace, it ultimately was manipulated by the builder, in the mutually beneficial arrangement of speculation.

In Johannesburg, (as in most contemporary Anglo-Saxon developing centres worldwide), housing was in the main, a product of capitalist enterprise -most of the middle class housing being erected by the speculative builder for letting or selling with the specific interest of capital gain.

However, the two alternative, subsidised, philanthropic forms of providing housing, practised particularly in England at the time (predominantly for the working classes), were considered:

1. The first, which pertained to a form of 'staff housing', was provided for by the mining houses and on a smaller scale secondary industry [see FIGURE 1.1-1 and 1.1-2] -although, in terms of the provision of the total housing which was erected over the whole of the Johannesburg area, these efforts were comparatively minor (2).
2. The provision of housing by the Local Authorities was investigated but was never instituted. The motivation was centred around the attempt at stabilising the white (middle class) work force.

> 'By 1903 the shortfall of houses was sufficiently pronounced for the members of the Johannesburg Housing Commission to debate seriously the feasibility of working-class housing being provided by the state or local government. After careful consideration, however, the commission came to the conclusion that the situation would best be alleviated through the initiative of 'private enterprise.' (3)

The result of this was the continuing erection of mining villages which housed mainly mining families.

Because of its financial structures and small scale of operation, philanthropic housing did not influence speculative ventures in terms of

their mechanics or environmental textures to any significant degree. However, philanthropic housing was apt to set precedent in as far as the generation of new housing types was concerned. Perhaps a product of available capital and power, many of the mining houses enticed the services of influential architects such as Herbert Baker to design the houses for their senior and junior white personnel. It is thus the boundaries of 'speculation' that have been stretched a little to embrace the post South African War efforts made by such mining groups as The Corner House, Rand Mines and City and Deep Gold Mining Co. In this respect an interesting switch occurred after the South African War: many of the houses built before, barely challenged domestic norms, whilst those built afterwards, were far more innovative and became very influential in the speculative field (these examples will be examined in later chapters).

There is little evidence to suggest that the concept of speculative building was anything new to those 'uitlanders' who inhabited Johannesburg between 1890 and 1922, as it was a firmly established practice in England (for many their country of origin) as well as Southern Africa. The product of essentially industrialist circumstances, speculative building originated in England around the late 1700's, which with the growth of the middle classes, and despite the more dubious aspects of its habit, became an invaluable service. Towards the end of Victoria's reign it had become the norm. In London for example, by the end of the nineteenth century, ninety nine percent of the housing constructed was done speculatively (4). In Johannesburg the fact that so much of the housing was done speculatively, seems to verify that most of the large contingent of Anglo-Saxons living in Johannesburg, believed it to be an acceptable way of achieving a small to medium sized house.

Who were the speculators?

> '...The initial impulse..[came] from somebody who bought or leased land from one or several established families [*]. It is he who was usually called the developer, or speculator, in the narrower sense of the word. In every development there had to be somebody who had the roads laid out...and the plots parcelled out for sale to individual builders. In many cases this developer-speculator was simply the estate surveyor; in other cases a person from outside took on the job, often a builder, but members of many other professions, or of no professions at all, were found. A subsidiary role was played by architects, surveyors, agents and auctioneers, if they were not actually acting as developers. A very important person in many developments was the solicitor...especially for procuring finance for the builders. He was really the mortgage broker -the word mortgage was chiefly used for builders' credit- and his investors were all kinds of private individuals -spinsters, businessmen, or shopkeepers...' (5)

The moneyed initiators were thus not always the builders themselves -although they certainly played a massive part. The range stretched from one-off speculators '...who were drawn in by their need to realise bad debts on half completed houses or attracted by the possibility of high returns...' (6), and included people who stood outside the building trade, to those professionals whose very livelihood depended upon it -and even with this breed, the spectrum of operation (from a few houses to large portions of townships), was wide. Those contractors who took it upon themselves to speculate, were however, usually not as stereotyped as the purer strain of businessman: 'Most began with skills in an aspect of the building industry: they might be bricklayers, masons, carpenters or plasterers. They would start out in a small way doing such work as they could and sub-contracting the other trades.' (6).

B. THE SPECULATOR AND THE INFLUENCES WHICH SHAPED HIS MODUS OPERANDI

An enterprising spirit and financial backing (not always present) were indeed crucial founding assets, but the realisation and ultimate success of any venture also depended on other criteria: In order to stay commercially viable the speculative builder invariably made use of an existing house pattern or contrived one which was appropriate to the contemporary romantic 'suburban' trend -which was a compromise between

that which conformed to his, and what he perceived to be a prospective buyer's taste, and what must appear to be imminently in conformance with middle-class status. The aesthetic ramifications of these criteria, is primarily the concern of this study, although considerations of economy, legal tenure and local authority requirements which shaped the less wilful aspects of the houses' final form, will be briefly discussed.

(i) ECONOMIC

Risk was an integral part of speculative building, since, by definition the house, or row of houses was built without a client. The fact that thousands of pounds was buried in brick and mortar, must have been a daunting prospect regardless of whether the developer was small or large -very little difference when losses were incurred. Cost of course varied according to house type, but the return a landlord expected to receive on the capital invested was (in the middle of the time period under study) 13%, of which 3% represented the cost of Municipal rates, water etc. and 10% repairs, depreciation and his own profit (7). Although rented housing was the norm in Johannesburg before the South African War, a progressive reduction caused by an increase in privately owned accommodation brought the amount of rented housing down to 66.53% (of total housing in Johannesburg) in 1918, and then to 65.13% in 1921 (8). It was felt however, that the demands of the landlords was rather high:

> '...that for three- or four-roomed houses in Johannesburg in those suburbs which are easily accessible, i.e. within the distance represented by a one-and-a-half d. tram fare, from the centre of the town or from the mines, the usual rent is now from 5 pounds to 6 pounds per month. Houses in the area indicated obtainable at such a rental would not be of the most modern type, and would usually be without electric light and hot water installations. In some suburbs, which are so near the mines as to be affected by the dumps, the rent for similar houses are as low as 4 pounds per month. These rentals include charges for water and sanitary fees. Three or four-roomed houses of a more modern type cost from 7 pounds to 8 pounds per month in the inner suburbs, and 5 pounds to 7 pounds in the outer suburbs, where the additional cost of tram

fares tends to reduce rents.

...The rentals above stated show that house rent is still the most formidable factor in maintaining the high cost of living on the Rand, and that many men earning wages of 25 pounds to 30 pounds per month, who are not housed by their employers, must spend as much as a quarter of their wages in house rent. In the case of men earning wages at a lower rate the proportion spent in rent is often much higher.' (9)

In the light of building costs however, it is significant that the cost of providing housing in Johannesburg a few years after the South African War was considerably less expensive than just before, dropping on average as much as 24.5% between 1896 and 1911 (10). However, once the high risk arising from the uncertain gold yield and political instability had lessened, Johannesburg enjoyed relatively low building costs compared to the rest of Southern Africa (11). After the war, prices for all buildings had to be included on the municipal approval/submission form, and it is from these that shifts in costing can be detected (although, alas, little record of cost before 1899 is in evidence on these forms). The figures reveal a fairly sharp decrease in pricing towards the end of 1906, particularly in detached housing (average figures given):

	1902-1906	1906-1921
Detached houses:		
single storey -	1104 pounds	777 pounds[*]
double storey -	1423 pounds	1280 pounds
Semi-detached houses:		
single storey -	1083 pounds	960 pounds

[*] Figures submitted for incorporation into the Report of the Small Holdings Commission (Transvaal) 1912 by Messrs. H.Baker and Fleming indicate that the prices of several 'average' detached cottages carried out under their supervision were built for between 350-510 pounds (12).

In addition, items such as the Architect's Fee (24 pounds 15s. 6d.), supply of electric current (29 pounds 0s. 7d.), water supply (17 pounds 17s. 3d.) and ground (average 20 pounds) bring the prices up to about 441-591 pounds or 8-9s. a foot. The price of the ground represented here is low because the area being referred to was some distance from the town centre and was partially subsidised (The Hill) - prices in areas a little closer ranged from 70 pounds (Bezuidenhout Valley) to 120 pounds (Kensington) -1913 figures (13).

The population growth over this perod was considerable, rising from approximately 155 642 in 1904 to 237 022 in 1911, and to 360 000 on the Witwatersrand in 1921. The sheer quantity of housing built in order to cope with demand clearly must have had an effect on the price reduction -certain streamlining in this sector of the building industry inevitably occurring. With firmer and ever increasing sophistication in communication links, the high material costs (linked to transportation), and the far simpler house forms (and consequently their construction) that occurred after the South African War, greatly contributed to the cost decrease. Also gradual shift in the distribution of money spent in the creation of the house occurred over this period, can partly be attributed to the rise of the industrial designer and his expanding array of domestic conveniences:

> 'A notable feature of house-building at this time was the increase of the services or fittings demanded by the purchaser, which had the effect of reducing the proportion of total cost which could be given to the basic fabric. In the past, houses had not been much more than shells containing windows and fireplaces, but having almost no other equipment for heating, lighting, washing or cooking...The house was increasingly becoming a shell to contain a range of complicated services -water, drains, gas, electricity, heating and lighting systems and so on -which, some architects hoped and believed, would ultimately transform it into 'a machine for living in.'' (14)

In comparing prices either side of the South African War it ought to be remembered, that in the late Victorian period very little

'speculative' housing was erected on freehold property and thus did not include the land price. Tnis further widens the gap between the two, and serves to confirm the more moderate house prices in the Edwardian era.

(ii) LEGAL

Initially under the 'Gold Law' instated by the authorities of the Z.A.R. in Pretoria, mining camps could only be temporarily occupied and were to remain in the possession of the original owner, although with the rapid increase in population and the subsequent development of an informal community, this of necessity had to be altered. Even with this change, the principal of leasehold (of which this law was really only a particularly stringent application) w[illegible]me areas never completely relinquished -despite the intention to [illegible] blanket government and private (family) legal control, and allow for the right of individual tenure -the options for those holding land were deliberately kept open, in the hope of increasing interests.

Almost every township which comprises Johannesburg has a different history, and as to whether it was privately owned, government owned or a combination of both, or indeed if it were occupied under leasehold (long (99 years) or short term (15 years), freehold or again a combination of both, varies -even to the present day. The story of Johannesburg's establishment and growth with regard to this aspect has been documented elsewhere and will not be restated here (15).

However, in very broad terms, most of the land which was developed speculatively before the South African War was done so under some form of leasehold agreement. (It ought to be stressed that this pertains mainly to speculative housing -and does not include the dwellings of the beau monde). After the South African War, a shift toward freehold was encouraged. With relative material and political stability of the

region, the flourishing of the Building Society (which had been around before the war, but had suffered absence of customer confidence), was intimately linked to government initiative (see Report of the Transvaal Leasehold Commission (15)). Very briefly, the effect on the speculative housing market, was a proportionate increase in detached housing (an attempt at realising the aspiration for spacious and gracious living), and a drop off in terrace and even semi-detached houses. The landlord (who was generally a sub, or even a sub-sub lessor) was gradually ousted.

(iii) LOCAL AUTHORITY

Few would dispute the necessity for the establishment of an authoritative boc, in order to control the activities of a haphazard assembly of ambitious individuals interested in little else other than their respective states of well being. As was the duty of the government of the region, representatives were sent out to perform this task, although over time several replacement bodies, made necessary by either excessive growth or political circumstance occurred. Initially the governmental representative was a field cornet from Heidelburg, who was soon replaced by a mining commissioner and 'Delvers Comite'. By November 1887, control over the camp was placed in the hands of the 'Gezonheids Comite'. In 1897 what was known to the uitlanders as the 'Sanitary Committee' was replaced by a short lived and politically impotent Z.A.R. nominated town Council and Burgermeester, a move that raised Johannesburg to a 'town' status. This in turn was replaced by a military authority in 1899 (at the start of the South African War), answerable to, and taking orders from the Transvaal Republic Government based in Pretoria -thus having little or no actual (political), independent authority. After the war the town was given a nominated

municipal council by the British military administration, which was replaced by an elected body in 1903. Once established it was to exercise increasingly autonomous powers in the running of its affairs.

The responsibility for the institution and policing of the building regulations was predominantly a part of the duties of the contemporary governing body. However, in a few of the more exclusive townships, most notably Doornfontein and Jeppestown, 'in-house' regulations existed, that were independent of the ordinary governmental by-laws. Whether they were scrutinised first and given official sanction by the authorities seems probable, although this is not entirely clear. The idea of this was to entice prospective inhabitants with the assurance that the area was 'independent' of at least some statutory interference -a factor which would have bestowed an element of exclusiveness on the area. The privilege was unfortunately short lived, as Jeppestown came under the jurisdiction of the principal authority in 1889 (only a year after its proclamation), and Doornfontein (which survived a little longer) in 1897. A vestige of exclusiveness remained however with the inclusion of certain conditions into the lease or freehold agreements; which generally required of the inhabitant certain minimum standards of house construction, and curtailed the use of premises for commercial purposes, forbidding people 'of colour' to own property or reside (for the exception of servants) in the area. Instances of independent by-laws were not very common, although the insertion of conditions (or covenants) occurred quite often, even when the township had been subject to the laws of the local authorities from its inception. The first sign of formal regulation was encompassed in the mandate of the 'Gezonheids Comite' (the 'Gezonheids Regulaten voor Johannesburg' of 26 November 1887). Although comprising a mere 32 items (and only six pages), it embraced a wide range of civic law from the creation and

siting of cemetries to merchandising -the 'building regulations' formed only a small part of it. An exclusive and slightly more comprehensive set of building regulations was brought out in August 1891 which contained 45 clauses, and included items relating to drawing submission for approval structure, fire precautions, site coverage, and light and ventilation. This was updated incorporating additional clauses in 1896. Many supplements were brought out after that, for example the regulations pertaining to Electrical installations.

Building legislation can thus be said to have occurred on two levels: Firstly the self imposed requirements of a company or family, who wished to maintain a minimum 'social' standard -the effect of which tacitly determined the class of a particular area; and secondly the laws relating to minimum 'health' standards enforced by the local authorities -although obviously the former had to embrace these as well. Both impulses had precedent in England, although the latter was a manifestation of a period of social concern when the evolution of the by-laws was an almost natural consequence of the broader political 'the all may benefit' ethic...

> 'The purpose of the covenants and agreements was to control the builder, but it was up to the ground landlord or the developer whether they wanted to do so. Now the building regulations would control the speculators and landlords as well. From the 1830s onwards there had been a tremendous concern for the health of the poor, buttressed by scientific reports. Its main motivation, apart from the shame and philanthropy, was the simple realisation that contagious diseases did not respect class barriers. The ensuing demand for healthy houses for all -only one aspect of a larger health movement- can thus be seen in the same light as the earlie. demands for the fire-proofing of all houses...The byelaws meant for the lower-class house what the covenants had meant for the better-class house.' (16)

It is perhaps appropriate therefore that the 'Gezonheid Commite' was the responsible body for checking that the by-laws pertaining to building were properly observed.

(iv) AESTHETICS

a.) Aesthetics as pawn -The business game and competition.

The speculative builder was primarily a businessman and the nature of his business was to build for profit. The humanitarian response to the want of a particular society (the 'need' in this context being insufficient housing), was not the prime motivator -the 'need' was merely exploited by the speculator for personal gain. To the speculator, to produce a saleable item was to achieve his primary objective. The whole activity wasn't even necessarily centered around producing something of particular aesthetic desirability, although in most cases this aspect was intergrally related to the speculative mechanism. Although there were a few lapses in housing demand (which tended to coincide with economic slumps experienced on the Rand), between 1890 and 1922, Johannesburg was growing at a steady enough rate to have supported many speculative builders. In one sense therefore, because the market already existed, the speculator didn't need to justify his existence or 'create' a public dependency. However, the fact that it was a fiercely competitive field, to a limited extent lessened almost certain complacency and was partially responsibile for:

1) the great variety in the designs which characterised the speculative housing of the time; and

2) the change or transition that the house underwent.

Of course the process of gaining 'the upper hand' was linked to public taste, and to smell this out was a vital part of the speculator's job, '...the builder had to predict the needs and the tastes of those who were to rent or to buy his houses. On his success in doing this depended his commercial viability.' (17).

b.) Aesthetic consultants.

The 'South African Society of Architects and Engineers' was

formed in Johannesburg in 1892, very much in the shadow of the major conflict which raged in England between those who wanted to make architecture a profession to 'rank with law or medicine and those who saw it as an art form with practical application...' (18), and which ultimately resulted in the R.I.B.A. winning a professional structure and educational system. Despite the protected title and measure of integrity as well as responsibility that supposedly attended it, architects participated as much in speculative developments as ever. This confirmed those opposed to the motions' worst suspicion; the sacrifice of artistic integrity (afforded by legal sanction) favouring those of mere title. The door was open to an erosion of Architectural respectability:

> 'The architect and craftsman were now irrevocably divorced from one another; and in an industrial society the craftsman was replaced by the general contractor, who became a dominant figure in the profession -one, moreover, whose only interest was financial...For in a commercial society it was natural that 'the client' (as the patron had now significantly come to be called) -generally an industrialist or tradesman, who with rare exceptions was devoid of both taste and feeling -should want value for money and should therefore insist on evidence of his architect's ability.' (19)

The architect allowed himself to become treated as an 'ideas tank' -a slightly more up-to-date source for the speculator than the well worn pattern book. The use of the architect in the speculative field as the aesthetic consultant, appears to have been more common than is generally thought (20). Although the speculator may have as an alternative relied on a surveyor or indeed produced the design for a house himself, these efforts almost always strained to duplicate even the low creative reaches of the 'professionals'. The majority of the design work (or more accurately the drawing) was carried out by people of little 'artistic' background who were at least affiliated to the 'profession' and included people such as

draughtsmen and apprentices. The fact that the census of 1896 reported that there were 87 architects and 31 draughtsmen and the 1911 census 171 architects and 147 draughtsmen, indicates that this recognised aid to the design profession was a growing body. It is often remarked that the builders and developers were closer to their prospective house purchasers than the professionals, for they were (along with the clients) a part of the untrained and unknowing mass (21). This may be true, but does not render their effort any less shallow or unfit. Perhaps only the houses at the bottom end of the market were (somewhat ironically) less susceptible to the pretension that typified so much speculative work -for lack of money they were without the ostentation of their spurious seniors.

c.) 'Design process' and the problem of conservatism and standardisation.

Opportunity for pithy aesthetic expression in the speculative field was generally severely curtailed by both tight economic constraint and a form of conservatism based on what the speculator perceived, or misperceived to be the client's wont. Firstly, economic considerations led to the development of set patterns or types which could be used over and over again with little or no change in their configuration -the advantage of production line housing bearing a corresponding reduction in effort due to repetition.

> 'The most important factor in the overall development of the building process was standardisation. In plan and elevation it was caused by the new insistence on drawing detailed plans, even for the smallest house, where variety would simply have meant additional expense.' (22)

Generally the strategy adopted by the speculative builder was a conservative one, a factor which was directly responsible for the pervading sense of aesthetic inertia which typified so much of what

was built over the thirty years covered in this study. The slow and somewhat piecemeal progress was ultimately the cause of the many hybrids that occurred. Shifts in taste were absorbed with varying degrees of commitment; an important corollary of this was the plan and elevation, in transition, becoming considered as separate entities. Although lacking integrity, the approach was understandable: The speculator was constantly groping for what the public deemed acceptable, as it was his livelihood that was at stake every time he built anything, be it 'untried' or not -which in housing or indeed in any form of building, was an expensive risk. As he steered his way through public opinion he had to be heedful of its shift in preference -an entity that was hard to predict but which he ignored at his peril. The rate of aesthetic progress displayed in the work depended on the individual speculator and as to whether the domestic market was prospering -ironically a boom did not always mean great aesthetic strides were achieved. On the contrary, in minor boom periods the rate was apt to slow down or remain stationary, the bulk of what was built reflecting a frozen picture of its contemporary state. Most of the time however, the speculator could be seen to be in a position of perpetual compromise- between the respected, dear and 'safe' values of his public, and the necessary replacement of those ideas. His experimentation was thus tentative -trying a new type of window here or a gable or roof configuration there -if it sold then it would become part of his 'architectural' vocabulary. About the biggest step he could have taken was to have implemented a structural change (a radical, usually internal alteration which had a consequence on the exterior) -only made by those of a particularly adventurous nature. Inevitably the flock followed their lead if and when the

gamble paid off. The characteristic range that the speculative design process embraced therefore tended to stretch from a cosmetic and nervous implementation of detail to structural innovation which acknowledged a fundamental variation in the way the house was used. Quite where the confidence had its base was buried deep in the speculator's psyche, for experience in this instance could only have been of partial assistance.

The taste or preference manifested in the houses of the time was, as might be expected, distinctly of Anglo-Saxon derivation -although the larger proportion fell on the English side. The sources from which much of the speculative vocabulary was derived, was plucked from the products of particularly English architectural movements which related more to the social and spiritual needs peculiar to England than Southern Africa. Much was therefore lost in translation -the style often having to undergo a double interpretation:- firstly by the local trend setters (usually those 'in the know' -the architects), and secondly by the untrained 'designers' who were only trying to copy (in a humbler sense) the copy! 'Appropriateness' was a challenge that for some observers was never adequately resolved -the efforts of the early designers being dismissed as copyist and of the worst possible taste: '...there luxury without order, sensual enjoyment without art, riches without refinement, display without dignity' (23). In world of speculation however,

> '...the architects concept was of lesser importance, if one could speak of such a thing at all. Th overall design was usually predetermined by tradition and convention; the element of choice often lay in materials and techniques and the detailed decoration. This choice was usually made by those who were involved in the actual building, the tradesmen and craftsmen.' (24)

However, to imply that because this was an essentially imported culture, and was devoid of meaning would not be true, '...We know

that excellence in this sphere [culture] is often rooted in the particular; but its excellence derives from its ability to transcend that local origin and speak in the universal conversation which is the cutting edge of mankind's growing awareness.' (25).

What becomes clear in assessing the aesthetic realisations of speculative effort, is the careful path that must be steered between pessimistic undervaluation and the sort of exaggerated enthusiasm of the apologists. What is certain, is that if hard nosed elitist attitudes which seek to sift 'high art' from 'low art' are adopted here, much of the charm (albeit predominantly naive), and social value of the houses will be overlooked. On the other hand, some of today's perceptions suffer from illusions of grandeur, and although scrupulously scientific, attempt to intellectualise what was formerly intuitive:

> 'It is evident that some objects and images had filtered down from upper-class values, yet the persistence of many symbols... was special to [the] middle-class... and multi-layered in their implications. Though many might be dismissed as kitsch or at best, in poor taste, they were important to their owners for the values they implied. Symbols are not subject canons of good taste and carefully nurtured concepts of quality. Symbols have meaning; sometimes they have aesthetic merit. [The built environment] was not without aesthetic criteria, though its measures of quality were often different from those of other sectors of society. Rooms were valued like gardens, if they were 'pretty'; but they were valued too, if they were 'nice'. Nice was not the same as pretty, for pretty was full of charm, sentiment and sweetness, while nice was orderly, controlled: nice and clean, nice and tidy; nice and smart, nice and bright.
>
> 'To 'take a fancy to' something in Dunroamin was to express one's taste. Objects and curiosities might 'tickle your fancy', which derived from 'fantasy', [connotations of] both the fantasising about the object and the fantastic qualities within it. Meaning light, whimsical and moveable, applied or decorated, 'fancy' described the surface rather than the substance. It was the means by which Dunroamin implanted its own values in ornament on the sterile and the mass produced.' (26)

The measure of heroics contained within this postulate, obscures the real process -which was a good deal shallower than imagined -the fact that a house got built and worked at all was more a result of

an empirical and unconscious reaction to the familiar, than a considered response to the psychological ramifications of it. The fact that so much of what the speculative builder produced was 'impure' and hybridised, is proof that he had at best an extremely tenuous grasp of notional thought. That he traversed areas which had hitherto been unchartered cannot be denied, but one must not and cannot credit all speculative builders as being CONSCIOUS pioneers of a new order in aesthetic doctrine -at very best they were generally UNWITTING pioneers of their mongrel progeny.

C. THE SPECULATIVE HOUSE

Common to the various housing types under study here is the intention that they all be built as permanent units of two or more rooms, and have independent cooking and sanitary facilities -thus boarding houses, hotels and 'rooms' will not be considered. 'Permanent' will be stretched to include dwellings of a prefabricated nature i.e. prefabricated corrugated iron houses will be included, although wagons and other similar forms of temporary accommodation will not. Although the ratio of temporary to permanent dwellings was displayed in the censuses taken between 1890-1921, they were unfortunately executed by different governments using different methods of gathering and displaying information -and although the thoroughness tended to improve with time, direct comparison between them is not very easily made. Despite this, a broad perspective can be acquired. It should be noted that whilst temporary and permanent housing is not clearly defined in distinct categories, the breakdown of houses pertaining to their material constitution gives an indication:

CENSUS:

1890 - 5 230 gebouen -presumably houses, since shops, bars and hotels are mentioned separately.

1896 - 13 844 houses within a 3 mile radius of the town centre (of which 696 were uninhabited). A further 320 were in

the process of being built.
Although the figure given for the material constitution of the buildings does not correspond with the totals and includes all types of buildings, it is still a valuable indicator of proportions:

Brick and stone	- 6 770
Wood and iron, lath and plaster	- 8 116
Other types (unspecified)	- 274

1904 - 18 386 houses (of which 990 were uninhabited). A further 263 were in the process of being built.
Continuity is lost in that the figures given don't relate to number of dwellings but to numbers of people living in dwellings of a particular material construction:

Brick and stone	- 85 568
Wood and iron, lath and plaster	- 67 909
Mud and sod huts	- 172
Tents, wagons and canvas roofs	- 1 667
Other types	- 323

1911 - 19 761 houses
Again the figures relate to numbers of people residing in a dwelling of a particular material type:

Brick	- 155 791
Stone	- 7 600
Brick and stone (combination)	- 3 583
Wood and iron and brick lined	- 66 586
Mud and sod huts	- 2 258
Tents and wagons	- 1 042
Other	- 162

1918 - 23 172 houses

Brick and brick & stone	- 17 880
Stone	- 135
Concrete	- 34
Wood	- 15
Wood and iron and brick lined	- 4 900
Other types	- 208

1921 - 24 627 houses

Brick and Brick & stone	- 18 941
Stone	- 166
Concrete	- 44
Wood	- 11
Wood and iron and brick lined	- 5 370
Other types	- 95

Certain trends emerge from these figures, which display an increasing desire for permanence. For instance the figure for the wood and iron dwellings dropped slightly over time, whilst the number of brick houses grew substantially. A characteristic of pre-war housing whether it were of brick or corrugated iron was its lightness of construction. This was

related...

> '..to the carefully calculated life span of a house. In the case of many leasehold developments, life expectancy of a building was linked to the duration of lease: when the lease expired, redevelopment or restoration was envisaged. Even under the freehold system the returns from investment in working-class houses were calculated differently from those of the better houses, according to their shorter life expectancy.' (27)

It was not difficult to achieve a built-in obsolescent factor -the quality of much of the pre-war brick produced in Johannesburg was very bad. However, the confident post-war period saw a shift toward a greater owner occupation and the building fabric was of a more substantial nature; the introduction of the brick and stone combination, pure stone and even concrete houses bears witness to the fact. This was also buttressed by contemporary architectural theory which emphasised the virtues of good workmanship.

However, despite the degrees of permanence or transience they embodied, the speculative unit embraced several different types of house form. They were the detached house, the semi-detached house, the terraced house and the corner shop/house combination (although this was a permutation of the terrace or semi-detached house.)

(i) THE TERRACE HOUSE

The terrace had its origins in both the English row house -a genre which embraced the 'suburbanised' rows of the better classes in England from the seventeenth century (the development of the Georgian squares framed by elegant townhouse facades), and much lower down the social scale, the dense blocks of 'back-to-backs which were provided for the working classes at the Industrial Revolutions inception (28). What linked them, despite their many differences - was their common generic form. They all comprised a series of at least three living units (each occupied by one family) placed cheek by jowl, which were separated by 'party walls' (which ran up to above the roof plane). The party wall

not only defined the legal divide, but also served to prevent fire from spreading through the row (for this reason it was usually thick, of substantial material and could not be broken through). Each unit also had a separate entrance which was accessed directly off the street (although later a small front garden became quite common). The house or unit stood upon its own ground and not on top of another dwelling and there was generally a yard at the back. Despite these similarities the row (of the upper classes) was not entirely the same as the more common terrace. The row possessed a compositional unity which transcended mere unitary repetition. The architectural arrangeme[illegible]he plan afforded were exploited in the production of some elabor te facadal deception -occasionally mimicking the compositional traits of palace architecture.

The period in which Johannesburg developed was however, towards the end of the terrace's popular (upper class) run. Also tacit directives dropped by government and private developers alike, that the suburbs be spacious, by comprising them of many small but individual stands, had been widely adopted from the early staoes of Johannesburg's inception. Although failing to totally discourage terrace house development, it served as a reminder of how the terrace was coming to be considered -generally as an economic expedient which sought to squeeze as much out of a piece of land as possible -'They were the products of the process of investments in housing for rent-income.' (29). Of course economic justification abounded:

> '...a single cottage is a luxury...[it is] cheaper to build in rows and pairs because of party walls. In a block of two square cottages, instead of two separate buildings of the same size, the saving is about one-eighth of the total amount of brickwork required; in a block of three, one-sixth; and in a block of four, three-sixteenths...Beyond four in a block, the saving is outweighed by several disadvantages...' (30)

In Johannesburg it became normal for those who could afford it, to buy

or lease a detached house, with little consideration being given for the prospect of living in a terrace house. It was the cheaper housing form built for the lower-middle and working classes, and as might be expected the more genteel aspects of townhouse occupancy were abandoned: gone were the features of the grand English terrace with their squares containing the communal garden. In Johannesburg little or no pretense at scale was even attempted; the lavish multi-storeyed town house of the upper classes in England was avoided -and was only occasionally double storey. In the sense the lower classes tried to emulated the upper classes, the terrace house was doomed from the begining, since, its popularity and image was already on the wane in the more established centres by the time Johannesburg started to flourish. Muthesius describes the reason for their downfall and ultimate extinction in England:

> 'It is in most cases something more than that; a row has an architectural unity which provides a heightened social image and which speaks of a special achievement on the part of those who planned and built it and those who bought and rented it.
> 'The final definition of the terrace is clearly related to practical elements, as well as to social status and to architectural elements. It was, in fact, the effective combination of both which let the terrace type continue for so long. Indeed, when the two elements parted, when it was no longer fashionable to live in a terrace, and the semi-detached house took over as the most desirable type of residence, the terrace was relegated to the lower classes, and after 1920 it was largely phased out even there. Regularity was no longer the result of style, but also of economy.' (31)

The terrace-house was thus a casualty of Johannesburg's sounder future. Being amongst the first housing types to be exploited by the speculators, it was commonly found in and around the pioneering residential areas of Johannesburg -which included Johannesburg central itself [see FIGURE 1.1-4, 1.1-5, 1.1-6] -a factor which explains their scant representation on the present scene.

(ii) THE SEMI-DETACHED HOUSE

In the general history of the small house, the semi-detached principle occurred as a transitional form which lay between two major, mass produced house types -terrace and the detached house. And whilst a considerable overlap occurred, the semi-detached marked the point of decline in popular usage of the terrace, and preceded the wide application of the detached house. Architecturally the semi-detached house combined aspects of both:

> '...it gave a more rural appearance to a pair of houses than they would otherwise have had as part of a terrace. Status came into it too as they could more easily be mistaken for a single, highly fashionable villa' (32)

and socially...

> 'for the less affluent the semi-detached house 'offered white collars and artisans the chance of escape from often intrusive gregariousness of the inner suburban terraces and more than a suggestion of the detached privacy so long the prerogative of the middle class.' (33)

The 'semi' became the symbol of the freer pattern of suburbia. Apart from these factors, it also had justification on both the practical and economic fronts:

> 'The great advantage of the terrace was economy, both in land and of structure. The terrace is, however, by its nature a wall along the street -A terrace-house cannot give access from the roadway to a private garden at the rear... At first this did not matter -the eighteenth century town garden seemed to have been a place of vegetables and herbs rather than a pleasance- but as the picturesque movement began to invade the town, the public demanded pleasances with their homes. To meet this need the terrace had to be modified... The architects of these buildings used the semi-detached plan to give access to the garden...' (34)

> 'the semi-detached plan provided a more acceptable solution to the problem of access to the back door, the coal cellar, the dustbin [,the privy] and garden.' (35)

Economically, savings were effected in the reduction of materials, as for example in the shared fire-wall, although the principally economic attraction lay in the density which could be achieved -two living units per stand. In a proportionate sense therefore, the semi-detached plan became economically possible as a cheap housing form only because the

price of land was not a major consideration within the total cost (as compared with, for example, a detached house).

Although the semi-detached house comprised a pair of living units placed next to each other, which in their plan configuration were usually mirrored abou the party wall, a common variation of this was the 1/3:2/3 house, in which the accommodation was split according to a different proportion. These types were often owner built (the larger proportion being occupied by the owner, with the smaller being rented out) and hence occurred as 'one-offs', whilst the more conventionally divided semi occurred singly as well as in large batches. Whatever form they took, their siting was such that they did not usually extend the full width of the stand (for access to the back). The typical bi-lateral division extended from front to back, in which either end of the house would have been defined by a brick wall (for the front garden) and timber framed and corrugated iron fence (for the back yard). They were usually set back from the road by a small strip of garden. The side space besides the access advantage, after the First World War was used as place for a garage -if it were wide enough. One of the major disadvantages of the semi-detached house was that many of the rooms down its length had windows directly onto the access passage, which very often presented a gloomy aspect, with a corresponding lack of sunshine and privacy -a problem that was occasionally solved by making the unit only two room ranges deep, affording each an outward facing window. Once again the single storey was the more common house form.

Attempts at evading the inherent compositional duality of the semi, produced some clever volumetric manoeuvring (see late Victorian section).

'However, in its exterior expression the semi-detached house

> offered its inhabitants a rather unquantifiable bonus -each pair of 'semis' could at first glance be mistaken for one relatively commodious dwelling...In fact, a gable or ornamental parapet feature was sometimes provided in the centre of the elevation, its only justification being to further the impression of 'oneness'.' (36)

Other standard methods of disguise, such as the placing of two entrance doors beside each other in the middle, assimilating the singularity of a detached house, were employed. This particular pretence was however, later abandoned, when in the 1920's a reversal in the interests of 'honesty' resulted in the entrances being put in the further corners of the front -in an effort to maintain as great a degree of separation as possible. The semi was certainly subjected to the contemporary compositional gamut, which in some cases led to the introduction of minor gables and other features to break the main roof line -often calculated to confound the beholder by losing the fire-wall in its compositional complexity.

The demise of the semi-detached and terrace house was a corollary to the attempt made by the Government to create a far more extensive freehold situation in the Transvaal, beginning with their commission held in 1912 (37). Principally established to find fair ways of transferring freehold to the town's populace, and empowering the municipalities to control and administer town affairs, a system of rates and taxes was instituted. Levelled at the landowner, the payment due by him was based on the site value only (38). To prevent landowners therefore exploiting the situation by packing their sites with as many units as possible (and still paying the same rates as someone with only one house on an equally large stand), rates were increased according to the number of living units on a stand. Although not outlawing the semi-detached and terrace house (as the semi was to survive into the 1930's), the mechanism built into the commission's report gradually

strangled their production. It wasn't an altogether uncalculated step either:

> 'The building of two or more attached houses on one small plot of land will be discouraged by the rating of land values because the consequent deepening of undeveloped land will enable landlords to make and tenants to demand a larger provision of land to each dwelling. Very few persons prefer to live in one of two or more attached houses on a small plot rather than in a house with ample ground space. Competition between landowners will meet the natural human desire for a separate house on a separate plot.' (39)

(iii) THE CORNER SHOP

A characteristic of the pre-industrial British social condition was the integrated work and living environments -both 'activities' often carried out on the same premises. Even with the advent of the Industrial Revolution the introduction of the centralised work place or factory, home industry persisted -although it was at this point that it began its decline. The squalid conditions of the industrial towns and cities which resulted, invited reaction -and although concerned rumblings had occurred all along, practical solutions to the problem were proposed on a large scale only towards the end of Queen Victoria's reign. The Garden City movement with its promise of salubrity for all, had as a fundamental tenet, the separation of the work and living place -an aspect which was largely responsible for the large scale banishment of trades and crafts from housing developments. With its wide acceptance, just token remnants of the commercial strain were allowed to remain, becoming thus, an institution which provided for just the essential domestic necessities. Usually being geographically confined to corner sites within the urban fabric, it was initially common to find the merchant or keeper living above or immediately adjacent to his premises.

Perpetuated within Johannesburg's suburbia, the tradition made good economic sense to the speculator and developer alike, since a shop

tended to fetch higher rents than ordinary houses. The study of commercial architecture is however, a study in itself, and will be limited in this study inasmuch as it occurred in conjunction with domestic building. The corner shop was basically a form of an attached or semi-detached arrangement, in which the living unit shared a wall or floor with an adjacent shop. The conventional corner site though small (usually 50'x50') was just too big for only one shop, and although predictably a two shop arrangement occurred, examples in which the remaining space was filled with some form of living unit were particularly common in the suburban context. The frequency of the corner shop varied from township to township, although a general pattern relating to higher density areas emerged -the smaller the blocks, the more numerous the corner sites, the more numerous the shops. Although in Johannesburg's centre, many of the corners were occupied by bars -which before the war was a more lucrative trade- the corner shop benefited from the policy intended for the bars' increased profitability. '...the government ordered a survey of the town, instructions were given to provide as many cross-streets as possible, because cross streets meant corner stands and corner stands always commanded the highest prices, owing to their trading value.' (40)

(iv) FROM FREE STANDING VILLA TO DETACHED HOUSE

The fundamental desire to occupy a detached house of some form, has in western society, been a prevalent characteristic for many centuries. The fruits of this tendency were eventually to become manifest in Johannesburg's urban fabric, and it is therefore necessary to divert slightly and trace its developments (albeit the earlier stages of its realisation were almost exclusively foreign).

a.) An outline of detached house development.

Up until the nineteenth century a sort of unnatural selection

-largely determined by wealth of an individual (and family inheritance), had kept all but a few from the privilege of detached living. The emerging economic and social structures that made possible the wider availability of detached housing has been documented elsewhere (41) and will not be repeated, though a precis of the influences that were to give physical form to the commercial detached house began with the romantic idea of transplanting what was formerly the product of rural tradition, into town or city environment. In the process, the rural seat or villa underwent a considerable reduction in scale (both in its built form and encompassing landscape), but in principle remained true to the concept of the exclusive occupation of a single, self contained detached house on its piece of land. The first time this idea was utilised for the middle class (albeit upper-middle), occurred in London in 1824 in a small development known simply as Park Village East (and later extended to Park Village West). It represented the point at which the free standing villa became an Urban phenomenon.

> 'Road, houses, gardens, trees and fences are combined to make an informal picture instead of being separated into the opposites of streets and open space...It is a group of country houses situated in the town...' (42)

-a direct consequence of the romantic movement. The overwhelming response to the free standing villa which followed during the remainder of the century must also be seen in relation to what was commonly available to the 'pre-detached-house' society: The Georgian terrace, and other quite rudimentary forms of row housing were widely employed, which by contrast set detached housing on a strong footing. The irregularity of its design (initially bearing the marks of strong Picturesque influence) was a reaction against the simple repetitiveness of the terrace house. Arguments for it were as

numerous as they were eloquent:

> 'To have to live in a row of houses built by contract, all at the same time, and all exactly alike, in which it is impossible to tell your own dwelling, except by looking at the number on the door, has always seemed to me one of the chief objections to life in a town, and one of the most pathetic and aggravating of the minor troubles of humanity... I hold that by submitting to, or worst still, by rejoicing in, a tame uniformity in our domiciles, we, of our own accord, deprive ourselves of one of the highest privileges of necessities under which instinct labours... to man alone is the privilege of impressing... a stamp of individual peculiarity on his home.' (43)

Once established as a viable proposition, the idea flourished, although in the interests of streamlining its production and widening the market potential, it was subject to further physical shrinkage. Those who could not afford the extensive pleasances of arcadia, had to be content with cheaper and smaller plots and houses. With progressive honing, the notional clarity became lost, and in the larger developments where repetition was rife, the result was hardly more than strips of 'detached houses', which could hardly be endorsed as 'free standing villas'. They were still however, '...derived from, and still bore a vestigial allegiance to [their] larger and more spaciously sited prototypes.' (44). The use of detached houses developed a fluency with imperialist expansionism and the subsequent formation of military and other community settlements -a factor which to a certain extent helped to chrystalise and even influence to a limited extent the development of its form back in the motherland. And although from contemporary argument (such as by R.A.Biggs in his 'Bungalows and Country Residences', of 1891, (45)), a denial of foreign influence is presented, a xenophobic arrogance lies at the heart of the protest which obscures some truth -the bungalow was by this time most certainly becoming an international (not to say regionally flavoured) phenomenon -the aesthetic fuel of which

was beginning to be fed back and reused in other places.

Though these trends were initially firmly based in English thought and practice, America began, towards the end of the century, to address (and thereafter become particularly influential in) the methods of providing for mass detached housing for its vast middle class. Rooted deep in English precedent, the free standing villa/detached house was ultimately to assume a distinct, recognisable regional identity -in the emergence of the American Bungalow. Clay Lancaster traces the development of the 'Bungalow':

> On the bungalow design: '[on Victorian domestic work]...retained a good deal of handed down ornamentation for no greater reason than romantic adherence to lacking psychological dependence that was not quite realistic. Romanticism had to run its course before the bungalow could emerge.' (46)
>
> 'The bungalow enjoyed the same significance during the first twenty or thirty years of the twentieth century as the cottage had before it, which means that, as a style, it constituted virtually all of the detached houses built during this period.. Whereas the American cottage may be said, arbitrarily, to have come into being with the establishment of home rule in the United States and persisted up to the hegemony of the bungalow -a period of approximately 125 years- the full force of the bungalow flourished for only about one-fifth of this span.' (47)
> 'The bungalow was conceived specifically for this group [of middle financial bracket], being a house of limited size, adequate for a small family [as opposed to the terrace house which was often not even meant for this], usually fitted onto a lot of modest proportions, affording an overall effect of hominess, and with its price held down to a figure the average citizen could afford.' (48)

As to exactly what proportion of American to English influence was present in Johannesburg's speculative detached housing would largely depend on speculation -because, although, most ideas did originate in England, some obviously American, made a detour and were subjected to English re-interpretation before being implemented (overt American influence will be noted according to specific examples in following chapters). Perhaps harshly, much of what was

learned from America lay in production techniques and parsimonious method in maximising economic advantage -as exemplified by the box bungalow (see chapter 5) which was to the speculators as well as the dwellers benefit.

b.) The detached house in Johannesburg

In a broader sense the extensive use of the detached house in far flung territories such as in Southern Africa, was part of a cultural revolution that went far beyond architectural concerns -the house was just one of the pawns of a far greater movement:

> 'The single-family, generally single-storey house on a quarter-acre block was...a product and symbol of many things -a colonial and capitalist economy and polity, basic cultural values such as privacy and domesticity, the concept of private property and the family structure amongst others.' (49)

Bearing this in mind, a formal definition of a detached house (which would encompass both the late Victorian and Edwardian eras in Johnnesburg) is therefore a separate or detached dwelling, sometimes with a verandah, generally occupied by one household or family (50) and located on its own plot ,with no one living above at the side or below.

Because of its relative independence and therefore inherent flexibility, the detached house happens to be the best vehicle for displaying the formal transition that occurred in housing between 1890 and 1920. The other housing types have unfortunate and rigid plan constraints, generally dictated by tight stand dimensions (usually being crammed onto the conventional 50x100 foot plot- or multiples thereof) and allotted capital -which was small, as these were intended for those lower down the social scale. Comparatively, this shift is in the terrace and semi-detached house, a cosmetic gesture, with their internal arrangements for the most part being barely challenged (the change is mainly reflected in elevational

adornment). The opportunity to build at will, free from the many constraints which shackled the other types, resulted in the detached house being the bearer of the idiosyncratic turns of Johannesburg's political history. Ironically this liberty was treated with caution, the change it underwent occurring in a tentative and somewhat bitty fashion -more a failing pertaining to economic risk than an inherent lack of potential on the unit's part.

Despite tardy design attitudes the 'Report of the Johannesburg Housing Commission' of 1903, paints a clear picture of the detached house's wide usage, its desirability and its assured future:

> 'It must not be forgotten that in Johannesburg, with the exception of the central district within a radius of (say) one mile from the centre of the town, nearly every house or at any rate every two houses, stand on their own ground. In a new country like the Transvaal the natural desire to be self-contained, and not to be immediately adjacent to your next door neighbour, is not one, in our opinion, to be deprecated, especially when it is remembered that enormous areas of unoccupied ground surround the town, but the effect of this ideal, which may be said to be firmly planted in everyone, including the class the interests of which we have had mainly to consider must be forgotten. The greater part of the residential population of Johannesburg lies spread over a very large area, and certainly nothing like the dense conditions, prevailing in the older cities can be seen here.' (51)

With such rhetoric from a government source the continuance of the detached house was guaranteed.

D. THE SPECULATIVE ENVIRONMENT - SUBURBAN TEXTURES

(i) BACKGROUND

Johannesburg being a late arriver in the evolutionary process of mass housing provision was devoid of early industrial housing (in the European sense), and although by no means exempt from high density and unsanitary slum-like zones (the townships of the working and labour classes -most notably Burgersdorp), the middle classes slotted somewhat expectantly into what by then had become a relatively advanced,

salubrious environment. This does not however, appear to be peculiar to Johannesburg -more a characteristic of Victorian colonial suburban development: Anthony King describes the early domestic environment of Australia, which because of the late acceptance and application of ready made suburban concepts, developed as an urban nation:

> '...unlike certain cities in Britain, or much later cities of Europe, those of Australia were never, by comparison, 'industrial'. They never had an inheritance of old, pre-industrial housing... from the beginning, therefore, Australia developed as an urban nation.' (52)

Thus on a global scale:

> '...Australia, far from being or becoming a nation apart -was really one small part of an international urban, or suburban culture, created by Western civilisation. Metropolitanisation and the brief span of Australian history before 1900 gave the majority of the inhabitants...insufficient time, opportunity or inclination to develop a truly distinctive way of life. In fact the major part of Australian effort was directed towards the precise opposite -an attempt to create provincial England in the Antipodes. This process was promoted by a continuous flow of people, capital, ideas and techniques from Britain' (53)

Although relevant to Johannesburg, the parallel is not entirely consistent- divergence occurring in the understanding and interpretation of 'provincial England' -this and the introduction of a host of colloquialisms distanced local housing from its ancestors. However, explicit pointers such as the garden city movement had a profound influence (albeit slightly perverted in the Johannesburg context), and which as mentioned very broadly promoted the use of the semi-detached and detached house. The movement which initially originated from Britain owed something of its impetus to a particular speculative development at Turnham Green outside London begun in 1875 (commonly known as Bedford Park). It was a widely admired estate of red-brick Queen Anne houses in a leafy environment, with its own shops, church, club and inn. Expressing a disenchantment with nineteenth-century industrialisation, the concept shared much with

William Morris's dream of a semi-rural Arts and Crafts utopia. Even before Ebeneezer Howard formalised the idea in 1898 in his 'Tomorrow: A Peaceful Path to Real Reform' -a body of theory which outlined a model for the Garden City, the idea of suburb was being extensively exploited all over the world. Though these earlier attempts lacked the fine edge of Howard's ideas, they largely achieved the distance and hence measure of seclusion between the living zone and the noisy, dirty surroundings of the work environment. The first contrived Garden City to clearly demonstrate Howard's ideas was at Letchworth in Hertfordshire, which was started in 1903. After this hundreds of developments sprouted all over the world, all dependent on the same basic theme. In Johannesburg, pale interpretations of the concept were to be found: 'The Hill', Turffontein [see FIGURE 1.1-7 and 1.1-8] and several small mining villages embraced vestiges of their layout patterns, by incorporating geometric set pieces and broad Boulevards within their otherwise monotonous fabrics. Many of the suburbs unfortunately weren't as obviously dependent on these slighly grandiose arrangements, but tended to rely on the more traditional and cheaper grid systems. However, the influence languished in the fundamental tenet of separation and the conscious creation of a spacious environment, with the inclusion of a few select roads picked out for special treatment -usually widened and lined with with trees. Most however, sadly never really approached the creation of an environment that resembled any thing like 'provincial England'. Although some ideas were used i. was the desire for separation -both from the work place and neighbour , that was most i evidence. However, separation was merely the manifestation of the '...growing middle-class urge to escape from the congestion of the urban workplace and live peacefully in a mini-Arcadia where each family could proclaim its own identity through the medium of a detached

house.' (54). Of course later, with the introduction of more efficient urban transport the move to more far flung reaches was afforded, which entrenched the guarantee of effective separation. Nicholas Taylor delves deep into the middle-class psyche, rationalising the motivation and result of their pursuits:

> '...To the extent that it offered greater possibilities for personal privacy, the suburb testifies to the growing value placed on the 'separate individual'. All these related aspects of privacy, intricacy, cultivation and microclimate are in the end...a matter of identity -of each family's possession of its own special territory,'...'But while suburbia did not exclude eccentricity it did not encourage either romantic alienation or rebellion. It stressed the separateness of the individual more than his distinctiveness...The ordinary suburb assumed, if it did not impose, at least outward conformity of behaviour; but in its planning and in the symbolism of its architecture it tried to see to it that such conformity took place by individuals and families cut off from the obtrusive society or inspection of their fellows.' (55)

(ii) REALISATION

a.) Township layout and the block.

Most of the middle and working class townships or suburbs established before 1920 assumed a rigid layout based on the grid-iron system. Only very occasionally disturbed by an oval or square (sometimes a 'working' or market square such as Fordsburg square) the reason for the grids' employment seems to stem from one of efficiency: a prime consideration in the planning of a middle class estate was to cover the ground with as many houses as possible (in boom-towns landlords were seldom concerned with ensuring high standards of layout).

The layout of townships designed by (1.) the government differed in many respects from that of (2.) privately established townships:

1. Johannesburg centre (government planned), was laid out on a piece of almost featureless veld and conformed to a typical, almost 'dorp-standard' layout. The reason for this was:

> 'No one in official circles at the time thought that Johannesburg would ever amount to anything larger or more important than Barberton or even Pilgrims Rest...Accordingly, the width of the main street was to be only 75 feet and that of others a mere 70... Thus the future City's central area was planned as a temporary expedient and one whereby the Government would gain the maximum revenue in the shortest possible time.' (56)

-to be fair this policy was not at all uncommon, government or not. The block was square and small, approximately 200x200 Cape Feet -the theory being that this afforded more corners for bars. The stands that comprised the north/south flanks of the block comprised four 50x50 Cape Feet stands, whilst the east/west flanks were made up of 50x50's on the corners and 50x100's (usually only two) inbetween. In central Johannesburg however, it differed from the typical block to the north (in Braamfontein and Hillbrow) in that the latter were afforded a service road or sanitary lane which ran through the middle (east-west). This 'polite' facility was used for the collection of 'night-soil' and refuse as well as to provide an alternative means by which coal deliveries could be made. Its occurrence in these areas is an indication that they were probably meant for domestic as opposed to commercial purposes from their inception.

2. Turning to the block of the private estate, the most obvious difference is the considerable variation in block length, although generally it was still longer than a typical central Johannesburg block. The extra length meant that the block could be broken into more stands and less land was wasted on roads. The expense of providing for a sanitary lane also went by the board -the width of the block being thus reduced.

Although the grid pattern was seldom disturbed in negotiating topographical peculiarities, the overall placing of the grid often

took these into account and even determined the limits of the grid configuration. From the patchwork of juxtaposed grids which constitute these early suburbs [see FIGURE 1.1-9 and 1.1-10], it becomes evident that no overall town planning principle for Johannesburg existed at this time (the establishment of a Town Planning Department occurring in 1933), although plans of proposed townships showing the new streets and the general drainage had to be submitted to the local authorities. By 1903 surveyors had to submit plans to the Town Engineer of proposed new suburbs for approval. A drive aimed at uniformity (with particular emphasis on street pattern and township interconnection) was instituted in 1911, and which stipulated that all subdivisions of plots had to be at right angles to the road edge except in cases where topographical circumstances prevented it.

b.) Divisions within the block

Most of the blocks intended for middle to lower-middle class domestic use (be they of private or government stock) that wee laid out before 1906, were divided into stands (57) of 100x50 Cape Feet -or at least multiples thereof. As quite often occurred in an area where all the stands were set at 50x100 Cape Feet, the builder in the course of making a more up market house would link two stands (occasionally even four) together [see FIGURE 1.1-23 and 1.1-24]. The later suburbs intended for middle to upper-middle class housing, tended to be assessed in terms of acreage, which suggests a kick against rectilinear constraint but in most speculative development the stand tended to be tied to the module.

Initially however, Johannesburg's 'thrown together' community was loosely assembled such that distinction between areas of similar

social class were unclear. The fact that some became agitated about it led to interesting urban developments:

> '...estates are cut up into plots (always approximately the above mentioned size [50x100 Cape Feet]), and plots are sold singly or otherwise without any restrictions as to class, quality, or appearance of the houses to be erected, except perhaps for a proviso that no house built on the ground shall be occupied by [illegible] coloured people. It is therefore not infrequent for a man, who has as a pioneer built a house of considerable attractiveness both in size and appearance, to find it surrounded by a row or series of houses squeezed each on a plot of ground very little longer and very little broader than themselves -a juxtaposition, to say the least of it, exceedingly galling to the pioneer.' (58)

The early social mingling that took place was a result of both limited options and the initial groping that characterises early pioneering communities efforts. One of the ways the problem was eventually overcome was by the insertion of stipulation clauses in the leasehold/freehold agreements which according to their stringency and associated expense, would have prevented builders from taking up the stands in the first instance. Thus the system of tacitly determining the social level of a particular area's residents was developed. Interestingly Stephan Muthesius notes this prejudicial trait as it existed in Victorian England : '...the English increasingly disliked the close proximity of different classes; even the middle classes did not want to be too close to the lower middle classes.' (59) (also see note (60)) -the manifestation was probably not so much the direct cause of an importation than a universal and innate human failing. What emerged thereafter were pocket communities of similar economic status.

> 'From early newspaper reports and old photographs it would appear that each suburb had a different flavour, which could be summarised as follows: Belgravia was very select with some large villas on spacious stands (and even had a pair of gates on Marshall Street to emphasize its exclusiveness): Troyeville, with its Afrikaans street names, aimed at the urban Afrikaner middle-class: Jeppestown, with its denser mix, was the 'haven' of the thrifty artisan; Kensington, the late comer, had a mixed

but mainly middle class character in its oldest parts. The very names of the suburbs themselves given strong clues to the pretensions of each area (or lack of them) which at the same time reflected the fact that each suburb was a speculator's venture.' (61)

The nature of a particular suburb's fabric was largely dependent on the residents' social awareness and the degree to which the exclusion system had been implemented. This in turn reflected the proportional quantity of the various housing types which predominated in a particular area. In order to obtain some idea of the textures of the townships, a study of a sample area of Johannesburg has been done, and since it is based on aerial photographic survey done in 1922-23 (that alas does not embrace Johannesburg's entirety), the area is in a crescent shape skirting the city centre on its north and eastern edges (62). Although most of the townships examined were established before the turn of the century, several only really flourished after the South African War. Representing speculative township development from both eras, the fact that the house count is set by the dates 1922-23, discloses the assumption that a major portion of those suburbs developed before the turn of the century were not radically altered. Although the figures and the diagrammatic maps will communicate the quantitive feel, the actual texture (qualitative) of the built environment is best displayed pictorially and will be included in the following summary.

1: The Pre-1900 township.

1a: Middle classes e.g. Doornfontein.

Although initially attracting the more affluent members of Johannesburg's society, and thus containing many fine large free standing villas (the availability of water being a major draw card), Doornfontein quickly fell from upper class favour (being forsaken

for more remote reaches such as Parktown), and was overtaken by the middle (and even lower-middle) classes who supposed they could bask a little in its exclusiveness. The larger houses were predominantly to be found along the northern flank of Doornfontein (around Saratoga Avenue), whilst the lower and more extensive areas were densely populated. See FIGURE 1.1-11.

DOORNFONTEIN (est. 1887) (u=units)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	268	56 %
Semi-detached houses	83 (166 u)	35 %
Terrace houses	10 (39 u)	8 %
Corner shop/houses	3 (3 u)	.6 %

See also note (63) for further example.

1b: Lower-middle classes e.g. Braamfontein. Originally established by the Z.A.R. as a residential area for middle class Afrikaners, Braamfontein was one of the first extensions to the town centre (laid out in 1888). Bearing its early vintage in mind, it is little wonder that small (tertiary or backyard) industry spilled over and began to flourish within the predominantly domestic domain. The housing types are of a more thorough mix than the aforementioned suburb (terrace houses up to 22% and semi-detached up to 39% [cf. FIGURE 1.1-12 and 1.1-13]. See FIGURE 1.1-14.

BRAAMFONTEIN (est. 1889)AND WANDERERS VIEW (est. 1894)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	401	36 %
Semi-detached houses	217 (434 u)	39 %
Terrace houses	67 (250 u)	22 %
Corner shop/houses	23 (32 u)	3 %

1c: Mixed (Upper-middle, middle and lower-middle classes) e.g. Jeppestown. Again a very early suburb (although privately established) that allowed for mixed social class housing. Without the quantity of light industry as the former however, distinct zones

within its boundaries can be discerned: for example the northern strip of its eastern half was made into an elite residential area maintained by rule of minimum stand area and house budget. Other instances of better class housing occurred clustered about the extraneous urban set pieces such as the parks, whilst the remainder of the fabric was thoroughly mixed. See FIGURE 1.1-15.

JEPPESTOWN (INCLUDING BELGRAVIA) (est. 1888)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	733	44 %
Semi-detached houses	336 (672 u)	40 %
Terrace houses	57 (214 u)	13 %
Corner shop/houses	41 (46 u)	3%

A predominant characteristic of the pre-1900 speculative suburb thus lay in its mottled composition -containing all the different housing types mixed together. A consistent fabric was however not entirely unknown, particularly in the lower or working class areas such as Fordsburg [FIGURE 1.1-16], in which almost whole areas were comprised of some form of terrace housing. But in the middle and lower-middle class areas only rare isolated blocks of almost entirely middle-class detached houses can be found [FIGURE 1.1-17].

2. The post 1900 township.

Post South African War confidence certainly promoted the polarisation of the upper-middle to middle classes from the rest, with the effect that their suburban fabric tended towards monotony -being comprised of a select housing type. The pre-First World War middle to lower-middle class suburb however, still contained the full spectrum of speculative housing types -although the typical size of what had formerly been considered the sumptuous type -the detached house, in these areas was generally smaller than those of the upper-middle to middle-class suburb.

2a: Upper-middle to middle classes e.g. Berea. Despite Barney Banarto building his house in the midst of Berea, the township was divided into 1 339 stands of 50x100 Cape Feet, and largely developed on that basis -although stand consolidation wasn't unknown [see FIGURE 1.1-18]. Comprised of almost entirely detached houses, the area was the testing ground for many archetypal Edwardian speculative types [see FIGURE 1.1-19].

BEREA (est. 1893)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	721	99 %
Semi-detached houses	3 (6 u)	.08 %
Terrace houses	0	0 %
Corner shop/houses	0	0 %

2b: Middle to lower middle classes. The speculative mix of both Hillbrow [see FIGURE 1.1-18] and Troyeville [see FIGURE 1.1-11] appropriate them for this category, although interestingly Troyeville (which flourished only slightly after Hillbrow), displays a weakening in the popularity of the terrace house (that is for a lower-middle class area) in favour of a strengthening (equal) proportion of detached to semi-detached houses.

HILLBROW (est. 1894), HOSPITAL HILL (est. 1889) AND ARGYLE (est 1903)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	504	57 %
Semi-detached houses	113 (226 u)	25 %
Terrace houses	38 (153 u)	17 %
Corner shop/houses	4 (4u)	.04 %

TROYEV LLE (est. 1891)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	351	42 %
Semi-detached houses	177 (354 u)	42 %
Terrace houses	32 (133u)	15 %
Corner shop/houses	4 (4u)	1%

(See also note (64) for further examples)

After the First World War, typical middle to lower-middle class areas such as Mayfair (1889), [see FIGURE 1.1-20] and Kenilworth (1906), [see FIGURE 1.1-21] flourished (the former suffering from a long period of developmental delay), displaying divided loyalty between semi-detached and detached housing -with little to no terrace housing.

c.) Speculative development within the block.

After laying out of an estate (usually funded and supervised by the estate owners or controlling developers), several builders would take out leases usually on a number of plots, to build houses. The scale of these operations however, varied considerably, ranging from an individual building one or two houses, to a substantial building undertaking that may have developed many blocks within an estate. The speculative builder would then sell the lease of the plot with the house, or let the house himself.

Since the nature of a particular development depended on a large number of variables (three of the most fundamental being the amount of land being available, its orientation and topography), few repetitive development patterns emerged. The most obvious (and uninspired) development pattern, which occurred either side of the South African War, was a series of identical houses in a simple straight row along a street edge (be they semi-detached or detached houses). The monotony of this approach was less noticeable in late Victorian times because of the relatively rich and articulated domestic forms, but its application in the Edwardian era (with greatly simplified house patterns) resulted in a somewhat tedious fabric. Rather unfortunately this approach became the standard for a very large number of speculative developments (e.g. Kenilworth [see FIGURE 1.1-21] and parts of Berea [see FIGURE 1.1-22]). However,

many of the more 'adventurous layouts' were built in late Victorian times, and it is mainly with these that this section will concern itself. Whilst the Edwardian developments tended to be of a far larger scale and were products of an almost industrial process, the late Victorians (in Johannesburg at least) concentrated on many smaller developments, even though they utilised 'standard house patterns' the attempt at arranging them in a way that would disguise monotony was more common. The Victorian's reticence to embrace project sizes typical of Edwardian times, was probably linked to the uncertain future of the Witwatersrand. The size of the development was one of the most important factors which determined its pattern, and whilst most of the early townships were filled with relatively small scale projects (comprising 2-6 units), half to whole block developments were not entirely unknown:

Variation 1: 2-6 units, usually occupying a small portion of a block: A careful examination of the aerial photograph of a portion of New Doornfontein [see FIGURE 1.1-24], will reveal several small speculative developments. They are comprised of free standing developments, semi-detached developments and mixtures of both and are all built prior to 1906.

1a (1): linear development; single sided -no attempt made at disguising the repitition -[see line of houses labelled 'A' in FIGURE 1.1-23]. A common approach as can be seen in both FIGURE 1.1-19 (Berea -detached houses) and 1.1-20 (Mayfair -mainly semi-detached houses) isolated cases of line developments can be detected. In FIGURE 1.1-25 (stands 130-134 Kenilworth) however, the line was comprised of two house types which alternated -a small attempt made at reducing the monotony of the straight row approach.

1a (2): linear development; double sided -see cluster

of houses labelled 'B' in FIGURE 1.1-23.

1b (1): symmetrically composed arrangement; single sided -see pair of houses labelled 'C' in FIGURE 1.1-23.

1b (2): symmetrically composed arrangement; double sided -see cluster of houses labelled 'D' in FIGURE 1.1-23.

1c: asymmetrically composed arrangement -the chief motivation in this instance being the attempt to throw others off the scent of an inherent repetitiveness -see FIGURE 1.1-26 in which a relatively sumptuous formal layout, was contrived by means of combining detached/semi-detached housing in pursuit of these ends.

Variation 2: Half to whole blocks; Once again developments were seldom governed by hard rule, the blocks merely being comprised of that which an individual developer considered profitable under the circumstances. Generalities that can be gleaned from these examples include, the placing of shops (when included in the development) on corners and against the busier intersections: and where terrace houses and detached houses were built simultaneously, the terrace houses were usually placed along the busier road, with the rare exception were a preferred aspect for the detached houses overruled this tendency.

-Mayfair -development bounded by 10th Avenue, Langerman, 11th Avenue and Hanover, date: 1898 [See FIGURE 1.1-27, 1.1-28 and 1.1-29]. 'Of course developers often bought land cheaply in anticipation of building, but its value rose in line with demand, and the only way to help demand along was to build what was called a 'strategic' road, or later a suburban railway line.' (65). This seems to have been the chief motivating force behind this exclusively semi-detached development, as by 1898 Mayfair was thinly developed (and remained so until well after Union). Even the corners

were left open -perhaps meant for shops, remaining unbuilt for lack of initial local consumer support. An element of distinction was lent to the development with the remaining corner sites being treated to cranked semi-detached houses with corner turrets.

-Bertrams -development bounded by Gordon, Queen and Ascot roads, circa 1895 [See FIGURE 1.1-30, 1.1-31 and 1.1-32]. This medium sized venture is a microcosm of speculative proclivity, which is discernable on many different levels:

1. Block composition -the presence of both terrace and detached houses within the same block, was a prudent and safe spread, particularly since the area was of typically mixed social class -a strategy that could not help but satisfy at least some portion of the market.

2. Sacrifices made to achieve external effect -the layout of this block (which displays a patent attempt to squeeze the most out of the available land), endeavours to retain a respectable, regular and composed frontage ote how the designer achieves this down the shorter edge of the development, resulting in labyrinthine sanitary routes.

3. The units themselves -although originally the elevational treatment of the detached and the terrace houses was different [see FIGURE 1.1-31] -a trend which sought to make some form of distinction between the lower-middle and middle classes, they were ultimately bound by a similar aesthetic treatment -a decision which even to the present day embues the development with an eloquence that is quite exclusive.

4. Exploitation of house plan pattern -Within the houses themselves: as can be seen an extremely limited range of standard housing patterns was forced to undergo a variety of variations to accommodate the tight site constraints -a method typical of speculative exploitative measures. Subtle variations of room/passage arrangement, which gives an indication of the social standing of inhabitants of the different houses within the development -see particularly the dining rooms which were either treated as a separate entity or made to assume a circulatory function as well.

-Hillbrow -development bounded by Kotze, Quartz, Esselen and Twist streets, date: 1897 [See FIGURE 1.1-33 and 1.1-34]. Formalism was the watchword in this development which was characterised by a mirroring of the block about its east/west axis. The block comprises two types of detached houses (for the exception of the two corners onto Kotze street), the deeper more spacious types occupying the mid-block stands (50'x100'), and the squat variety being shoe-horned into the smaller square-end stands (50'x50').

N O T E S

(1) Olsen, Donald J. The Growth of Victorian London. Hammondsworth: Penguin Books, 1979. p.210. Olsen is quoting J.B.Papworth, on the importance of the home in English culture.

(2) Although 'minor', the quantity of housing erected in Johannesburg over these years renders (by proportion) this number to relatively great. Although a vast subject, philanthropic housing in terms of its financial structure was the antithesis of speculative housing, and is therefore not dealt with in any depth in this study.

(3) van Onselen, Charles. Studied in the Social and Economic History of the Witwatersrand 1886-1914. 1 New Babylon. Johannesburg: Raven Press, 1982. p.28-29.

(4) Muthesius, Stephan. The English Terraced House. p.19. For example: 'In nineteenth century London something like 99 percent of all houses were built speculatively. This meant not for a specific client, but in the hope of selling or letting when finished, and it included all types of houses, terraces and villas...'

(5) Ibid. p20. [*] For example the Bezuidenhout family, owners of the farm Doornfontein. Land was however, more commonly owned partially or wholly by estate, investment or mining companies than individual families.

(6) Ibid. p.57.

(7) Transvaal Colony, Report to the Johannesburg Housing Commission, 1903. p10.

(8) Census 1921, Section XXII, Occupied Dwellings, p.288. Section dealing with Ownership of Private Houses occupied by Europeans between 1918-1921 in Johannesburg.

(9) Report of the Small Holdings Commission (Transvaal). 1912. U.G. 51-13. p.17.

(10) White Labour Department (Transvaal). U.G. 51-12 p.13. See Table on this page indicates building material prices for 1896, 1899, 1901-02 and 1911. An average fall in price of twenty four and a half percent is shown.

(11) Same reference as (7), 'The cost of building including wages and material is high...the cost of building in Johannesburg is high compared with that of England...but compares favourably with the rest of the country.'

(12) Same reference as (10), see p.88. for a breakdown of costs for varying cottage sizes.

(13) The difference in the prices worked out from the municipal submission forms of an average speculative dwelling and H.Bakers, which is about 50 pounds, could possibly have been the speculators' rake-off.

(14) Burnett, John. A Social History of Housing. p.254. 'Lewis Mumford has caculated that in 1800 the structure alone represented almost nine-tenths of the value of the house and land. Throughout the nineteenth century there was a slow but regular increase in the amount necessary for land and apparatus, until about 1900 the curve began to take a sharp turn upwards as the house systems such as heating, lighting and plumbing became more sophisticated and costly. By the 1930's these were accounting for approximately one-third of the whole cost, and, with land, as much as half the total cost.' Although this relates specifically to England a similar fluctuation in expenditure occurred in South Africa... although due to the fact that so much of the equipment had to be imported, the effect was not as sharp.

(15) A sketch of the legal history of most of the townships in Johannesburg up to 1913 can be found in the Report of the Transvaal Leasehold Townships Commission 1912. Appendix "D" -List of Townships within Muncipalities dealt with by the Commission, containing a short history of each individual Township. p40-117. U.G.34.-'12.

(16) Same reference as (4), p.34 and p.37.

(17) Dixon, Roger and Stephan Muthesius. Victorian Architecture. London: Thames and Hudson, 1978. p.56.

(18) Service, Alastair. Edwardian Architecture. London: Thames and Hudson, 1977. p.40.

(19) Cook, Olive. The English House Through Seven Centuries. Hammondsworth: Penguin Books, 1984. p.269-271.

(20) Irving, Robert (compiler). The History and Design of the Australian House. Melbourne: Oxford University Press, 1985. Chapter entitled 'The Victorian House' by Miles Lewis p.76. -The approval forms that accompanied the plans for submission to the controlling authorities which had an allocation for the architect's name and address, in both late Victorian and Edwardian eras was filled in, in excess of 40%. Even in Australia ...'It is often claimed that this so called Boom style architecture is the work of the speculative builder rather than the professional designer, and that it is the result of decorative elements being available for purchase off the hook. But these are half truths. Architects of this period were associated with projects of even a very minor nature, and it would seem that proportionately far more houses were built by architects than is the case today.

(21) Oliver, Paul, Ian Davies and Ian Bently. Dunroamin: the suburban semi and its enemies. London: Barrie and Jenkins, 1981. p.202. 'Builders and developers were far closer to their prospective house purchasers than were the members of the design profession of the period. Though they drew from the designs of Voysey, Baillie Scott and Unwin they adapted them extensively to fit the needs of their middle-class clients.'

(22) Same reference as (4), p.30.

(23) De Villiers, R., Brooke-Norris, S. The Story of the Rand Club. 1st ed. Cape Town: Purnell & Sons (SA) (Pty) Ltd., 1976. p.8. The authors are quoting Flora Shaw of 'The Times' (1892).

(24) Same reference as (4), p.199.

(25) van Schaik, Leon. Against Regionalism. Architecture SA, March/April 1986. p.19.

(26) Same reference as (21), p.182.

(27) Same reference as (4), p.4.

(28) Ibid. p.3. As regards the history and development of the row and terrace house in England, the chapter entitled 'The common English Row house' provides an excellent background.

(29) Same reference as (20), chapter entitled 'The Australian Terrace', p.262.

(30) Allen, Gordon. The Cheap Cottage and Small House. 6th ed. London: B.T. Batsford, 1919. p.117.

(31) Same reference as (20), p.11.

(32) Quiney, Anthony. House and Home (a History of the Small English House). 1st ed. London: British Broadcasting Corporation, 1986. p.159-160.

(33) Same reference as (1) p.212.

(34) Ewards, Arthur M. The Design of Suburbia. 1st ed. London: Pembridge Press, 1981. p.32-33.

(35) Ibid. p.63.

(36) Same reference as (20), -chapter entitled 'The Federation Period' by Richard Apperly.

(37) Report of the Transvaal Leasehold Townships Commission 1912. U.G.34-12.

(38) Ibid. p.28. The first two recommendations of the Commission are the salient points in this context:
'1. That taxation of site values is the best and only available means to bring about fair and equitable terms and conditions for the conversion of lease-hold into freehold in semi-Government and private leasehold Townships.
2. That the municipalities of the Transvaal be empowered to adopt that system of rating, and to take steps to assist the stand holders to obtain freehold that we suggest in Chapter V.'

(39) Ibid. p.24.

(40) Leyds, G.A. A History of Johannesburg...the early years. Cape Town: Nationale Boekhandel, 1964 p14. Leyds is quoting F.A. Simmonds book 'The Johannesburg Story' p.52.

(41) Lancaster, Clay. The American Bungalow. 1st ed. New York: Abberville Press, 1985. p.13.

(42) Same reference as (30).

(43) Same reference as (1), p.222.

(44) Radford, Dennis J.C. The Architecture of the Western Cape 1838 to 1901. PhD. Dissertation, University of the Witwatersrand, Johannesburg, 1979. p.300.

(45) Same reference as (41), p.39. Quoting Biggs: 'A Bungalow in England has come to mean neither the sun-proof squat house of India, nor the rough log house of the colder regions. It is not necessarily a one-storey building, nor is it a country cottage. A Bungalow essentially is a little 'nook' or 'retreat'. A Cottage is a house in the country, but a Bungalow is a little country house -a homey, cosy little place, with a verandah and balconies and the plan so arranged as to ensure complete comfort with a feeling of rusticity and ease. Cheapness and economy are important factors, but they should not be obtained at the cost of substantiality and utility.' - Although Briggs in this quote refers to the bungalow as 'little country house', it is specifically in relation to the urban context -the reference

to the country here merely being a proclamation of the domestic revivalist stance which drew much inspiration from rural precedent.

(46) Ibid. p.240.

(47) Ibid p.11.

(48) Same reference as (41)

(49) King, Anthony D. The Bungalow. London: Routledge and Kegan Paul, 1984. p.23o.

(50) Ibid p.2-3. '...a 'modern' form of dwelling for a 'Western type' nuclear family, or in some cases, only one generation of it, in contrast to the more 'traditional' dwelling forms associated with the extended or joint family.'

(51) Transvaal Colony, 'Report of the Johannesburg Housing Commission 1903'. p.10.

(52) Same reference as (49), p.227.

(53) Same reference as (34), p.105.

(54) Same reference as (20), p.89. -chapter entitled 'The Federation Period' by Richard Apperly.

(55) Same reference as (1), p.219.

(56) Shorten, J.R. The Johannesburg Saga. John R. Shorten (Pty) Ltd., 1972. p.87.

(57) '...the word 'stand' is derived from the Dutch 'standplaats' meaning a parking place for wagons needed when mining, while 'erven' is the usual Dutch word for the ground on which a building is erected when not on mining-ground.' Smith, Anna H. Johannesburg Street Names -a dictionary of street, suburb and other place-names, compiled to the end of 1968. Wynberg: Juta Company Ltd. 1971. p.vii.

(58) Middleton, G.A.T. (Editor). Modern Buildings. Their Planning, Construction & Equipment. London: Caxton Publishing Company, 1907. Part III. South African Planning and Construction. Contributed by H.S. East. p.157-158.

(59) Same reference as (4), p.26.

(60) Same reference as (14), p.102. Burnett traces the desire to be separate from neighbours in England, and although this process was hardly parallelled amongst the middle classes in Johannesburg, the outcome (understood or not) was emulated: 'This physical separation from the centres of towns where business and commerce were carried on -a separation, that is, of living from working -allowed and encouraged the development of a new kind of social life. Leonore Davidoff has observed that "when leading families lived in or very near the city, their control over local politics meant that social life was ultimately tied to the governing of the city. As families moved out to prosperous suburbs, local social life centred more on charity, the arts and the marriage market". Inevitably, it reinforced the

growing separation of the sexes to the point where, for women, the centre of existence became the home as the basis of social life. It was of the essence of the new code of conduct that social interaction should be ordered and regulated by a ritual of 'calls', 'At Homes', teas, dinners and parties, and not left to possibly embarrassing chance encounters. This therefore implied that the house itself should be as separate as possible from its neighbours and, at all costs, from neighbouring areas of an inferior social status. For these reasons, terraces became increasingly out of favour as the century progressed, and the detached house increasingly the ideal; the semi-detached was a compromise solution typically employed in the inner suburbs where land costs were relatively high.'

(61) Radford, Dennis. Public and private in the early suburbs of Johannesburg. Architecture SA. Jan/Feb 1982. p.17.

(62) Note: These figures have been derived from a visual examination of an aerial survey done between 1922-1923 by the Government airforce (negatives in the possession of the S.A.D.F. archive.) The series of the following coloured-up township areas are based on this survey. The colour coding is as follows:

Red - Detached houses
Blue - Semi-detached houses
Orange - Terrace houses
Green - Vacant stands or parks
Grey - Other (including extraneous living quarters (boarding houses),commercial and institutional buildings

The backgrounds upon which these codings have been superimposed are latterday layouts supplied by the Town Planning division of the Johannesburg City Council.

(63)
NEW DOORFONTEIN (est. 1889)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	276	40 %
Semi-detached houses	126 (252 u)	36 %
Terrace houses	38 (165 u)	24 %
Corner shop/houses	1	.01 %

(64)
FAIRVIEW (est. 1896)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	124	27 %
Semi-detached houses	122 (244 u)	53 %
Terrace houses	17 (71 u)	16 %
Corner shop/houses	12 (18 u)	4 %

WOLHUTER (est. 1894)

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	38	16 %
Semi-detached houses	61 (122 u)	51 %
Terrace houses	18 (75 u)	32 %
Corner shop/houses	2 (3 u)	.1 %

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Corner shop/houses	2 (3 u)	.1 %

MALVERN WEST

HOUSE TYPE	NUMBER	PERCENTAGE OF TOTAL UNITS
Detached houses	43	48 %
Semi-detached houses	23 (46 u)	52 %
Terrace houses	Ø	Ø %
Corner shop/houses	Ø	Ø %

(65) Same reference as (4), p.20.

CHAPTER TWO

JOHANNESBURG BEFORE THE SOUTH AFRICAN WAR

Before the South African War, Johannesburg was for most of its populace, an uncomfortable place in which to work and live. The living conditions and services in most townships were rudimentary. Predictably the exception lay with the governing and upper middle classes (at the one extreme), who had established themselves relatively fast -almost living in the manner to which they were accustomed. At the other end however, working class life was impoverished, with extramural activities and family life for most, being for the most part non-existent:

> '...it's worth noting how overwhelmingly male dominated the town was through the period leading up to the South African War. Initially uncertain about the economic future of the goldfields, and later about their political fate as 'uitlanders' under the Kruger regime, Johannesburg's immigrants were for many years extremely reluctant to commit their wives and children to a settled life on the Witwatersrand. This together with the expense and difficulty of getting to the Transvaal before the rail link with the Cape was established in January 1893, meant that early Johannesburg was largely devoid of working-class family life. Thus, while a few of the wealthy mine owners and a section of the middle class soon set up home on the Rand, the large majority of workers had to be content with considerably less...' (1)
>
> '...You have simply to walk through the wage earning districts of the town to see the numerous working-class dining rooms; you have simply to try and find a workman at home in Johannesburg, to discover that his home is only a bedroom, which he generally shares with a fellow workman, and that family life -upon which the state is built -may be said hardly to exist amongst great sections of the population. Men rent beds not houses in the Golden City.' (2)

Whilst initially what was to become the lower middle and even sectors of the middle classes, vacillated between the two (though most shared some of

the uncertainty and hardship of the working classes), towards the turn of the century they began to emerge as a more distinct community whose standards of comfort and living rose above mere boarding house existence, to semi-detached or at least terrace house occupation.

Initially domestic needs were fulfilled by structures that mostly belonged to the category of 'temporary accommodation'. These ranged from tents and wagons, and later to simple timber frame structures clad in sheet metal and even of packed daub, which were followed by alternative forms of accommodation such as rudimentary hotels and boarding houses. The history of the self sufficient living unit in early Johannesburg, most probably began with small simple structures such as the one room wide and two to three rooms deep house ([see FIGURE 6.2-14] approximating to what the Americans termed 'shot gun houses') which was placed right against the road edge. The walls were of sun dried brick of clay and cow dung and the floors of the same material only compressed (3). Roof covering was usually of zinc (thatch was outlawed very early on because of the fire risk). Some of the transportable dwellings of wood and iron, were considerably more sophisticated in plan, (their format based on that of the 19th century cottage plan complete with an axial passage down its length -for further discussion on this type see late Victorian archetypes). For all this the town still resembled a camp. The gridiron layout didn't help in any way to soften the sickness of its crude fabric. Living and commercial areas tended to be mixed (particularly central Johannesburg and Marshallstown), although some townships of an exclusively residential nature were soon established (e.g. Doornfontein (1887), Jeppestown (1888)). The initial absence of suitable transport also meant that the different townships were densely packed and clustered close to the town centre. Thus the mass adaptation of a form of the more contrived, genteel and aesthetic 'garden suburb' was only fully exploited (and fuelled with the advent of a clearly

emerging middle-class) after the South African War, (even though many of these areas were confidently laid out before the turn of the century).

Johannesburg's periods of greatest economic growth tended to coincide with the most noticeable investment spurts in the mining industry. These dates occur in 1888-9, 1895 and 1899 (4). As usual, the building industry experienced its minor booms a short time after, most noticeably between 1892-1895 (5). This has a noticeable effe t on the way houses were constructed from then on. Less of the small temporary daub shelters and sheet iron structures were built and more permanent and clearly mature housing patterns from the Cape and Natal were used. A slump occurred during the years of 1897 and 1898 (6), which amongst other factors was due to the high price of machine made bricks and cement (which was largely under the control of the mine owners). As might be expected, the first 'permanent structures' to be built for the working classes were somewhat basic accommodational facilities -boarding houses, rooms, and errace houses. It should be noted that the financial infrastructure which greatly facilitated the growth of housing for individuals in the post South African War era, was not yet fully developed. In this respect the risk before the war was mainly borne by developers and landlords, and the middle-class lived under a blanket rent system.

Dates of selected influential events (7):

1886	April 12	George Walker and George Harrison obtain permission to prospect for gold on the farm Langlaagte owned by Gert C. Oosthuizen.
	September 8	Public diggings are declared on Driefontein, Elandsfontein, Doornfontein, Turfontein, Langlaagte, Randjeslaagte, Roodepoort, Paardekraal and Vogelstruisfontein.
	October 4	Randjeslaagte proclaimed a village of stands.

		The name Johannesburg was used for the first time the previous day.
	December 8	Auction sale of first stands to become available in the Johannesburg central area.
1887	June	Second sale of stands on the site of the now-abandoned mining claims in the central city area.
		Sanitary Board replaced Digger's Commitee during this year.
1888		Formation of the Johannesburg Lighting Company.
		First telephone installed on the Rand by Hubert Davies.
	January 16	First Johannesburg exchange opened by J.W. Sauer.
	June 23	Piped water delivery to homes turned on in Johannesburg for the first time.
1889	April	Sigmund Neuman obtains a concession from the Kruger government to establish a tramway system network.
1891		Three-and-three-quarter miles of tramway track were opened with the termini being situated at Fordsburg. These were horse trams and were only replaced by electric powered trams in 1906.
1892	June 23	Gas supply begins from Gasworks at the lower end of President Street. This plant continued production until 1928 when new works were erected in Cottesloe.
	September 14	First Cape train reaches Johannesburg.
1894	November 2	Johannesburg to Lourenco Marques line opened.
1895	December 16	Johannesburg to Durban rail link opened.

1896	January 2	Jameson defeated at Doornkop and captured with most of his troops.
1897	September	Sanitary Board replaced by Z.A.R. nominated Town Council and Burgermeester. Johannesburg raised to 'town' status.
1889	October 11	Outbreak of hostilities Britain and the Z.A.R.
1900	May 31	Johannesburg surrendered to the British as Dr. Krause hands the keys to the city to Field Marshal Lord Roberts.
1901	January 22	Queen Victoria dies. Edward VII assumes sovereignty of the British Empire. First nominated Town Council of Johannesburg.
1902	May 31	Treaty signed at Vereeniging. Hostilities officially end. Boundaries of Johannesburg increased from 5 square miles to 75 and a half square miles.

N O T E S

(1) van Onselen, Charles. Studies in the Social and Economic History of the Witwatersrand 1886-1914. 1st ed. Johannesburg: Raven Press, 1982. p.5.

(2) Ibid. p 27. Quote by James Ramsey MacDonald.

(3) Kunsgeskiedenis, Department van. Projek: Opname Historiese Geboue in Johannesburg. Tweede verslag. Rand Afrikaanse Universiteit, 1976. p.13 and 14.

(4) Same reference as (1), p.2.

(5) Ibid. p 19. '...the number of plans which the Sanitary Board approved for construction rose from 1200 in 1894 to over 2 500 in 1895...'

(6) Ibid. p 19. '...the number of plans approved by the sanitary board fell from 1 500 in 1896 to over 1 000 in 1897 and then disastrously low 440 in 1898.'

(7) This list is based on the chronology compiled by Franco Frescura and Dennis Radford in 'The physical growth of Johannesburg -A brief survey of

its development from 1886 to date' -Outline of a paper to be presented to the Urbanisation Conference, South Africa Institute of Race Relations: October 1982.

CHAPTER THREE

THE LATE VICTORIAN SPECULATIVE DWELLING

The interminable gap that exists between theory and practice, is the basis for this chapter's two part division: the first deals with aspects of a general and abstract nature, such as Victorian preference, and since there was no formalised body of theory to which the Victorian speculators adhered, this is largely based on fragments of contemporary thought and the pervading empirical methods born of particular social demand. Although not attempting to define an archetype, it addresses favoured late Victorian procedural tactic. The second part surveys the manifold variety of common house forms built in Johannesburg and the extent to which they depended or challenged the tenets of the first part. In some cases a 'walk around' a particular example will be described.

3.1 PART ONE -A Background to Victorian Preference

The census taken in Johannesburg in 1896 (1) gives some indication as to the proportion of temporary to permanent dwellings found in the areas in and around the town centre: in Johannesburg itself (defined as the area under the jurisdiction of the Sanitary Board), 5194 buildings (of all types) were of brick and stone, and 5440 were of wood and iron, or 'latten en klei', with 26 of 'other sorts' (presumably canvas or wagon accommodation.) Of the areas not under the sanitary board's authority, 1576 were brick and stone with 2676 being wood and iron etc., and 248 other

sorts. Although these figures include commercial and institutional buildings, the larger part of this will have been taken up by housing. Clearly, though many of the shelters that the inhabitants lived in were of a rudimentary nature, the permanent dwelling by this time had become the norm. Although the plan types dealt with here start on a level slightly above the rudimentary shelter most tend not to be direct descendants of these, but appear to have arrived in a semi-developed state from elsewhere. The influx of people from established urban locations such as Barberton, Kimberley, Durban and even Cape Town inevitably resulted in the importation of housing forms familiar to these areas. Where funds permitted more than mere shelter, these dwellings were often copies of the tried-and-tested variety -although predictably modifications were made quite soon after their use to suit the particular requirements of the new environment. This factor relates to an interesting point of difference between late Victorian house in Johannesburg, which initially depended entirely on external though locally based practise, and the Edwardian house in Johannesburg which (although by no means free from foreign input) took the lead in influencing modern housing within the rest of the country after the South African War.

A. STYLE

'On the whole, the architectural design of the facade and the planning of the house were two very different concerns. Only occasionally did problems of the relationship between the two arise. What mattered above all was the overall composition of the front, based on notions of order and composition [and style]...' (2).

(i) THE INFLUX AND DEVELOPMENT OF STYLE AND TECHNOLOGY.

The importation of ideas which influenced the late Victorian house occurred at two levels: 1. In the minds of the immigrant designers (be they local or foreign) -an importation of a tradition rooted in another geographical centre; 2. On a shallower plane, where ideas 'acquired' were from other independent sources (commonly transmitted through the vehicle of the popular publication).

The plan of a particular housing type was usually a relatively stable component (often a product of the first level) which changed very slowly, whilst the elevations were more vulnerable to the whims of capricious fashion (often a product of the second). It is worth noting at this point that initially, adoption of a particular plan type was usually extended to include the current array of 'applique' or elevational adornment -although it was this that was apt to change a short time after, without necessarily having a corresponding variation in the plan.

The publication however, did not only transmit information about fashion, but was instrumental in the spread of knowledge about architectural theory and practice. As pointed out by Dennis Radford (3), these occurred in three basic forms: The first was the architectural theory/history book which was aimed at the professional architect -not being as superficial as the pattern book, its contents were of a rather more erudite nature: The second group embraced technical matters, and were meant primarily for the tradesman -a role which substantially helped in establishing standards for quality of workmanship, and the spread of new developments in building technology: The third and by far the most influential type, was that of the pattern book. 'The pattern books which were published by many of the less successful architects of the early decades of the nineteenth century in the hope of attracting custom, often displayed 'elegant villa's' which, without change of plan or general form, could be erected in the Grecian or Gothic manner' (4). Although it is claimed that this type had exhausted its use by the 1880's, to the speculator it took on a new guise (still maintaining the 'ideas lexionary' principle) with the advent of the journal. Serving '...the layman and colonial architect alike, they provided a basis upon which a fashionable house might be

achieved' (5). Magazines such as 'The Builder', 'The Architect' and 'The Illustrated Carpenter and Builder' although overseas publications were in evidence in this country. 'The Illustrated Carpenter and Builder' for example was not as classy or 'high-minded' as most, dwelling less on architectural theory than with practical concerns -the straight forward application of style-to-building and the issue of building-to-site. It was a cheap (the English price being one penny) weekly magazine which found a market particularly amongst small builders, 'superior artisans' and speculators and incorporated plans, specifications and detail costs of buildings (5).

(ii) COMPOSITION AND THE QUESTION OF STYLE

> 'The pace of change was so rapid and erratic that it cannot really be treated as a logical development. Fashions overlapped and conflicted with one another, each phase was preceded by much earlier examples and accompanied by survivors of older styles and there were extraordinary instances of individuality which cannot be fitted into any scheme. All that can be said is that the impulse behind the whole of this frenzied activity was, consciously and unconsciously, emphatically romantic and Picturesque.' (6)

Thus style was seldom consistent within a given unit, i.e. that which was employed rarely displayed allegiance to one specific style within the historical spectrum (or even to a revival of a revival of a style!). When on occasions details did pertain to a single stylistic strain, consistency was generally sacrificed in the flagrant disobedience of its inherent order. Amalgamation of the various styles (or their revivals) was the common approach to elevational embellishment. The question must then be asked: 'What were the designers attempting to achieve if 'scholarly' consistency was of little concern?' -as to many their attempts were merely vulgar...

> 'They have no connection with architecture in the sense of that word as building art; forms and ornament are merely there in order to impress: what the whole crushing image expresses is the combative attitude of the Victorian materialist and its triumph

over inherited canons of taste,' (7)

-but to dismiss it on these grounds is to fail to recognise the motivating impulse. Style was here of secondary concern to compositional directive, and though initially perceived on a detail level it lacked coherence, the overall impression was the important factor. Although the idea was initiated in the late eighteenth century, it flourished during Victoria's reign, with the advent of the free standing villa becoming available to a far wider group.

> 'An architect who was designing in the picturesque idiom was principally concerned with what the building looked like ...whether it fitted into the landscape, whether its horizontals and verticals mixed in an irregular but balanced composition, whether its light and shade were nicely contrasted. His attitude to style was an eclectic one... But the picturesque approach influenced the way styles were used; total symmetry went out of fashion ...even for a classical house.' (8)

The origins of Victorians' use of the picturesque in their domestic work, lay in the late Georgian cottage-orne; Nash's Blaise Hamlet and Wyattville's Cottage, being influential in their embodiment of the picturesque technique; picturesque composition being based on a combination of horizontals and verticals, mixed asymmetrically but with an approximate balance, building up to a dominant central feature. But these strayed from the norm in one major respect (and one which gave the Victorians their lead): the horizontals and verticals were supplemented by a riotous conglomeration of diagonals -a tendency that was essentially alien to Georgian composition (9).

> 'In an age terrified and alarmed by the horrors of industrial urbanism...the Picturesque became a form of escapism...The cottage orne in particular, which had been originally conceived as a pretty pictorial embellishment of the landscaped park, was now viewed through a haze of sentimentality and cultivated as a symbol of rural felicity.' (10)

The picturesque was par excellence the image of the Victorian suburb, an anti-civic aesthetic which rejected the unified string of domestic units, and 'preached instead the gospel of individuality.'

It should be noted that the development of the picturesque concept took place in England, and its use in Southern Africa at best only shadowed this evolution. Certainly much was lost in colonial transposition. Just as the notion of the 'free standing villa' became watered down to the pale 'detached house', so the compositional ideas embodied in the picturesque 'pile' became eroded until their complexity was reduced to mere asymmetry. Alas, in the speculative field, very few examples attempt full-blooded volumetric, picturesque composition (expense probably preventing it), but ironically display the characteristic stylistic confusion which was always of secondary importance.

In essence the domestic revival continued to seek to create the comfortable 'cottagey style', (insomuch as it is a 'style' at all) begun in the eighteenth century, but for a wider patronage. Although making wide use of the picturesque compositional principle, symmetry was never forgotten -since not everyone subscribed to the picturesque. Partly associated with persisting classical trends, and partly out of a reluctance to part with a preferred aesthetic principle -for its use was by no means bound to the classical style- it held its ground right through the late Victorian era and into the Edwardian times -where it once again dominated. Symmetry or asymmetry, in the cause of conjuring up the requisite image, pieces were pilfered from Italian, Elizabethan and Gothic styles and placed adjacent to each other. To the speculator the whole issue of the battle of the styles (assuming moral attitudes in higher architectural circles in England) was of little importance -Johannesburg was developing far too rapidly.

a.) Gothic

The Gothic style by the time Johannesburg was being established, had passed from favour (the High Victorian Gothic style having

flourished in England in the middle of the century). Even in England the use of Gothic in the speculative field was rare (11), and considering the scant availability of craftsmen, materials and the sheer cost of its institution, reduced the likelihood of it ever being employed in Johannesburg. A few extraneous details were to be found in these buildings of Gothic origin but their inclusion seldom amounted to anything resembling a consistent Gothic aesthetic. Elements such as the steep cottagey roof (accompanied by a gable of equally severe pitch), the flat segmented arch, the pointed arch and a preference for slenderness within a composition were the closest speculative design got to the Gothic style. [see FIGURE 3.2-17, FIGURE 3.1-17 -gable, FIGURE 3.2-13 -motifs in fretwork duplicating tracery, FIGURE 3.1-20 -gothic window and FIGURE 3.1-28 -bay window]

b.) The 'Queen Anne' Revival and Eclecticism

Initially the style was a mixture of of Dutch (particularly the gable) and even Gothic features with the typical English domestic manner of around 1700 (which was loaded with classical detail). Rejecting purism of historical styles it is typified by eclectic mixtures of features drawn from different sources. Strides in its popularity and acceptability were made after its extensive use in Bedford Park -the large domestic commercial development in England. Inevitably watered down, it lost much of that which constituted its 'classical' make-up in local (Johannesburg) interpretations. The elements were however, in evidence: the predominantly red brick facade (not very common before the turn of the century because of the low quality facebrick available) contrasted with white painted timber frames, barge boarding and cheerful verandahs. [see FIGURE 3.2-46 and FIGURE 3.2-48 -gables, bay windows and entrances]. American Queen Anne because of its complexity and hense comparative

difficulty in execution, did not have a wide following in Johannesburg, even though its influence was not entirely unknown [see FIGURE 3.1-75]:

> '...[American Queen Anne]...was marked by a number of differences from the British models on which it was based. Chief among these was a blithe disregard for restraint -an eagerness to 'lay it on thick'. Steeply pitched roofs were brought together in complicated relationships and towers and turrets were added to produce a busy, piled-up effect.' (12)

c.) Old English Revival

Both the 'Queen Anne' and the Old English revivals were linked with the new attitude to domestic planning and design. Although affiliated to 'Queen Anne', Old English Revival took its precedent from medium-rank and minor country houses. Dipping into the picturesque tradition it generally lacked [illegible]tic p[illegible]cision. 'It expressed a preference for eclecticism r[illegible]han scholarship for ways of building rather than stylistic correctness, for the vernacular rather than high style, for plastering, brickwork, half-timbering and tile-hanging...' (13). It made use of half-timbering and tile-hung walls. The proportions were generally slender, with the persistent presence of large sash windows and much applied ornament. The roofs were complicated punctured by weighty brick chimneys. Again it was represented locally only by an exploitation of a few token elements [see FIGURE 3.2-29].

d.) Neo-Renaissance and Italianate

'Italianate' usually referred to something less than classical. Two main branches can be detected, though not uncharacteristically they were mixed. The first eschewed the laws of proportion and order, and comprised a multitude of small classical appendages. 'The main precedent was no longer Classical Antiquity, but the Italian Renaissance of the sixteenth century.' (14). Fragmentary evidence of

Mannerist, Second Empire, and Neo-Roccoco motifs can also be detected in the 'vocabulary'. Doors and windows were framed with architraves, pilasters and cornices, with balusters filling in blank panels, skirting balconies and occasionally set into parapets -flat surfaces were avoided. Unification was often only achieved by the use of a single colour paint! The second approach was based on the the imitation of the rougher textured and more massive treatment of the Italian rural villa. Its main contribution locally was the lesson of massing -the balanced 'pile' indebted to its technique. [See FIGURE 3.2-11 -campanile and arched openings, and FIGURE 3.2-37 -the use of the pediment and quoining.]

B. A GLOSSARY OF LATE VICTORIAN ELEMENTS

The speculator's understanding of style at best stretched as far as assembling motifs and elements of similar background or origin. Normally however, the facades were adorned without even this superficial discipline and the details were treated as ends in themselves -isolated, baseless, 'artistic' pieces. This section is concerned with the exterior (predominantly in the vertical plane) of the house and the bank of elements that was drawn upon in its creation. Since material is so closely related to element it is dealt with here as well.

The element was largely employed as a form of aesthetic decoy -to avert attention from the somewhat elementary nature of the small house, and centre it rather on attractive detail -which was all in the cause of making the ordinary, extra-ordinary. If the maxim declaring the imperative existence of an essential bond between all decorative detail and indeed composition, seems to have been largely ignored here, 'integrity' was further taxed with the contemptuous disregard for 'truth to material'. Blame for the sacrifice of these virtues lay principally

with the its method of realisation or means of production. For instance the constant acceptance of cheap substitutes by the designer without any apparent pain, led to a string of ersatz details; 'Certain materials were used to imitate others of a higher status: stucco had to look like stone: woodwork was echoing ironwork in verandahs; conversely, there were cases of iron imitating wood...' (16). Not surprisingly therefore, extensive use of the prefabricated item was a common occurrence: being generally a product of the industrialised centres, these were imported on a large scale. The lists of builders goods circulated by the local agents, from which materials could be ordered (affecting as well as the bricklayer, such trades as the carpenter, plumber and decorator), displays a selection of articles that were mostly imported ([see FIGURE 3..-101] and note (15)). This was not without repercussions: aesthetic poverty resulted from the double assault of distinterested designers and the inevitable stiff, artificiality accompanying the prefabricated piece; 'The precise and hard character of such architectural detail bears the stamp rather of the new tools of technology than of the subtleties of traditional craftsman.' (17). Something of the age of the catalogue and pattern book, substantial pieces of buildings could be ordered from such companies as Mac Farlane's of Glasgow (although in the speculative arena this particular reference, for economic reasons, had a limited application). The acceptance of this situation ultimately had effect on aesthetic option. In a certain sense such a system of choice left little originality to the architect though in other ways this could only be of advantage to architecture. The economic limitation of colonial building programmes necessitated that cheap, which generally meant simpler, examples were chosen.' (18). This dependency did not slacken until well after the South African War, although major bulk items such as bricks, were made locally. Combined with this, the scarcity of skilled labour in

most trades, there is little wonder the concern for integrity, identity and the respect for materials, went by the board.

If style tends to either give birth to a train of architectural elements, or adapt those that exist in a manner that befits the principal concept (the 'principa' oncept' justifying their existence), then the rather shallow pursuit of 'just making something pretty' for capital gain, somewhat perversely justifies 'the spec-style'. Most of the elements which will be examined here, have their roots in styles already mentioned, and although these elements will be torn apart and analysed in isolation in the next section, the methodology refelects the speculators' attitude towards them in the adopted process of manufacturing a saleable object.

(i) A GLOSSARY OF LATE VICTORIAN ELEMENTS -EXTERNAL

a.) Plinth

Rising damp in the best of walls created a problem, and the poor quality brick (porous) found in pre-war Johannesburg was found to be particularly vulnerable. Protection was usually afforded by a stone plinth, which seldom rose higher up the elevation than was strictly necessary (generally to ground floor level), and as the foundations were initially rock bed, this tended to be merely an extension. The use of concrete strip foundations in houses became common only towards the end of the century.

b.) Wall

> 'Every person erecting a new building shall construct every external or party wall thereof of stone, brick, or other hard and incombustible material or of wooden framing covered with corrugated iron properly constructed and bonded together....' (19)

The Johannesburg census of 1896 showed that in the area under the jurisdiction of the Gezonheids Comite, approximately half the houses were of brick or stone, whilst the other half were of either wood

and iron, or timber and clay. Outside its jurisdiction only two in five houses were of brick or stone. This situation remained until well into the new century, the 1904 census displaying a slight bias toward brick and stone (85 568 people lived in brick or stone houses whilst 67 909 in wood and iron or lath and plaster (20)). The brick wall was certainly favoured over the other types in the speculative field -and would have represented those houses of a permanent nature. Another widely used alternative was the wood and sheet iron walled house, and whilst ultimately serving as a permanent dwelling (many still in evidence today), lacked the aesthetic solidity of their conventional brick contemporaries. The advantages of portability and relatively fast erection time, probably explains their wide usage in late Victorian Johannesburg, although the feeling that they were only intended as a temporary expedient lingers on. There were combinations of these two systems in the wood and iron house which was lined with brick, the internal partitions being either of one or the other [see FIGURE 3.2-22].

Usually however, brick walling in a typical single storey house was of a nine inch brick for external walls and four inches for non-load bearing internal walls. In double storey houses the brickwork on the lower levels was generally thickened to fourteen inches for exterior walls and nine for internal. Although '...with double storied houses the load bearing structure often limited the architect's freedom of planning on the first floor. The use of lath and plaster partitions allowed a certain amount of flexibility here...' (21).

-Wall Surface: The use of plaster and the use of exposed brickwork. Brickfields had been established early in Johannesburg's history although confidence in their quality and durability seems to

have been lacking, as is evidenced in the persistent use of plaster. The lack of sufficient fuel required to produce a hard brick and the available clay deposits, seem to have been the main factors against their manufacture.

-Wall Corners: The edges of a wall plane (particularly front walls) were usually celebrated by some form of decoration -usually quoining. Its use was more appropriate in the Italianate style although it was mixed in with other styles. The most common form of quoining was by means of plaster (mostly bevelled in the Italianate manner), although with the Queen Anne influence a different colour brick emphasised the pattern, when the facade was executed in facebrick. Dressed stone was occasionally used although this was expensive (used mainly in commercial buildings).

-Wall Features: Gables. The gable was undoubtedly the most important indentifiable elevational feature of the late Victorian period. Other features may have been bolder and more prominent (e.g. the turret) but it was the gable that was used almost universally in all the different housing forms -from the most sophisticated to the simplest types. It became the jewel within the overall composition, lending the whole a powerful identity. The earlier gable was relatively simple, often being quite empty or bland, the main concession to decoration being rendered by the bargeboard and the finial -the roof nearly always projected over the gable [FIGURE 3.1-1]. The bargeboards and roof edges were treated in several different ways -the simplest being a triangle of fretwork in timber at the apex [FIGURE 3.1-2]. The idea was taken further with its extension down the length of the pitch and subsequent framing [FIGURE 3.1-3], and with the introduction of the trussed gable -be it free from the wall plane [FIGURE 3.1-4] or against it [FIGURE

3.1-5]. The roof vent became a further excuse for embellishment [FIGURE 3.1-6]. In FIGURE 3.1-7, 3.1-8, 3.1-9 and 3.1-10 and 3.1-11 (Old English revival) the wall plane, although still remaining two dimensional, is marked by a busier, decorated surface -a step in the development of a more sophisticated gable. These later gables became bolder and took on a three dimensional quality -for example the twin sash window became either totally replaced by a bay window, having a greater glazed area [FIGURE 3.1-12], or being simply projected out to form a quasi-bay [FIGURE 3.1-13]. Before the gable fell from favour, it became parapetted (i.e. with the roof stopping behind it) and outrageously ostentatious -the piece onto which any favoured features were offloaded with little restraint -Quoining, plaster cornices, bay windows, elaborate bargeboards and finials [FIGURE 3.1-14, 3.1-15 and 3.1-16].

c.) Elements in the wall

-Windows: Ordinary. Both the sash and the casement were used around this time although there was a distinct preference for the former. There were of course both aesthetic and practical reasons given for this choice: Ralph Dutton suggests that technology led the way, leaving the aesthetes (who didn't want to be left behind) frantically looking for aesthetic justification;

> '...when a method of making large sheets of glass was invented, these first Victorians felt that a great advance in amenities had been made. Their predecessors had been living in bird-cages or, still worse, prisons, from which the outside world could only be viewed through a grill. Could one properly enjoy the beauty of a picture, it was asked, if it were criss-crossed with wooden bars?' (22)

-if a little contrived its effect was wide spread. On a practical level the sash proved invaluable for coping with Southern Africa's hot climate -since the sash is known still to be the most efficient window for the purposes of ventilation -(an obsession with the

Victorian architect anyway). Other advantages included its remaining fixed in the same position after being set, and the fact it took up no horizontal space when open (thereby reducing interference within the room). Of course there were disadvantages which included not being able to shut tightly, the problem of cleaning all the surfaces, wind rattle, mechanism failure and jambing, and the panes not being able to lie in the same plane. Cheap sliding sashes were available on American import, though better quality sashes came from Sweden. From the 1880's to the 1890's the four pane sash (i.e. two panes per leaf) was the most common window [FIGURE 3.1-6]. The two pane sash gradually became more popular during the 1890's although it never quite ousted the four pane window. One pane represented one leaf [FIGURE 3.1-17 and 3.1-4,3.1-5], although where the window became very wide an intermediate bar had to be introduced. The more fashionable windows were usually paraded on the street elevations with the older more common types down the sides and back [FIGURE 3.1-18], although mixtures were known to have occurred [FIGURE 3.1-19]. Window head shape varied according to the stylistic flavour (such as it was) of the house; though most were rectilinear, a few distinguishing types included; the pointed 'gothic' head [FIGURE 3.1-20], or in the more rounded Venetian 'gothic' vein [FIGURE 3.1-28 and FIGURE 3.1-9]. Transformation came in the mid 1890's with the influence of Queen Anne, where initially the sash's top section became divided into smaller panelets (usually a multiple of three = 6, 9, 18) whilst the lower part remained as it had been [FIGURE 3.1-21]. This transitional window form bridged the gradual shift in preference between the sash and the casement -the argument for sash without bars becoming thus considerably weakened, and gradually forgotten. The casement took approximately the same form of the

transitional window with its upper section of smaller panes being frequently filled in with coloured panels and with the lower section still being treated to a large sheet of glass [FIGURE 3.1-23 and 3.1-19, 3.1-34]. Variations on this type were typified by a heavy transome separating the top patterned panel and the bottom panel which was occasionally broken up into equal panels [FIGURE 3.1-22].

Although it was recommended that an odd number of windows was used in a wall as it imparted elegance (even numbers didn't', and avoided the centre pier which was apt to cast a shadow right across the room, this advice was seldom heeded. [FIGURE 3.1-24 however, took up the challenge]. Framed window surrounds or architraves occurred principally around sash windows on the front elevation -the shouldered architrave (the most common) being of classical origin.

Glass was imported principally from Britain although inferior quality glass from Belgium and Germany was also available.

Windows: Bay Windows -One of the few elements used by the speculator that had a consequence on the inside as well as the outside. They occurred principally in the parlour or front room so that its effect was reflected on the front gable. It was also found, though less commonly, in the dining room and main bedroom -its occurrence in these rooms being determined by budget. On a practical level it satisfied the desire for having an uninterrupted view of the outside world that an open air facility afforded, whilst remaining in the relative comfort of the sitting room. Miles Lewis suggests that the 'canted bay' (typically with two sides angled back at forty-five degrees or less from the central light) has its sources in Picturesque Gothic designs, though in themselves not so much Gothic as Tudor and later periods (23). Whatever its derivation it was essentially a stylistically 'neutral' element.

'...The bay window was more capable than the tower of being applied to smaller houses, and so, while the tower remained the aspiration of all, the bay window was used in a huge number of medium and small villas, and even occasionally in terrace houses.' (24)

The early bay window in Johannesburg was a simple rectangular projection of brick, usually without a particularly accentuated roof (sometimes even hidden behind a parapet), applied centrally to the front gable, [FIGURE 3.1-25 and 3.1-26] -it is worth noting that initially the bay had its own independent roof structure. The sloping sides implied a firmer commitment to the bay, as it took on greater compositional consequences, being a deeper, wider and hence bolder element [FIGURE 3.1-27]. Although both the rectilinear and the sloping bay were equally as popular, there is a fundamental aesthetic difference. The sloping sided bay was visually always heavy because of its width and the thick brick piers which took the change in plane. The lintels above the windows were also quite deep, and if the roof was prominent -which it quite quickly became, the whole effect was volumetric and bulky [FIGURE 3.1-28, 3.1-29 and 3.1-30]. The square bay on the other hand was rather delicate, even transparent -due to the corner mullion which was merely a thickened timber stantion -the window frames either therefore butting up against it or even forming it [FIGURE 3.1-31, 3.1-32, 3.1-33 and 3.1-34]. Even when the lintel was deep and solid (generally a timber panel and not masonary) the effect was much the same [FIGURE 3.1-35] The square bay executed in masonary also however, possessed a lightness when compared to the canted bay [FIGURE 3.1-36]. Despite the aesthetic difference, their respective usage seldom pertained to an overall compositional idea. As the bay became essential to the domestic inventory, so designers started to become more adventurous. The most common variation was marked by the forsaking of the bay's

separate identity for its integration into the overall gable design. Its separate little roof was taken away and the panels above the windows were extended up under the projecting eaves -a solution that had obvious cost advantages [see FIGURE 3.1-37 for the rectilinear application and 3.1-21 for the chamfered sides]. Associated with like frugality although with different compositonal criteria, the bay was occasionally located under the verandah [FIGURE 3.1-38]. The oriel window though related to the bay window differed in respect to its suspension above the ground, floating within the wall plane [FIGURE 3.1-39 and 3.1-40].

-Doors: The front door was usually the most elaborate door in the house. Frequently made from teak (or even pine) they were often surrounded by narrow glass margins and fanlights. For cost reasons, the coloured or embossed glass panel was only occasionally used. In early examples it is possible to find a double leafed front door although the single door arrangement dominated. The entrance way was usually celebrated by an arch. [See FIGURES 3.1-41, 3.1-42, 3.1-43, 3.1-44, 3.1-45, 3.1-46, 3.1-47 and 3.1-48]. [For typical door and margin light sizes see FIGURE 3.1-101.]

d.) Verandahs

The two elements which contributed the most towards the character of the late Victorian domestic front elevation were the gable and the verandah. Although from the 1880's onward the gable became the favoured element which cornered most decorative attention, the verandah for a long time before it was the main or frontal showpiece. And although it was never omitted or completely ousted, its compositional role altered; treated as staging for the gable, which due to its comparative lack of show, afforded the gable

greater prominence. Although the gable/verandah combination was the usual practice, the verandah alone as the dominant elevational feature was not uncommon (some even urging this in the interests of aesthetic efficiency (25)). The verandah's aesthetic value at a time when picturesque aspirations ran high were obviously exploited:

> '...The verandah roof relieved the stark simplicity of a colonial house. Even the projection of verandahs created opportunities for plastic manipulations of building forms. The dark enclosed space of the verandah would set off the light decorative patterns of iron or timber supports..' (26)

There were certain 'compositional 'do's and don'ts' which applied generally to verandah design, for example: '...the verandah should be seven and a half feet in width, and should not extend the entire length of the front, but stop a couple of feet short at both ends. If extended along the whole length, a verandah has the disagreeable effect of cutting the facade into two halves, and destroying its character and proportion' (27) -though sounding like justification for what was to become the shrunk Edwardian 'porch', reaction to this early advice (circa 1850) amounted to the clipping or sloping of the ends of a full length verandah [see FIGURE 3.2-8]. A small gablet was often included within the roof of the verandah to emphasize the point of entry [see FIGURE 3.1-49]. The roof of the verandah was usually a simple mono-pitch of straight sheets of corrugated-iron, although the cranked sheet was also widely used -it having the advantage of requiring fewer rafters since it was self-supporting [see FIGURE 3.1-50].

Brian Kearney points out that apart from purely aesthetic concerns the verandah had two very important practical functions (28): i) to provide shady semi-outdoor spaces relating to the house -multi functional though somewhat recreational; ii) to protect the exterior walls from direct sunlight -a precaution against

overheating. Essential in hotter climates, it's debatable whether the Johannesburg speculator regarded it as anything more than something that was part of the aesthetic standard -the verandah having already achieved the status of one of the essential (traditional) domestic elements (commitment to the verandah didn't really approach that typical of the earlier verandah house in Natal).

The construction of the balustrading and supporting posts was most frequently of timber. Later when transport and communication links with manufacturers (overseas and later local) had been firmly established, prefabricated cast iron elements were used. It must be noted that although cast iron was widely used in commercial and larger domestic buildings, its expense made it prohibitive in the speculative field. However, where timber was used and the verandah was of substantial length, it was often characterised by a double column bay which apart from providing for a proportion escape route, also performed an important structural function. In the horizontal plane, the verandah comprised three basic divisions: The base or bottom section, which was the balustrading, the mid-section, defined by the posts, and the head or top part which approximated to a 'frieze'. The balustrading was made of timber spars which were held between a bottom rail and the upper handrail (thematic variations occurring at almost every house). The frieze piece was treated with differing degrees of complexity -from the simple shaped timber 'beams' [see FIGURE 3.1-51, 3.1-52 and 3.1-53] to a more delicate construction of glazed infill panels [see FIGURE 3.1-54]. Of course there were others which fell between these two extremes: FIGURES 3.1-55, 3.1-56, 3.1-57 and 3.1-58. (Alas as can be seen with today's perspective, the use of extensive use of timber has ultimately

jeopardised the aesthetic longevity of many early speculative houses -since timber has a short life without high maintenance demands, many house owners from the 1920's onward, replaced the shabby timberwork on their verandahs with pre-cast concrete columns and brick dwarf walling.)

The use of the concrete column in verandah design though quintessentially Edwardian, was used in a few isolated examples just before the outbreak of the South African War. The 'columns' (no longer a posts) of the verandah in FIGURE 3.1-59, sat somewhat uncomfortably amidst thin timber balusters and a timber frieze (with delicate circular cutouts) -a particularly diquieteni[illegible] confused mixture of heavy and light elements, which clearly betrays the fact that the idea was in its infancy. The use of th[illegible]lumn in FIGURE 3.1-60 reflects a purer strain of classical sorts, although was more of the affluent 'spaceship' class, than of the regional speculative vernacular.

Other instances in which the verandah was used, was at the rear of the house patially created by the lean-to over the third range of rooms. Forming a covered connection between the kitchen and the bathroom or pantry (or outer bedroom), this was almost always constructed in timber.

e.) Turrets

Although in the process of enhancing a main facade, a bay window had often to suffice, the turret was, depending on available funds, the first choice. Both the labour and material contributed to the expense of the item -inter alia requiring a skilled carpenter to erect the internal lattice and sub-surface boarding, and commonly a plumber to cover it with a beaten zinc carapace. It was thus used predominantly in the medium to large sized detached houses although

its occurrence in smaller examples is not entirely unknown [see FIGURE 3.1-61, in which a set of terrace houses with each unit sporting a quasi-turret over the living room]. As an aid to compositional arrangement the turret possessed a unique character that was neither of the wall nor the roof -bestowing an emphasis within a composition by virtue of its inherent verticality -the effect of which was far stronger than the individual identities of either the wall or roof. Of course it served those who endeavoured to create a picturesque composition handsomely, enhancing 'the pile' and contributing to the broken silhouette, '...Above all, when the composition is irregular, rises the campanile or Italian tower, bringing all into unity, and giving picturesqueness, or an expression of power and elevation to the whole composition' (29).

The turret tended to be used in several different positions, depending on what the designer felt needed emphasising within the composition:

1. Over the front door -there was a twofold reason for placing here; for the compositional focus it bestowed on the front elevation and for the small entrance vestibule it afforded in plan. The turret was often attended by an arch at its base in which clearly stressed the front door's location [see FIGURE 3.1-62, FIGURE 3.1-63 and 3.1-64]. A common variation on this idea necessitated by the desire to screen the front door from the street, resulted in an off-axis access route -the approach having to take a 90 degree swing in order to face the front door [see FIGURE 3.1-65].

2. Its inclusion as reinforcement or the principal axis in a diagonally symmetrical house. This, the most common application, lent prominence to the parlour -the show-piece of the house, and

was always accompanied by a bay window at its base. The double curved or ogee-turret -one which possessed a convex and concave component, [see FIGURE 3.1-66], usually preceded the more simple conical forms [see FIGURE 3.1-67, 3.1-68 and 3.1-69. For other variations see FIGURES 3.1-70, 3.1-71 and 3.1-72].

3. Within the run of a verandah. Usually located at the turning point of the verandah, it was used either to create a proper sitting area (since they were rarely wide enough to facilitate a table with chairs around), or emphasise an entrance where the front door wasn't necessarily on axis [see FIGURE 3.1-73 as an example of the former].

4. Random placing. This application was typically wilful, the use of the turret being without the geographic intent of the former locations. The turret in FIGURE 3.1-74, besides failing to empahsise anything in particular, loses much of its impact due to its low profile relative to the main roof. The turret in FIGURE 3.1-75 is merely one piece in a busy compositional assemblage used internallyas a nook on the stair landing and dressing room! The turret in FIGURE 3.1-76 merely provides a visual stop at one of the house's extremity without contributing much to the compositional merit of the house.

f.) Roofs

-Shape: The morphological development of the roof in the detached house has been extensively covered in other works (30), although some points of aesthetic concern will be mentioned here. The roof played an undoubtedly important role in the houses' overall composition, forming a prominent capping to the whole. The other contemporary approach typical of the Karoo House -a square parapet gable with a very shallow roof behind, had an extremely limited

following -although was not entirely unknown in the speculative field [see FIGURE 3.1-77]. The earlier houses which had simple double pitched roofs, were either treated to a gable at either end (a Dutch trait), or with hipped ends (an English trait). Beyond the major roof-structure (over the first two ranges of rooms) there was usually a low mono-pitch or 'lean-to' roof (covering the third or back range). With the influence of the picturesque and an increase in capital expenditure on the individual house, more complicated roof types were introduced. Richard Apperly in his description of speculative practice in Australia makes observations which closely resemble those which occurred in Southern Africa:

> 'The roofs of Australian houses displayed a complexity which belied the basically simple shapes of the buildings they covered ...Denied the opportunity to ramble, the Australian suburban house sought to establish its identity by means of complicated Shavian roof geometry [R.N. not G.B.]' (31)

Of course other features such as the gable, multi-gable, multi-gable-gablets [see FIGURE 3.1-78 and 3.1-79], and the turret, all contributed towards the necessary assemblage, although these are strictly speaking not 'of the roof'.

The roofscape was most often however punctured by the gablet which performed both a functional and aesthetic role. Aesthetically its location within the roof plane often corresponded to and emphasised a feature on the wall surface below that was partly obscured -for example, a bay window at the back of a verandah [see FIGURE 3.1-80]. Apart from wringing out the most from the element, it provided the means for expressing compositional preference (be it symmetrical or asymmetrical). Other applications of the gablet tended to be more functional; when the vent to prevent heat build-up in the roof space was not incorporated on one of the wall gables (the most common place), and when additional light was required in

deep passage space [see FIGURE 3.1-81]. Ranging from simple make-shift hoods [FIGURE 3.1-82], to the slicker catalogue item [FIGURE 3.1-83], to the more sophisticated custom made mini-dormers [FIGURE 3.1-84], the most direct way that roof ventilation was achieved in a hipped situation was by slipping the side roof planes to just below the ridge level [FIGURE 3.1-85].

Initially eaves were cut to an absolute minimum, with the ever present gutters (necessitated by clause 39 of the Gezondheids Comite's regulations of August 1891), almost against the wall surface. The clipped eave detail lent the late Victorian villa an aesthetic which was tidy and wholly volumetric -if the wider eave overhang had been introduced, it surely would have broken the strong sense of shape these tight units possessed, linking them perhaps a little too much to 'rural habit' (a trifle premature for the full blooded Arts and Crafts movement).

From the 1860's to the 1890's the favoured pitch for a roof was 27 - 28 degrees, a factor which influenced thus early roof design in Johannesburg. By 1890 the pitch changed to 30 degrees, although if the 'Gothic' style was being employed the pitch would have been about 55 degrees.

-Roof Materials: The Bye-laws set by the Gezonheids Comite published in August 1891 clearly condemn the use of wood, canvas, reed or any material of a combustible or inflammable nature (thatch) as a roofing material (clause 12). The use of locally available materials for roofing was therefore severely curtailed, a limitation which left little option but to import acceptable materials. Since importation was from the coastal regions, lightness, manageability and space-efficient packaging were the factors that would have determined the choice. Materials such as slate were ruled out on

account of the weight, which apart from the initial difficulties of transportation, would have required a substantial timber sub-structure in the roof itself for support -making it even more impractical since timber had also to be imported. Sheet iron (corrugated iron) fulfilled all the requirements and had become a familiar or 'known' entity, being a widely used roofing material in other maturer colonial urban centres. Imported from England and it was used in almost all domestic work, from the smallest terrace development to the biggest detached houses. Its trussing and batten support was, in comparison to other roofing material support, simple and light. Since each sheet covered a comparatively large area, it was an efficient fast covering -a match for the problems of insufficient skilled labour and worthy materials. The most common colours used for painting such roofs were red and green, though towards the end of the century metallic grey and silver paints were developed (32); which greatly assisted in reducing heat intake.

If the heaped 'pile' was to provide for, inter alia an interesting silhouette on the macro-scale, other pieces such as pinnacles [see FIGURE 3.1-86 and 3.1-78], weather vanes and cast (occasionally wrought) iron ridge pieces worked on the micro-scale [see FIGURES 3.1-87 and 3.1-88]. Being amongst the last elements to be applied in the decorative priority (the wall related elements took precedence), they were apt to be left off.

g.) Chimneys

Chimneys according to the bye-laws (August 1891, clause 24) had to be carried up not less than three feet above the roof -a law that few felt the urge to challenge as it conveniently satisfied the quest for slenderness and silhouette. During the 1890's the chimney was often an elaborate piece of plaster (mouldings) and brick

(shaft), adorned with a multiplicity of motifs -including cornices, dentils, rusticated bands, arches, inset panels and even little roofs [see FIGURES 3.1-89, 3.1-90, 3.1-91, 3.1-92 and 3.1-93]. However, chimneys entirely of brick were not uncommon even in relatively expensive houses [FIGURE 3.1-94 and 3.1-95]. The prefabricated chimney shaft was used [FIGURE 3.1-96] though not extensively. The chimney pot is known to have been incorporated into chimney design, but was not widely used in the speculative field before the turn of the century.

h.) The use of colour

The external woodwork of the earlier houses was usually either painted dark green or treated with a dark timber stain. With the influence of the Queen Anne revival towards the end of the century, chromatic contrast was achieved by picking out window and door frames, balustrading and verandahs in white, against what was a relatively dark (red) building. Cast iron was commonly painted green or black. Occasionally light grey and brown was used (33).

i.) Urban Fabric and House Siting.

Just as the middle classes revealed their aspirations in the borrowing of certain decorative elements and even house forms from the wealthier 'trend setters', so the house-to-garden relationship was likewise plundered. Many of the ideas incorporated within the Johannesburg middle class suburb, were watered down variations of attempts promoted by the wealthy at 'caging arcadia' on their own somewhat larger tracts of land. The ideas centred around the endeavour to '...possess something of both the country side and of the city.' (34). Suburbia was characterised by roads, houses, gardens, trees and fences which combined to make an informal picture -it was essentially a group of country houses situated in the town.

Obviously most could ill afford the pleasures of a large garden, and although aspiration didn't diminish, scale and form did. The arcadian dream became eroded.

> 'Their roads were usually straight (a rectangular road pattern is more economical in land than the sinuous curves of arcadia), their plot-frontages were narrow (narrow frontages enable more houses to be accommodated on a given length of road), their trees were small. The pattern of design which resulted from these ...[factors]... was a pseudo-arcadia in which no single feature, trees, houses or roads, was dominant over the others, whose silhouette was jagged and irregular, and where no effort was made to fuse the parts into a new coherent whole.' (35)

The texture of the urban fabric varied from suburb to suburb, a factor which depended mainly on the type or types of houses which dominated the area. To define an area's predominant house type alone is not, however, to describe its texture, though the relationship between the various house types and the piece of ground on which they stood, does get a little closer to the point. It must be made plain that although a house in a garden was what most aspired to, the garden was really only space left over after all other planning had been done. The result was that the minute garden (because the stands were only 50x100 Cape Feet) displayed little aesthetic unity (Herman Muthesius' advice that '..the garden [ought] extend the house into the midst of nature...', largely fell on deaf ears.) The siting of the detached house was really the only case in which the idea of the suburban garden was approximated. The layout was conceived in a series of layers; the house being generally set back from the street edge (as much as 15'), leaving a strip of space for a small garden in the front. In most speculative arrangements the house spanned almost the entire width of the plot, but for one or two thin service passages down the sides (thus effectively blocked off the view to the back). The larger piece of open 'utility' space occurred at the back. The semi-detached and terrace houses were, on

occasions, treated in a similar way, although they are often thrust right up to the road edge, without any option for creating a garden. The garden itself seems to be made up largely of flower beds and pathways with perhaps a centre piece in the form of a small fountain or large tree (quite often a palm tree).

Arthur Edwards sees the whole institution of the garden and (the last item to be examined here) the garden wall as a means to achieving a form of seclusion...

> 'The even texture and varied constituents of Victorian suburbia, were physical expressions of the Victorian system of values, a system in which the home occupied the central place ...required for their full development a high degree of privacy. To achieve such a privacy the gardens of Victorian villa-suburbia were surrounded by separating walls ...' (36).

Dennis Radford relates this to a more calculated form of privacy for the express purpose of impressing others and winning respect;

> 'The boundary of public and private was first marked by a wall or fence, the former being the ideal, the latter the minimum barrier. This was obviously a statement of possession, a concept which was important to the Victorian capitalist ethic. It should be observed that the wall (or fence), although often elaborate, was not visually excluding. Privacy for the front garden was not required; in fact, the garden, like the house behind was an object of display. The garden was as much given to the street as it was a setting for the house.' (37)

The garden walls down the sides and back of the house were usually of a light timber frame about 6' high clad in corrugated iron although brick was used. The front was more transparent and much lower. It was either a brick wall divided into bays by strengthening piers [FIGURE 3.1-97] (sometimes with wrought or cast iron panels [FIGURE 3.1-98 and 3.1-80]) or a simpler, cheaper frame system of steel tubing which may or may not have had a corrugated iron retaining base [see FIGURE 3.1-99]. The timber sorts ranged from painted pickets to a series of framed bays crossed braced in timber [FIGURE 3.1-100], usually with a corrugated iron base about 1' high.

Diamond mesh fencing was the cheapest form of barrier in the early 1890's.

(ii) A GLOSSARY OF LATE VICTORIAN ELEMENTS -INTERNAL

As the 'style' employed in most speculative houses may be described as eclectic by virtue of the disparity of its constituent elements, so the interior of the house was of like proclivity. As with external elements the origins of each item were as multifrarious as they were in number. Fake discipline, comprising a myriad of rules on the do's and don'ts of internal adornment, generally concerned itself with minor detail at the expense of coherence. Thus internal detail, when not infatuated with itself, was usually arranged so as to create some form of illusion or pretense. Loudon for example advocates the manipulation of colour and detail in the endeavour to conceal the meagreness of typically crushed accommodation; '...The best effect in rooms of small size...is produced by having the ceiling highest, the side walls a little darker, the wood work a shade darker still, and the carpet darkest of all.' (38). There were many such diversions, and a look at the treatment of the different room planes will perhaps expose some of the more obvious ploys:

a.) Floors

The suspended timber floor was used wherever possible -as cement had to be imported, the concrete floor was used sparingly, being limited to exposed or wet areas, such as verandahs, kitchens and occasionally hallways. The timber floor consisted of tongue in groove boarding (Red baltic or Deal), supported on 6"x1" timber joists. Floor finish was generally limited to one of three types -employment depending on available finance and room type. In the polite rooms such as the parlour, the floor was left as a plain

exposed timber finish and partially covered, most commonly with mats or carpets (with a strip of the natural timber being visible all around.) In other more 'utilitarian' areas such as kitchens, passages and stairs, bathrooms, and sometimes even dining rooms, linoleum (generally green) was used. A granolithic finish was used on verandah floors and entrance halls in the cheaper houses whilst encaustic tiles (the colours of which 'were those recommended by Eastlake and were mostly of the 'Etruscan' or 'Roman' variety, in oranges, browns and yellows' (39)) were laid in the more expensive houses. Baked clay tiles may have been used as an alternative.

b.) Walls

-Surface. There were many types of wall finishes and rules for their application, although the principal treatments were either whitewash or wallpaper. Often mixed within a single house, the principal and 'best rooms' were papered, with a whitewash application to the kitchen, inferior passages and minor bedrooms. Where the budget was tight, whitewashing was recommended throughout because it was cheap (and even with fresh coats being applied every year, the cost was still comparatively low). Should the overall effect have been dreary, it was suggested that the ceiling remained white whilst the walls be treated to delicately tinted neutral colours such as fawn, drab or grey (40). As Downing put it '...the great advantage of papering the walls, lies chiefly in the beauty of effect, and cheerful, cottage-like expression, which may be produced at very little cost...' (41). To begin with, the use of oil paint would probably have been limited, because of the absorbtiveness of the wall plaster (commonly lime or a sandy mix). Again paper on these surfaces would have been the easiest way to achieve a pleasing finish. When a 'hard' wall surface could be achieved (commonly

through the use of plaster of paris) and oil paint was favoured, the wall character was enhanced with a cornice '...both to heighten the character of the room architecturally, and to lessen the baldness of plain walls.' (42). The textiled wall hanging (in which wallpaper had its origin) was only occasionally used, and only then in the more expensive houses.

The wall was often divided into a series of horizontal bands of differing treatments -a compositional characteristic that can be likened to the sections of a column; with a base (skirting and dado), shaft (main wall surface above chair height) and capital (above picture rail, frieze, or cornice). For the most part these divisions were framed by moulding strips (43) which ran right around the room.

-Skirtings -Skirting boards were bold statements, and often comprised more than one standard board i.e. one piece was placed directly above the other, in an effort to produce a deeper band. Sizes were generally 4 1/2", 6", 7" and 9".

-Dado and Frieze -(dado -from the Italian word ildado = pedestal.) According to Muthesius the Aesthetes of the 1880's were responsible for the re-introduction of wall divisions. The proportion of frieze to dado was carefully defined: an emphasised frieze was the preferred solution with the wall being divided into a shallower area at the top and a deeper one below. The dividing-line was usually marked by a cornice at the level of the door head most commonly defined by the picture rail. When both a frieze and a dado were employed, only one should have been highly decorated, with the other remaining relatively plain (44). A dado was usually the height of a chair back and was topped by a moulding, although '...good proportions will often be obtained by raising the dado to just under

half the height of the wall...' (45).

-Picture rail -This was the divider between the main wall surface and that zone which masked or celebrated the wall/ceiling junction. Obviously it performed the function which gave its name and since pictures were essential pieces of Victorian bric-a-brac it was included in even the smaller detached and terrace house -'...Nothing gives an air of greater refinement to a cottage than good prints or engravings hung upon its parlour walls' (46), it provided for the hanging of these in any position, with the benefit of allowing for change, should the arrangement become tedious.

c.) Elements in the wall

-Doors -As with so much in the speculative house, the internal door was as subject to prevailing taste as anything else; 'Doors changed with the fashion from four-panelled to six and eight panelled designs, and back to four panel at the end of the century and were either of stained wood or painted white' (47) -very occasionally they were painted green or another plain colour (48). They were either made from deal or pine [for common sizes see FIGURE 3.1-101], and the handles and fingerplates were usually of brass or white porcelain. 'Most imported American doors were four-panelled complete with machine-made bolection mouldings and architraves...' (49).

Position of the door- For most rooms the preference for approaching a room through one entrance and from one end only (limiting possible cross flow) is apparent in the late Victorian house, although this quite often does not hold good for the dining room (particularly in smaller houses) from which several service and private areas gain their access (50).

Other door positions -In a house in which the front rooms were

the parlour and the main bedroom the door position into the former was generally closer to the front door than the latter. Other door positions include a glazed door separating the service part of the house from the more 'polite' areas, particularly in the house type characterised by a centralised passage running from front to back (see FIGURE 3.2-2): seen in the earlier domestic work of Johannesburg, it was abandoned with the gradual phasing out of this particular plan type.

-Architraves and sills: The internal shutter and attendant casing evident in the earlier Victorian houses was never widely employed in Johannesburg. The window was merely surrounded by moulded timber architraves which came in 3"-6" widths and were imported from America. The sill was generally a simple element made from timber planking.

-Fireplaces -The fireplace had several functions: on a practical level it performed the obvious tasks of heating in winter, as well as providing a means for cross-ventilation in summer (51). Although a fireplace in every habitable room would have been the ideal, this seldom was the case. The parlour, dining room and occasionally the best room, were favoured first with the others following on behind. It was thus an extra-ordinary internal element, and since used sparingly, lent prominence to any room which possessed one. Rules for locating it were devised although not always adhered to:

> '...the fireplace shall be well lit (from both sides), since the whole life of the room takes place in its vicinity. So it must be near the window. For the same reason it must be situated as centrally as possible, so that the middle of the room may be used. At the same time draughts must be avoided, which means placing the doors at least as far from the fire place as possble...' (52).

Of course sharing a flue by positioning fireplaces back to back (or even four clustered around the intersection point of four rooms) for

the sake of economy ruined this best laid plan... The fire place in the dining room was however, placed almost without exception against the short wall. At the end of the Victorian era, the inglenook, usually associated with the dining room, was a celebration of the fire-place (a feature favoured by the domestic revivalists at the end of the century), which can be best described as a fireplace enlarged to the size of a small room which was then located within or next to a principal room. The fireplaces in the main bedrooms were often situated at right angles to the view window of the room when they weren't thrust into the corner (53).

The prefabricated fireplace was subject to many refinements, which grew from the decorated and rather impractical all-cast-iron unit, to a unit incorporating a fireclay surround, which when heated, supplemented '...the direct radiation of the fire by giving out an even warmth over a longer period of time... To increase this effect still further, the sloping sides of the fire-place... is faced with tiles...' (54). The drawing room fireplace, usually surmounted by heavy mantelpieces and mirrors, would have been more ostentatious than those favoured for the principal bedrooms and even the dining room -which were much simpler and not as high.

d.) Ceilings

In the cruder examples of the early Johannesburg dwelling, canvas was used. This was replaced quite early on by T&G boarding (which was usually thinner than floor boarding although also of deal or red baltic), in almost all the rooms. The more formal rooms such as the sitting room, occasionally had papered ceilings with simple printed or reliefed patterns impressed on them.

C. INTERNAL ACCOMMODATION

Whereas the previous section dealt with decorative details and rules for application, the emphasis here will be on the rooms that were to be found in the typical speculative dwelling, and an examination of the room's social importance and physical disposition within the body of the house will be undertaken.

The criteria for including a room in the smaller house were obviously intimately linked to its imminent usage or functionality (the parlour perhaps being an exception) -money was seldom flaunted on room space that was rarely occupied. Thus rooms were not included or excluded like embellishment on grounds of fashion -the commitment to planning was a little more grave. This is not to imply the way in which the room was used did not change, it's just that the rate was tardier, being linked to broader social lore -of course the room was no less independent of the upper classes' directives;

> '...It has become characteristic of the lower middle classes in England that they have no mode of life of their own but style their lives on an imitation of the mores of the rich...The average small house of today, as mass-produced by the developer, has all the constituents of the larger house - a hall, drawing-room as well -but the rooms have all become so small and are usually also cluttered up with useless household effects to such an extent that it is difficult to move, let alone to live in them' (55).

Given certain rooms were almost always present in a particular cottage, the way in which they were arranged or geographically placed (consciously or unconsciously) defined internal divisions, the most common being the zones of privacy and semi-privacy. Although not always clear, the notion can be detected from the disposition of doors and physical placing of the room. Of course in a double storey house the division was more obvious than in the single storey -the difference in level being used as the natural divider between the semi-private and private rooms. Despite lapses in clarity in some cases, three basic room types can be identified by virtue of their associated functions; A.

Semi-Private rooms (the rooms used for entertaining), B. Private rooms (such as bedrooms), and C. Service rooms (such as the kitchen and bathroom). The private/semi-private division was not the only internal interface -other implied zones or territories existed which were meant for the house's inhabitants:

> 'In larger houses, it is true, it was possible to divide the accomodation into male and female 'territories' -for the former, studies, libraries, billiard and gun-rooms... for the latter, drawing-rooms boudoirs, sewing and music-rooms -but in the averaged-sized house such extravagant use of space was not possible, and the male preserve was usually restricted to a small study and a dressing-room off the principal bedroom. The rest of the house, with the possible exception of the dining-room, which might be regarded as 'neutral', was essentially female territory where men moved circumspectly, and stepped out of line at their peril.' (56)

One further note ought to be made about the rooms generally that did not pertain directly to the room's social aspect -although ideally it possibly should have - is that of height. The room's height within the speculative dwelling unit usually remained constant throughout, except for those under the lean-to roof at the back of the house, and in a double storey situation. They were generally 10'6" to 12' in single storey and on the the ground floor and in the case of a double storey the height was 8' to 10'.

(i) SEMI-PRIVATE

a.) The entrance -the Verandah and Hallway

> '...It could be said that the prime ordering idea of the front of the Victorian house was the celebration of entrance. Inside the house this theme was continued in a hallway from which the reception rooms were entered; behind this, increasing degrees of privacy were established for the service rooms and sleeping areas.' (57)

The ubiquitous verandah along the front of the house served inter alia as an introductory zone in which one would have possibly 'collected' oneself before entering the body of the house. At worst (for some were very small) it provided a shelter from the elements before the front door. The hallway for the most part could have been

described as a swelling at the mouth of the passageway, and was occasionally lent prominence by a tiled floor. An archway marking the point of constriction (usually one room back from the front) which defined the passage proper, commonly leading into private and service areas. Quite often the hall was flanked by the parlour or sitting room on one side and the main bedroom on the other, the staggered door positions providing the clue for outsiders -the parlour door being generally closer to the entrance.

b.) Dining Room

The dining room was undoubtedly the most important room in the smaller Victorian houses. It served as the family room, the eating room, the room where occasional visitors would have been entertained, and it was a vital transitional space to many of the 'back' rooms (bedrooms, bathroom, kitchen and back yard). For this reason it was often the largest room in the house, and in instances where the budget for a house was tight, it performed the double function of being both the dining and sitting room It was often the warmest room, being in close proximity with the kitchen, although it was seldom without its own fireplace. In the more consciously revivalist houses, the old form of domestic hearth, and even inglenooks were sometimes added -an endeavour to bestow a more homely character to the room (which was more an aesthetic pursuit than one of practicality).

The dining room was traditionally located in the second range rooms (towards the back). Of course this posed problems when it was utilised for entertaining purposes and visitors had to make their way down past at least one bedroom, in order to reach it. Although never adequately solved in the smaller houses (the drawing room helped a little in this respect -when it was present), the practical

consideration of placing it next to the kitchen took precedence. Often its aspect was onto the back yard, although in the later and more sophisticated diagonally symmetrical house, it opened onto the verandah (which ran around both external walls) -french doors to the ouside were employed in these instances. The dining room was subject to being combined with passages and other rooms: In cottages of limited area the passage from the front ran into, and formed part of, the room, whilst in the slightly more classy houses the dining room was clearly defined as a separate room. The other common engagement when the house possessed both a dining and sitting room, was a wide set of double doors between the two -an en-suite arrangement which wasn't however, universally appreciated (58). The size of the dining room was usually from 12'6"x13'6", up to 20'6"x15'.

c.) Parlour, Drawing Room, Sitting Room or Front Room

Although all these titles were used to describe the same room type, the 'drawing room' was the most widely used (59).

Whereas the dining room provided space for most of the family's informal gatherings, the drawing room provided a far more formal social rendezvous. Because it was often intended for impressing visitors, an element of display tinged its character; '"...the drawing room of the average town villa, with its impossible wallpaper, stiff uncomfortable 'suite', mirrored overmantel, and engravings..." so many drawing-rooms looked as if they might be labelled 'for visitors only'...' (60). When it was used by the inhabitants (usually just the adults), it served as a retreat, a place where the quieter aspects of domestic life could be enjoyed (61). In this respect the drawing room must be seen to be a 'luxury item'. Certainly it was the first room to be axed when the budget or

space was tight. Even though a luxury, it performed a vital role in the particularly middle-class pursuit of status, an 'aspirant function' that should however, not be ignored:

'The possession of a parlour, appropriately furnished with ritual objects in what was considered to be 'good taste', was an important part of the struggle for achievement and respectability, and of the search for identity by people who instinctively modelled their behaviour on their social superiors. Whether used or not, the parlour announced to the family, to neighbours and to visitors who first glimpsed through its Nottingham lace curtains, a triumph over poverty and a challenge to the external environment which was too often one of dirt, squalor and social disharmony...inside the home, and especially in the parlour, the environment could be controlled and order, comfort and even beauty created. In this respect cleanliness and brightness within the home were essential requirements: the bright surfaces of linoleum, polished furniture, mirrors, brass ornaments and starched or glazed fabrics helped to reflect what light was available from outside, oil- or gas-lamps and from the open fire, and were part of the aesthetic symbolism to which the class unconsciously aspired.' (62).

The Drawing room was always located in the front range of rooms (i.e. those fronting onto the street) whatever the house's orientation, although in a north or south orientation the west corner was the preferred position. It was consistently placed along the front for two reasons: 1. The desire for privacy (where it could be afforded), was a priority in the minds of the middle classes, and placing the drawing room near the to the point of exit and entry meant that visitors could be 'kept at bay' or at least away from the more private part of the house. The drawing room was generally accessible from the hallway only : and 2. Because it presented an impressive front to the road. The drawing room was perhaps one of the few rooms in the typical speculative house which both inside and out was consistently 'showy' (63). The ostentatious exterior -most commonly in the form of the decorated gable and bay window, was matched by the fussy intensity and pretentiousness which racked the interior, '...the drawing room would be filled in random style with furniture and bric-a-brac so as to produce a lavish air, and the

remainder of the house would be left mainly to chance.' (64).

The location of the drawing room in the diagonally symmetrical detached house was shifted from one of the gable-ended wings, into a position created by the right-angle of the two projecting wings. It was thus skirted by the verandah which touched its two exterior walls. Being buried behind the verandah, it was to a certain extent robbed it of its traditional forms of external display, which the turret was commonly called upon to remedy. From the inside it read as a four sided bay (usually with seating). Although this location provided for direct access onto the verandah, the opportunity was seldom exploited. Although not the most used room in the house, the location of other rooms hinged off its position, '...the need to maintain the drawing room permanently in a fit state to receive visitors has certain other small consequences...no one may smoke in the drawing room, the lady of the house sits in another room during the morning ...the nursery must be some way off' (65).

The two essential internal accessories required for a drawing room were the fire place (usually bold and highly decorated with a mantelpiece), and the bay window -so as to catch and take advantage of the 'suns cleansing rays', and provide for views down and onto the street. The drawing room was often small in comparison to the dining room, having a minimum size of about 12'6"x13'6", although they were frequently square.

d.) Smoking Room or Den

Although the smoking room was not a common feature in speculative housing (being a luxury which few could afford), it is not entirely unknown [see FIGURE 3.1-102]. Again its function was socially rather than family orientated. The habit of those of higher financial status was the possession of a drawing room (considered to be part

of the female domain) and a smoking room (a corresponding facility for the male). '... the smoking-room should be 'a little snuggery, cheerfully but not too delicately decorated'. After a few hints on how to achieve this objective, Dutton concludes his discourse with the prudent advice that 'a couple of neat salivariums are necessary adjuncts'' (66).

Its position was well back -within the second or third range of rooms and its size was approximately 9'x10'.

(ii) PRIVATE ROOMS

a.) The Main Bedroom

'The bedroom is a room in which we spend about one third of our lives, in continuous periods of between seven and nine hours...[An east orientation is desirable]...since people like to salute the morning sun' (67). Apart from this, the main bedroom was used by the lady of the house as a dressing room (68), whilst the man used an adjoining room (69), which either took the form of a dressing room proper (a common feature over the entrance hall in double storey houses), or the bathroom. Bedrooms were, in general, much simpler in arrangement and furnishing than the public rooms of the house. They usually had a fire place and were occasionally treated to a bay window.

The position of the main bedrooms in the single storey house was somewhat vulnerably placed next to the drawing room in the first range of rooms, regardless of the houses orientation. The reasons for this were two-fold; 1. favourable aspect -since the typical house had very little side space (if any at all), the best aspect (other than to the back yard) was to the front -since naturally it was the prerogative of the adults of the house to have the best

aspect; 2. access from a passageway into the bedroom was more preferable to the less private alternative of gaining entry from a communal space, that is via the dining room -for it was quite common that several bedrooms led off this area. In the double storey house the bedroom usually occurred over the drawing room. The advantage was that with very little extra effort the flue for its fireplace could be combined with the drawing room's', and if so desired, the lower bay window could either support a small balcony off the bedroom or be simply extended to embrace two storeys.

Built-in cupboards were not entirely unknown [see FIGURE 3.2-2] but did not become a common or standard feature in speculative housing until after the South African War.

The size of the main bedroom varied greatly from one house type to another, although an average size was approximately 14'x12'.

b.) Other Bedrooms

Although careful orientation of these rooms was strongly advised (70), their placing was mostly determined after the houses relationship to the road and its site constraints had been considered. Thus these bedrooms were strung out behind the first and second range of rooms, some even located in the tunnel back behind the kitchen with outside access. They were very simple rooms usually with a single window, rarely with a fire place. They were small, 10'x10' and up.

c.) The Nursery

The nursery was again a non-essential or luxury, although it was found occasionally in some houses (usually only in detached houses). Although the title suggests a kind of 'play room' for the exclusive use of children, wiling away the hours under the supervision of their nannies, it would have been an unlikely situation amongst

those classes of people whose houses are being investigated here. However it is a title to be found in several instances on plans submitted to the municipal (or other) authority, and since occurring in relatively small houses, probably simply refers to (by virtue of its size and location) a bedroom intended for a child or children.

d.) Servants' Rooms

A servant in the home was another middle-class Victorian institution. It left the lady of the house free to cultivate a refined and epicurean manner, whilst the domestic chores were executed by someone specifically employed for the purpose. Eventually their presence amounted to a sort of status symbol.

The colloquial and degrading terms 'boy's room' or 'kaffir room' that can be picked off many plans, referred to the the small and usually detached room at the back of the stand adjacent to the toilet. It was, of course, accommodation for the domestic assistants, who were employed in a large number of free standing and semi-detached houses. They were very small, 6'x6' up to 9'x6', and were frequently just a timber frame and corrugated iron structures.

Periodically a room attached to the main house (although at the rear and next to or above the kitchen), labelled 'servant', can be found [see FIGURE 3.1-102]. This would have referred to the room in which a white servant was accommodated, which was again the privilege of the slightly wealthier classes.

(iii) SERVICE ROOMS

a.) The Kitchen

By the 1890's, the kitchen attached to the house was accepted as the norm, although it was still located towards the back of the house. This meant that quite often it was under the lean-to section and not under the main roof, and because it could never embrace the

full width of the house (as this would have cut out light and ventilation to the middle range of rooms) it was often afforded the benefit of the back verandah. In the smaller houses (from terrace to free standing) the kitchen served as cooking place, dining room, living room and washing area, although this was seen to be far from ideal; the kitchen should be '... used exclusively for the preparation of foods and that all forms of cleaning, etc. are rigously excluded. Thus no English kitchen contains a sink... the areas for cooking and washing-up are kept separate...' (71) -of course this was the ideal, and in reality it depended heavily on available capital. The kitchen always had a hearth for cooking, and depending on whether the house had a scullery or not, it possessed a sink. Its size varied from 8'x9' to 12'x12'.

b.) The Pantry

The storage of food before the advent of preservatives, canning and mechanically refrigerated chambers, was facilitated by the pantry. This little room was found in all housing types bar the more rudimentary forms of terrace house. Herman Muthesius describes the function and form of the ideal pantry;

> '...There must be a refrigerated cupboard. One essential need is common to both kinds of store-room and this is a means of creating a through draught. They must have windows on two facing sides. The pantry has shutters of fine wire mesh that open outwards; windows that open inward are fitted only in the cold season. Sometimes a meat-larder has no windows at all, only pierced zinc panes' (72)

The shelves of the pantry were ideally of slate.

The orientation of this room specifically in relation to the sun's movement was far more carefully worked out than any other room in the whole house. It was always next to the kitchen at the rear of the house, which was not a problem if the house was north facing (as the pantry would face south). However, where the house was south

facing. The pantry would have been either completely internalised or pushed with its smaller dimension against the east wall.

c.) The scullery

Although the scullery is associated with the washing up of soiled utensils, it was also used in the preparation of foods such as roasting and boiling, and the cleaning of the vegetables, the dressing of poultry, game and fish. It was seldom more than an alcove located adjacent to the kitchen and was usually without an interleading door.

d.) The Bathroom

Not all of the earlier houses in Johannesburg had a room designated specifically for the bathroom -they were absent in particularly the smaller terrace houses. When included however, it was commonly situated next to the kitchen so that warm water could be brought from the stove. Bathing was however, sometimes performed in a large portable tub in the bedroom or kitchen. Bathrooms initially were accommodated at the rear of the house under the 'afdak', and were approached externally via the back verandah. By the 1890's bathrooms gradually became incorporated within the body of the house although were rarely combined with the toilet. Its size was usually just big enough to accomodate a bath and basin along one side, with little circulation space down the other i.e. 4'6"x4'6". Waste water was sometimes temporarily kept in what was known as a 'slop tank' until collected by the sewage cart, or otherwise left to drain into a cesspool.

e.) E.C's, W.C.'s and Pails

Waterborne sewage was in Victorian Johannesburg largely non-existant, despite the toilet house being labelled 'W.C' on many plans. Sewage was collected at night and taken away on a sewage

cart. The toilet was never accommodated within the main house, partly because the by-laws didn't encourage it (73), partly because of the storage and associated odour problem, and partly because it infringed the gentility of gracious living (74). The 'E.C' or 'W.C.' was located along the back boundary of the stand, access being gained by either a sanitary lane which ran down the middle of a suburban block, or where this was absent, by thin sanitary passages which flanked the side boundaries of the stand. Because of the inconvenient location for the inhabitants of the main house (particularly at night), the 'night-commode' was generally used. The toilet house structure was very elementary being constructed of either timber and corrugated iron or brick. Its size was usually 3'x5'. The seats had to '...be provided with hinges to facilitate the removal of pails, and a sufficient quantity of dry earth or ashes shall be used to cover the such contents of such pails in use' (75) -hence the title 'earth closet' or E.C..

f.) Passages and Staircases

Common passage widths begin at approximately 2'6" and increase to as much as 5'. The swelling which occasionally passed for a hall at the front door was usually 6'.

Staircases in the detached house tended to be either dog-legged, quarter turn, or occasionally half turn. In the semi-detached house where the unit was only a room and a passage wide the stair was commonly straight or quarter turn with winders. The widths of the stairs were usually 3'.

g.) Stables and carriage houses

These usually accompanied detached houses although they can be found in the larger semi-detached houses. Although not always present, it was a relatively common feature in houses of the outer

suburbs. The stable was a double storey structure, with the hay loft occupying the upper level. The size of the stable depended on whether one or two horses were kept: where there was only one the size was about 10'6"x11', and two 16'x14'. The height was 10'. The coach house was approximately 10'x14'. These structures would have been linked and were either constructed of a timber frame and sheet iron cladding [see FIGURE 3.1-102] or brick. The location was usually along the back boundary.

3.2 PART TWO

A. THE DETACHED HOUSE

(i) SINGLE STOREY

The suddenness of Johannesburg's establishment inevitably led to the provision of housing depending on various established imported 'architectural ready-mades'. Perhaps obviously, all those 'nomadic' types which appeared had had a history which as soon as they were set down in Johannesburg was to be extended to embody a host of mutations. Since these often bore the insignia of the inhabitants differing cultural backgrounds (cf. BOOYSENS 136 [FIGURE 3.2-6] and BRAAMFONTEIN 2198 [FIGURE 3.2-8]), the intention here is to rather list variations and principal themes than to categorically credit any particular one as being an evolutionary milestone.

Two broad or principal themes become apparent when examining the influence on the spectrum of late Victorian detached houses in Johannesburg. They have different places of origin and distinct characteristics. They are; a.) The Verandah house, and b.) The Vernacular cottage.

a.) The Verandah House

The verandah house was a type which was widely used in many

different countries; 'It is worth noting here too that the four-verandahed house style with steep pyramid roof is certainly not confined to Queensland but seems to be a British colonial style -as existing and former houses show in South Africa, Sierra Leone, India, the West Indies and elsewhere in Australia.' (76), although as to its origins there is a great deal of uncertainty (77). As an import to South Africa, the verandah house was mainly used and adapted in Natal (mostly around Durban) by the English settlers of the nineteenth century (78). Similar plan types, without as much verandah (usually only one side) were built in the Western Cape (79), although how many of the shared characteristics were common to other 'English colonial' patterns than to what was essentially a Verandah house (a distinct type) is a little unclear (80).

In the Transvaal it had been used in Barberton and Pilgrims Rest before its appearance in Johannesburg. Most of the contemporary characteristics of the verandah house are encompassed in MARSHALLSTOWN 759 (date: 1894) [FIGURE 3.2-1]: the plan clearly exhibited a central passage which ran from the front door straight to the back, dividing the house into two halves. The one half usually accommodated the semi public rooms (which included the sitting and dining room), whilst the other half contained the bedrooms. The verandah ran around at least three sides of the core -which would be that part accommodated under the main pyramidal roof, comprising four rooms (with the middle passage). The fourth or back elevation would originally have been cloaked behind the verandah as well, although in this example developments which lured the service rooms up against this outer edge (accommodated under a lean-to roof), largely afforded the continuance of the aesthetic although somewhat disturbed its academic purity. The service rooms

were occasionally held apart by a small space for a back verandah (on axis with the central passage). Somewhat unusually, the out of date 12 pane sash window -a typical mid-century hang over, is used on the front elevation (four pane was more fashionable at the time). The fact that there are no fireplaces and hence chimneys, could be explained by the fact that since it was a tropical house form they weren't strictly necessary -the designer of this particular house possibly not being fully acquainted with Johannesburg's climatic conditions.

JEPPESTOWN 453-5 (date: 1893) [FIGURE 3.2-2] was a slightly more sophisticated variation. As usual the elevations were a little stiff and formal -the front in particular displaying a rigid symmetry, enhanced by the two large bay windows to the drawing room and bedroom. Although the front elevation is distinctive, the surrounding elevations were of a similar form -the verandah or lean-to as an initial 'layer' before the dominating principal roof. The back service range comprised the kitchen, pantry, bathroom and a loose bedroom under the same roof which were connected (although not shown) by an entirely external route (81).

Since in this house type the verandah ran around at least three sides of the house, front and side space was required -a factor which severely curtailed both its use in tight urban situations (Johannesburg's 50'x100' stands were far too small) and its adaption into other house types. Although semi-detached verandah houses are not entirely unknown (82) they were very rare. Other detached house plan types to be examined in this section were generally more flexible and were used to produce semi-detached and terraced house rows. Variations on its theme in the speculative arena tended to be limited because of its inflexibility -it would have been difficult

to add or subtract from its composition without rocking the basic concept. Of course minor variations did occur, mainly in the form of extended back wings, although they were always heavily dependent on its basic form. But in Johannesburg the small verandah house had a limited speculative use, and died out quite rapidly in the 1890's (83). This is not to say that it was without influence: many of the ideas embodied by it, were incorporated in late Victorian mutations, whilst it was in the purer sence in a state of decline.

b.) The Vernacular Cottage

Whereas the verandah house can almost certainly be considered an import, the other major house type had its roots more firmly in local building history. Its characteristics by the 1890's can only be loosely defined, as the number and types of variations were many, and were multipling very rapidly during this time. The plan comprised essentially four rooms; two wide by two deep. These in the earlier and perhaps cruder examples would have been interleading, although by this time a short passage from the front door past the first bank of rooms, which then dissolved and formed part of the dining room was introduced. The elevation is equally as hard to define, since two schools of thought were exploiting its potential to their own ends (the symmetrical and the asymmetrical schools), although tracing the cottage's origins back a little further than Johannesburg's foundation, reveals a distinct symmetrical ancestry (84). Dennis Radford has covered much of the early development of the cottage in 'The South African cottage in the 19th century' (84), an article which helps to place the emergence of the cottage plan in Johannesburg into perspective. What is clear is that its appearance in Johannesburg -being towards the end of the century, comes at quite an advanced state of its development. Although an alteration,

JOHANNESURG 160 (date: 1893) [FIGURE 3.2-3] embodied many traits of the late 19th century cottage, in its maintainance of several essential elements common to examples found in the Cape and Natal (even though a few post 1870 Victorian additions such the verandah have been made): the simple symmetrical elevational arrangement framed by plain verandah posts, and the front rooms being accommodated under the main double pitched roof, with a lean-to covering the second range of rooms, all bare witness to the fact. The gable-ends either side of the first range of rooms link it to the Dutch rather than English tradition. This then is the basic theme -from here on the score is subject to modulation.

Having established the basic plan type, it would be as well to mention the two fundamental approaches to the composition (frontal symmetry (which unlike the verandah house), only presented one symmetrical face (to the road), and asymmetry). The preference for the asymmetrical plan and the attendant irregular massing of volumes (especially prevalent in the roof design) was further emphasised by the visual fracture afforded by the verandah, rich ornamentation (both externally and internally) and the off-centre gable and accompanying bargeboards. Of course all these contrivances were intimately linked to the picturesque notion of the balanced pile. Volumetric articulation inevitably affected the plan, and it was the double-fronted house which suffered the imposition of distortion in the realisation of these ends. The most innovative move was the shifting forward of the drawing room to the front edge of the verandah -and by doing so, the symmetry both in plan and elevation was effectively destroyed. Further articulation was achieved with the addition of a bay window. '...The building was obviously treated in the picturesque manner popular with English estate buildings and

its antecedents can be found in the pages of many contemporary pattern books' (85). Whilst compositional symmetry was buttressed from both traditional vernacular and 'imported' quarters, calculated asymmetry (as will be seen in the following examples) seems to have been a particularly Anglo-Saxon colonial trait.

Variation 1: With the main roof structure encompassing the house 'core' (which was essentially two rooms deep by two rooms wide with a central passage).

1a: Symmetrical school -BRAAMFONTEIN 53 (date: 1895) [FIGURE 3.2-4]. The kitchen here, was separated from the pantry, which although by this time was becoming the norm, indicated a subtle tuning to a lifestyle that was perhaps less spartan. The fact that the dining room was distinct from the kitchen, made for a more graceful dwelling, although the absence of a sitting room and the dining room's possession of the fireplace (implying it performed this function as well) indicates that it still had a few steps to go. Externally the large pane sash windows were at this time very fashionable and hipped roof owes some debt to English tradition. The four panel doors with the smaller panels at the bottom, were also typically late Victorian.

1b: Asymmetrical school-JUDITHS PAARL 64 (date: 1903) [FIGURE 3.2-5] was essentially the basic 4 roomed house of symmetrical parentage, straining to be an asymmetrical child. This is only partially achieved in plan, with the parlour's main thrust directed out towards the street being accomplished merely by the strategic placement of the bay window (since it was a square 12'x12' room). A clue to the aspirations of the inhabitants can be detected by the inclusion of both a dining room and a parlour despite the limited floor area. The dining rooms with its glazed double doors to

the outside suggests its function was a little more than just an eating place. The roof form with its vents to prevent heat build-up above the ceiling indicates a certain sensitivity to climatic conditions -a characteristic which evolved in the 1890's.

Variation 2: 'A last evolution was the building of a triple range plan covered by a double pitch roof over the first two sets of rooms and with an afdak over the last range...' (86). This allowed for a six room plan with a central passage.

2a: Symmetrical school -BOOYSENS 136 (date: 1908) [FIGURE 3.2-6]. The location of the kitchen, pantry and bathroom with a back stoep against the back of the house under a lean-to was a habit gleaned from Natal, (albeit a late Victorian development which united what had previously been separate buildings -the house and the service area). The over-sailing eave was an unusual detail since gables or hips were the most common design solution. The lateral devotion to the road at least aesthetically could not be be more pronounced -successfully fulfilling a late Victorian preference.

2b: Asymmetrical school -BRAAMFONTEIN 5045 (date: 1895) [FIGURE 3.2-7]. Although this example is charged with foreign features and elements, it still belongs to the 'vernacular cottage' category. The plan depends in essence upon the four part division covered by a principal roof, with an adjoining lean-to at the rear accomodating the kitchen, pantry and bathroom. This example however, illustrates how complex the vernacular cottage was to become (before its fusion with other equally strong influences in the ultimate production of the diagonally symmetrical house). This variation was immensely popular, and dominated asymmetrical house design -it was a type that occurred with relatively minor alterations in both the

Cape and Natal. The rudimentary plan types of former examples have been wrenched about and spiced up with several more subtle alterations in the production which by comparison externally were almost unrecogniseable: In order to achieve an asymmetrical front the drawing room (which by its very inclusion indicates that this was a dwelling of comfort), was turned so that the major axis was perpendicular to the street front, and brought forward to the verandah edge. As has been suggested the drawing room was not a room for recreation but for infrequent formal entertaining, and was thus quite a small room. Somewhat conviently, the dining room swelled with the drawing room's forward slide. The large opening between the dining room and drawing room, meant that when social need demanded, the two could interlead. The drawing-room's fireplace and bay window confirm allegiance to contemporary popular English domestic custom. A sensible relationship between pantry and kitchen, and kitchen and dining room is at last achieved by means of a simple lobby -a device which seemed to have eluded many pre-war designers. The front elevation was crammed with iconic paraphernalia which because of its fussiness, distances it from the vernacular cottage -the hipped roof, corniced chimney, plaster quoining, horizontally ruled joints (rustication) on the gable, bay window with a large vent above, elaborate timber fretwork under the gable eaves and the finial, were almost all based upon popular Anglo-Saxon domestic applique. Whilst the plan of this type was readily accepted by many without much alteration, the external detail and decorative embellishment was seldom the same on any two examples. The fashion game seems to have begun at this point -as is born out here, there appears to be a corresponding relationship between increased comfort and frivolous display.

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Variation 3: The longitudinal section of this type was similar to variation 2 in that the main roof structure was two rooms deep with the service rooms under a lean-to being attached to the back. The difference lay in the location of the dining-room, which although still situated within the second range of rooms, displayed a remarkable fusion of two distinct cultural preferences. The 'agterhuis' of the South African Dutch vernacular dwelling (87) was positioned on the central axis of an essentially symmetrical first bank of rooms resulting in a 'T' shape plan. The resultant back rooms in this hybrid variation, are of a questionable proportion -the price of contrivance.

3a: Symmetrical school -BRAAMFONTEIN 2918 (date: 1895) [FIGURE 3.2-8]. This example shares many compositional and even planning characteristics with variation 2a. Although the only room labelled is the dining room, the room adjacent to it with a fireplace is obviously the kitchen. The other room flanking it, was probably a bedroom. An unusual interpretation of the 'afdak' has resulted in the main roof structure being lifted up rather high so as to allow for the service rooms to be incorporated under the same roof slope. In the interests of proportion, the verandah roof and the main roof on the front elevation were separated, the resulting strip being partially filled with an eaves rail and decorative brackets.

3b: Asymmetrical school -BRAAMFONTEIN 2725 (date: 1893) [FIGURE 3.2-9]. Again this variation owes something to those examples categorised under variation 2 -only the asymmetrical school this time. However, the difference lies not only in dining room location but in the way in which the 'sitkamer' or sitting room was packed out behind -with a pantry (this being just one of the many

strategic 'fillings' exploited to justify the articulated facade). The twin set of sash windows on the main gable confirms its debt to mid-Victorian colonial speculative housing (although this simple handling of the front gable is seldom seen in houses of this nature after 1895). Most of the decorative embellishment is borne by the timber fretwork on the main gable and verandah -a shy use of decorative plaster (being confined to window sills and lintels) accountable to an early hesitant use of the technique. The evidence of the side gable ties this example back to the vernacular approach (the foreign hip alternative not being explored here).

Variation 4: That which was examined in the vernacular section, had but one formal face, which was to the road. The verandah house, as has already been stated, possessed the potential for 'omnidirectionality', although the main entrance was usually against the side of common approach. In TROYEVILLE 679 (date: 1904) [FIGURE 3.2-10] the striving for compositional organisation of the balanced pile, achieved greater volumetric articulation by combining the most advanced ideas of the asymmetrical vernacular house type, with ideas from the verandah house. Several rooms were nudged sideways, but their essential location within the overall plan was not challenged: The verandah was made to slide around two sides of the house, with the result that it was no longer the preserve of a favoured front -a factor which, perhaps intentionally, resulted in the ambiguity of 'front'. The dining room was pushed out to the external edge of the verandah and treated as a gabled 'wing' much as the drawing room was, in earlier examples. Providing thus for an effective stop to the verandah's run, french doors often connected the two in a more effective utilisation of the verandah space. Oddly enough symmetry was maintained not frontally but on the diagonal. The internal

planning was otherwise arranged in a similar fashion to the verandah house (cf. MARSHALLSTOWN 759 [FIGURE 3.2-1]) with the bedrooms falling one side of the bisecting passage way, and the sitting room and dining rooms on the other. There was still a lean-to at the back covering some of the service rooms. This type was very common during the eighteen-nineties and continued to be built right up to the nineteen-twenties, on a variety of different stand types despite its obvious suitability to corner sites. Refinements were made very rapidly which soon placed it within a category of its own. These include: the slight widening of the passage flanking the sitting room: the complete internalising of the bathroom, and the inclusion of such items as linen rooms and built-in cupboards: and the combining of the kitchen and pantry in the definition of a single precint for the storage and preparation of food.

Elevationally Troyeville 679, had been simplified: the gable end was less fussy, the fretwork common in earlier examples being replaced by pseudo half-timbering -a motif from the Old English Revival which tended to favour bolder English rural features. The verandah balustrading, posts and eaves detail had also probably been simplified in the same spirit.

Variation 5: Although WANDERERS VIEW 56 (date: 1897) [FIGURE 3.2-11] was not a typical speculative pattern (for its idiosyncratic plan arrangement and some quirky details), it is worthy of mention for its embodiment of an idea which re-occurred in many other housing types such as in semi-detached and terraced housing (from late Victorian through to the Edwardian era). The idea centred around the the entrance to the house being one room back from the front -entry thus being gained by moving past the front and down an external or side passage. Effectively bisecting the house laterally

as well as longitudinally, the result was a rather wilful circulatory pattern, although the advantage separating the most public room -the sitting room, from the main body of the house, may well have been the motivating force.

(ii) THE DOUBLE STOREY HOUSE

We learn that in Victorian Cape Town amongst those who had the choice, the double storeyed house was prefered over the single for its more imposing nature (88). In Johannesburg however, the proportion of these to single storey houses was very small -especially in the speculative field. There were several reasons for this:

1. The cost of a double storey (when a single would have sufficed) would probably have seemed unnecessary -since building costs in Johannesburg were already high.

2. The building of a double storey with its slightly more complex technical demands -that of staircases and temporary support, probably would not have seemed worth the effort, particularly to the speculative builder who would have wanted to build as fast as he could.

3. The double storeyed house set limits on the designers freedom to plan at will on the first floor, due to the position of the load bearing walls on the ground floor (although this was partially overcome by the use of a lightweight partitioning comprising lath and plaster).

4. Although stand space was generally a little cramped, it presumably was as bad as to warrant a double storey.

The choice offered to the speculative builder about whether to go for an imposing architectural aesthetic at the expense of these 'practical' constraints, could not have been particularly agonizing.

Despite this however, where there were instances of the double storey house in Johannesburg, the plan and overall form were in a comparatively advanced state -unlike the single storey house which was represented by a range, from crude dwellings in evolution to slightly more sophisticated examples. The double storey's basic criteria were seldom challenged to the extent the single storey's were, and hence did not bear a similar host of variations. Although three types can be identified, they share several common features:

1. Semi-private areas were confined to the lower floor, whilst the upper level was almost exclusively private.

2. Internal circulation was generally by means of passages and not inter-room transmission.

3. Most of the accommodation occurred under the main roof structure -although lean-to's were known to occur. This was one of the major advantages of the double storey -that at least eight major rooms could have been accommodated under the main roof.

Variation 1: As with the single storey, there was a basic theme from which several variations emerged. The plan once again was defined by a four roomed unit with a central passage, the pattern of which was duplicated on the upper level. Symmetrical and asymmetrical compositions based on the same variation could be found (asymmetry being achieved through the same device as before, in which the sitting room (with a bedroom above) was pulled out to the front edge of the verandah). It should be noted that although symmetrical houses could be found in Johannesburg, asymmetry was by far the most common. The different types defined below vary in the location and treatment of the staircases:

1a: BRAAMFONTEIN 4920 (date:1896) [FIGURE 3.2-12].

Here the staircase was treated as an important internal

architectural feature, by virtue of the fact that it was allowed to occupy one of the quadrants comprising the four part plan. The open well lends it a 'grandeur' that one might expect to be slighly in excess of a house this size, but for the fact that it is part of the entrance hall. The dressing room above this area is a trait common to many late Victorian double storey plan types. The service wing although not accommodated under a lean-to, was kept from prominence by means of a smaller scaled pitched roof and being of narrower width. The house though small in area and room number, was loaded with references (in title only) to a lifestyle perhaps a little beyond its inhabitants' social standing; items such as the nursery, the study, the large area given over to the stair/hallway and the abundance of fireplaces. The elevational composition however, does not maintain the same intensity of pretence. Although asymmetry was quite acceptable, here the composition's technique (mainly due to its slender and rather crude verticality) smacks a little of a typical semi-detached house unit (half a semi-detached house). Of course attempts at disguise were made -most notably the hipped roof, although detail plays its part as well -bracketed eaves, and a cocophony of plasterwork details -which was all calculated to create an air of wealth and independence. The bay window and the pedimented lintel above the window on the first floor assumed a distinctly classical flavour -a step in iconic sophistication which begins to herald the demise of the simple vernacular approach -even those of asymmetrical disposition. With an increasing exposure to such ostentation, a taste for exhibitionism amongst the populace became inevitable -a snowballing respect for pastiche was being cultivated under the licence of fashionable domesticity.

lh: JOHANNESBURG 4863-66 (date: 1897) [FIGURE 3.2-13].

In plan, the staircase fills the void left as a result of the drawing room being shifted to the front line of the verandah. Although the staircase's presence slightly distorts the quadrant arrangement, it is still recogniseable. The entertaining rooms were located next to each other and were interleading. The position of the fireplaces in these two rooms gives some indication of how they would be used; the drawing room for instance has its fireplace in the corner -which suggests the furniture would have been gathered around it and not thrust against the walls in a strictly rectilinear way; the dining room (still the largest room on the floor) on the other hand, more predictably had a centralised fireplace, as the furniture arrangement was limited by the rather rigid dictates of a dining room table. By having these rooms interleading and with the introduction of the stair between the kitchen and study, all the benefits of the shared flue seems to have been foresaken. The toilet was somewhat unusually attached to the house (being normally a separate entity), and whilst on the ground floor, access was still not directly through the house, the upper level however was. A 'shaft' has been designed, the bottom of which probably housed a pail.

The elevation bore many unresolved details: The bay window on the main gable was backed by a rectangular 'French' turret, which due to its failure to be acknowledged in plan, lacked appropriate force in elevation, appearing much as an afterthought. The ruling in the plaster (particularly on the side elevations) was a common let-out for large bland stretches of wall which weren't doing as busy a job as the front facade -a device used in the 1870's in other regions such as the Cape, and this instance was supplemented with dummy windows. Compositionally the whole alluded to a kind of nervous

diagonal symmetry, which alas wasn't quite satisfied -betrayed mainly by the predominantly frontal aspect (the verandah and the decorative detail being limited to one face and not returning down the adjacent flank). To be fair, the plan type was in its infancy. Most of the elevational clumsiness however, takes after the immoderate and bulky detailing of the 'Notched Style' -a grotesquely exaggerated form of carpenter gothic.

1c: -Asymmetrical school -BRAAMFONTEIN 5059 (date: 1904) [FIGURE 3.2-14]. As with variation 1b, the staircase was situated between rooms, whilst the overall plan still recognised the two by two room format. The stair and passage were located on axis defining a far simpler circulation pattern than the former's 'L' configuration. One of the bedrooms was to be found on the lower level, which was unusual (most probably a specific requirement of the client), but which could be seen in the general trend as a room function that was interchangeable. The elaborate system of exterior stairways and passages probably served as an independent circulation for either lodgers, or (more likely), servants -so as to facilitate the minimum contact between lodger/servant and inmate.

Compositionally the house was still uni-directional, embracing the road edge only, whilst the elevations showed signs of aesthetic progress; plaster work had almost entirely fallen away being limited only to window surrounds and sills -even the quoining was expressed in brickwork; and, the use of sash windows was confined to the sides and back, whilst the casements (which was by this time coming back into fashion), were used on the front facade. The decorative timber work around the verandah was however, essentially Victorian.

-Symmetrical school -KENSINGTON 1029-30 (date: 1904) [FIGURE 3.2-15]. The ground floor plan was once again a distorted

quadrant, which appears to have been done for the sake of creating a back verandah (vaguely reminiscent of an asymmetrical villa facing backwards!) The staircase was located in the line of circulation passing from front to back. The upper levels' movement pattern however, was about a core which in turn was surrounded by rooms -this device was normally employed in situations where the house's dimensions both laterally and longitudinally took the form of two rooms with a middle passage. However, because the rooms were large on the ground floor this situation could not apply, although on the upper level many more smaller rooms were accomodated (due to studd partitioning) and the 'core' circulatory pattern was facilitated . The Victorian social habit of using the dining room as a place for gathering, be it family or otherwise, was again exemplified by the comparatively larger size of dining room to drawing room. The drawing room was lent added status by a series of formal arches either side of the fireplace.

Although the front elevation tended to symmetry, this was thrown by the difference in width of the dining and drawing rooms on the ground floor, and the uneven distribution of rooms on the upper level. The strong gables and the unifying aesthetic the double storeyed verandah right across the front of the building offered, masked these minor deviations. Unlike an asymmetrical frontage in which a protruding bay provided a stop end to a verandah run, the symmetrical frontage had nothing but its outer parameters. The verandah can therefore be seen to be an almost separate element that was applied to the face of another -the artistic satisfaction derived from weaving and interlocking the two elements (house and verandah) together into a compositional whole (such as in the asymmetrical house) was really not an option. The outer or finishing

edges of the verandah roof therefore, quite often tapered. Once again different types of fenestration were mixed together -although a hierarchy of sorts can be detected. On the front facade the primary rooms (drawing and dining rooms) had casements, whilst the secondary rooms (bedrooms) had sashes -the two mixed together on the same face displays a lack of conviction, displaying the period within the house's history of aesthetic change. The casement windows were themselves a mixture of elements from different origins, the upper section comprised panels of small panes (a typically Queen Anne detail) and a mid-panel which owed much to the french door and side light element. Although this house was situated on a large stand (two 50'x100' stands), and had much space about it, it was still strictly frontal or uni-directional -a typically Victorian trait. Plaster quoining was confined to around the front windows and edges of the building.

1d: All previously mentioned symmetrical and asymmetrical variations have been strictly frontal. However, asymmetry really only finds its true self in the three dimensional volumetric interplay of examples such as the diagonally symmetrical house, and those of picturesque proclivity (see variation 3). What precedes these are merely 'flat' toys which don't fully grasp its possibilities. The organisation of the plan of JEPPESTOWN 1476-1477 (date: circa 1904) [FIGURE 3.2-16] didn't greatly challenge the pattern of what has already been described, but how this pattern was manipulated (whilst still remaining recogniseable), had consequences that greatly enhanced the artefacts' ultimate complexity. The dining room instead of keeping in line with the drawing room (by extending longitudinally backwards), was swung out perpendicularly, so that a 'niche' was created in which the drawing room and the encompassing

verandah could couch. This form had its counterpart in the single storey house (see TROYEVILLE 679 [FIGURE 3.2-10]) which possessed a similar roofscape. Although the drawing shows the upper level with only three bedrooms -a quarter of the 'quadrant' being absent, subsequent aerial photography shows (89) this was eventually made whole.

The elevations displayed a variety of materials, (cf. earlier examples) such as facebrick with plaster quoining ,window sills and heads. The gable-end decoration with its mock half timbering was reminiscent of Old English revival. The verandah detailing (as drawn -although it may never have been like this) made use of timber on the ground floor and what appears to be either cast or wrought iron on the upper level -signs of a slightly wealthier owner. The windows on the gable with their upper panels divided into smaller panes were of the Queen Anne revival.

Variation 2: The house on a corner stand always had the problem of frontal duality. Although it often presented two 'good' faces to both street edges by means of a diagonal symmetrical composition (as discussed under variation 2d), other approaches were devised. MARSHALLSTOWN 832 (date: 1894) [FIGURE 3.2-17] being 'L'-shaped had two 'wings', a characteristic which eschewed the uni-directional box-like quality which typified the quadrant house. Unlike the diagonally symmetrical house (which eventually became to be used indiscriminately on all stand types), the 'L'-shaped plan's use in late Victorian times was confined to corner sites (more specifically 50'x50' stands).

The exterior of Marshallstown 832 was treated in quite an uncluttered manner with strong clean gables, all in plaster. The one 'dormers' pitch suggested a hint of gothic revival, although it was

elegantly understated. The whole possess the stripped appearance of early pattern book houses. Only two and four pane sashes are used (paired on one of the gable ends) which was probably a hangover of an idea developed slightly before Johannesburg's time.

Variation 3: The idea of entering the house down the side with the front door one room behind the outer face of the house has already been mentioned. Clearly in BRAAMFONTEIN cnr.De KORTE & HARRISON STREET (date: 1898) [FIGURE 3.2-18] where this planning device was used, simplicity and tidiness of plan were clearly shunned. In this example, the choice of circulation pattern and its effect in fragmenting the plan greatly facilitated the picturesque cause. The main roof structure did hov ver a two by two room plan, although it was grossly distorte y of the accepted traits of contemporary planning arrangement were challenge for instnace the position of the front door, which instead of being couched next to one of the two gables, sat outside the volumetric enclave (which traditionally defined a normal diagonally symmetrical house), under the turret; and the dining room was not accomodated within the double storeyed 'core' of the house but treated under a separate roof, almost as an intermediary betwixt the main house and the service rooms, under the lean-to at the back! The elevations bore Venetian gothic window heads, and the treatment of the wall plane, rather unusually for Johannesburg at this time, combined facebrick with plaster cornices and quoins. The verandah partially wrapped around three sides (perhaps a half-baked concept emanating from the verandah house.)

Although not a typical speculative type, this example poses as a representative of the many houses which made use of contemporary

planning devices and compositional techniques but which defy more specific categorization.

B. THE TERRACE HOUSE

The row and terrace house tended to be a housing form which catered more for the lower-middle and working classes. The sumptuous triple storey English townhouses meant for the upper middle-classes and containing as much accommodation as a detached house, were never built in Johannesburg. The terrace was exploited as a quick, economic solution to the demand for accommodation during the first years of Johannesburg's existence. Terrace houses were '...ideal speculator's architecture offering maximum returns for minimum outlay. These buildings were invariably erected for rental purposes' (90).

The format of a terraced house presents several problems: 1. Access to the back -an important consideration since sewage was collected from the outbuildings along the back boundary. This was overcome in areas such as Braamfontein, Wanderers View (and later Hillbrow) by the introduction of sanitary lanes which ran lengthways down some early Johannesburg blocks. Notable exceptions where terrace houses were common and no lanes existed, include Ferreiras Town, Fordsburg, Jeppestown and Doornfontein -in which case a passage down one side and part way along the back was allowed for. Access was then by means of a series of gates between it and the back yards of the houses. The other solution was a sanitary 'tunnel' accessible from the front, which was usually given some form of architectural expression (see WANDERERS VIEW 81-92 [FIGURE 3.2-29]). 2. Because the typical unit was hemmed in on either side, light could only be obtained from front and back -which meant the main body of the unit could only be two rooms deep. The service rooms were thus strung out behind (known as a tunnelback), which because they were usually only one room wide and of a much narrower girth allowed light into the second

range of rooms.

The single storey terrace house was more common than the double storey, which was probably due to the fact that the terrace was used in an almost 'temporary' or 'transitory' capacity -as a stepping stone to something bigger and (preferably) detached. The types found in Johannesburg had similar counterparts in Cape Town.

(i) SINGLE STOREY

a.) One room wide

The simple one room wide terrace house (often referred to in manuals and handbooks on housing as 'labourers' cottages'), was a basic and 'primitive' form of accommodation. One unit usually only comprised 2-3 (interleading) rooms which was also somewhat rudimentary in external appearance, having little or no elevational embellishment. They occurred in lots of three or more (quite often in multiples of three), with little visual or spacial relief.

Variation 1: Basic format -FORDSBURG 246 (date: 1896) [FIGURE 3.2-19]. A group of three units, one room wide was a common phenomenon, as it was as much as a 50' wide stand could accommodate (including its side sanitary passage). In this example in order to be able to fit more rooms lengthways, the two back units have had their widths decreased so that light could have reached the middle room. The verandah in front was but a nod to domestic custom, as it was so narrow, that at best it would merely have sheltered a person at the front door from the rain. The gablets set into the roof above the verandah were similarly token gestures to an essentially absent individuality.

Variation 2: Basic format with passage -FORDSBURG 609-610 (date: 1897) [FIGURE 3.2-20]. The introduction of a passage in any housing type (be it terrace or free standing), was a triumph for the privacy

impulse, and its inclusion must be seen to be an indication of an increase (no matter how slight) in degree of status. The functions of the rooms in this example were a little more clearly defined as compared to the former - for instance the room next to the kitchen, (although mer ' labelled 'room') has a similar geography by virtue and its comparative size and location to the dining room in the detached house -a function which it undoubtably performed (although it probably served as a bedroom as well). The sanitary passage circumnavigates the group in a neat migration that would have gladdened the heart of any sewage collector as cul-de-sacs were often his lot.

Compositional and Elevational Variations -'Nothing appears on terrace houses which is unique to them, but the repetition along a street, and the variations upon a theme which can be be observed in a brief walk, bring them into prominence' (91). The character of a terrace group is made distinctive by the presence of several obtrusive and mandatory firewalls. To bestow compositional unity on a group therefore, would have been a task that involved a modicum of deception (in the manner that embellishment deceives rather than by something more fundamental such as structure). In BURGERSDORP 646-647 (date: 1898) [FIGURE 3.2-21] for example, an endeavour to lend a soupcon of grandeur and unity to a row, by highlighting the end and centre bays, by means of gables was made. Of course those units directly behind these minor celebrations were no different to any other -it was but an act of deceit. FORDSBURG 220 (date: 1896) [FIGURE 3.2-22] on the other hand was a far humbler set, and considerably more subtle. The middle unit was set back from its neighbours, thereby creating an entrance verandah that was common to all three -a tightness of design lacking in most speculative

examples of this period. The two side units were gable-ended without straining to be clever. The whole looks effortlessly balanced without pretension; structural honesty -no deceit.

b.) 2 rooms wide

Although those units of a two roomed width were of a slightly more salubrious nature, the motivation for implementing this 'double fronted' format is a little unclear: Since they normally occurred in lots of four built over two stands, to have opted for two pairs of semi-detached houses may have seemed a more attractive alternative solution. However, the shared walling and the benefit of service continuity was quite probably a cost saving which swung the decision.

Variation 1: Although on close inspection each unit of JOHANNESBURG 970-971 (date: 1896) [FIGURE 3.2-23] contained as much accommodation as a typical unit in FORDSBURG 246 [FIGURE 3.2-19] (see preceding section on one roomed wide units), it was organised in a far more flexible and distinctive manner. However, this series represents the most basic of the 2 room wide unit type, which was distinguished by the inter-room circulation pattern and the absence of a separate service wing (which would have had at least a pantry). Small concessions to comfort were made with the inclusion of a fireplace to the kitchen -which probably would have been used as a dining room/sitting room/bedroom as well. Once again the distinction of the facade hangs from the small pitched gablet over the front door. A unit's identity was defined by the symmetrical composition of its frontage -the door being held in position by flanking sash windows -not like the single roomed unit's composition, where one unit relied on the handing of the next for 'visual completion'.

Variation 2: The variations mentioned in this section all

adapted detached house plan forms in the creation of their particular typical units -which have counterparts in both the symmetrical and asymmetrical schools. Some of the adaptions include the obvious exclusion of windows in the side walls, and the re-orientation of the service strip (formerly located laterally along the back of the house under a lean-to) to suit the tunnelback format.

-Symmetrical school. The room and passage arrangement in the typical unit of JOHANNESBURG 46 (date: 1897) [FIGURE 3.2-24] was based on the detached house type which was discussed under Variation 2: symmetrical school (see BOOYSENS 136 [FIGURE 3.2-6]). Note how in this example the last unit (against the sanitary passage) was treated to a hip, whilst the unit at the other extremity (obviously right against an adjacent stand) had a firewall.

-Asymmetrical school. BRAAMFONTEIN 5031 (date: 1895) [FIGURE 3.2-25]. The plan was based on the detached house type which was discussed under Variation 2a: asymmetrical school (BRAAMFONTEIN 5045 [FIGURE 3.2-7]). The relatively expensive quasi-turret at the end of each protruding wing (as opposed to the more conventional gable and accompanying bay window treatment), was an device usually reserved for more extensive houses. The use of french doors on the front facade was probably a measure taken to admit as much light as possible to the rooms behind the verandah (the ordinary sash would probably have had insufficient area). The end unit celebrated the corner with a full and quite distinctive 'ogee' turret, with the intensity of elevational embellishment being maintained on both faces -obviously located at an important intersection. Somewhat unusually the of pinning the date of erection

on the side elevation was done here, although this tradition was chiefly reserved for commmercial buildings. This and the careful detailing indicates a degree of pride taken in this building's design -which in a set of terrace houses was indeed rare.

Variation 3: Mongrel terraces. As exemplified by BRAAMFONTEIN 3021 (date: 1895) [FIGURE 3.2-26], the three unit terrace house was not always comprised of units with similar accommodation -in area or layout, as here both single and double room width units made up the set. The desire for a strictly symmetrical composition usually determined the order of unit arrangement. The side units were by themselves asymmetrical arrangements, although somewhat ironically, since they occur at either extreme and were handed, provide for a symmetrically balanced composition. The reason for building a row of both one and two room wide units is not entirely clear, although an owner/landlord could quite possibly have lived in the larger middle unit and rented out the remaining two. Once again the firewall/gable end on the side (running down the length of the stand) on the left was not echoed on the right -which besides conforming to the by-law, displays a distinct preference for the hip, even in a situation where there was no hope of making both sides the same.

Variation 4: Other dense housing forms. Boarding houses and 'rooms' have for the purposes of this study been deliberately avoided, since they were not self sufficient residences, but accommodational forms which shared centralised facilities (such as kitchens, dining rooms and ablutions). FORDSBURG 840 (date: 1895) [FIGURE 3.2-27] comprised four self-sufficient living units, yet was neither a terraced series (since no units adjoin), nor was it a set of detached houses (since the space all around each 'unit' was common). It has however, been included in the terrace house section

because it bears the common stamp of compact accommodation -four units on one 50'x100' stand (two units in front and two behind). What is interesting is that it beats the established terrace house format at its own game -no terrace house arrangement however it was arranged could achieve four units on a single 50'x100' stand and still have room for sanitary ways to all toilets -the stand proportion was inappropriate. However, there's a hint of desperation in this speculative tactic -squeezing four units onto one site borders on perversity. Its form appears to have originated from a combination of factors: most notably the common Johannesburg boarding house layout (92), the physical constraints of the small stands and the desire on behalf of the inhabitants to live in a 'detached dwelling'. This type was quite commonly found in high density suburbs such as Fordsburg and Ferreiras Town. As can be seen in FIGURE 1.1-16, sets were linked back to back in numbers that ranged from four through to eight units, and perhaps as a transitional form, were occasionally combined with 'rooms' (which can be recognised by the fact that they made a continuous frame against the site boundaries).

The front two units which comprised a bedroom, dining room and a kitchen were usually slightly more sumptuous -commonly based on the four roomed asymmetrical cottage plan, than the back two units. Usually some effort was made so that the front units presented an interesting face to the road, whilst the back units were comparitively bland. The units which comprise FORDSBURG 840 (date: 1895) [FIGURE 3.2-27] lurk behind a screen wall which seems to have taken the warehouse as its aesthetic mentor, whilst FERREIRAS TOWN 193 (date: 1905) [FIGURE 3.2-28] utilised more accessable domestic

iconography -although the 'Cape Dutch' gables belong a little further on in this study.

(ii) DOUBLE STOREY

Although the multiple storey terrace house was the most prolific type of speculative housing form in Britain at this time (93), developments in the colonies drifted to more regional and almost independent plan types. The multiple storey terrace did find place in central and surrounding Johannesburg although they differed from their English counterparts most notably in their height -being only double storey and without attic rooms or basements. The double storey terrace could really only be justified in an area where space was at a premium, since the accommodation they afforded was seldom more than a medium sized SINGLE STOREY detached house, and they were usually more expensive and difficult to execute. It was a cluster housing type which disappeared quite rapidly after economic and transport conditions improved, although even before this they were not a popular or common house form.

The unit which in width comprised one room and a passage was the most frequently employed type -a plan which was indebted to its English ancestry (little evidence of a two room wide type occurring). The sitting room, dining room and kitchen were always on the ground floor, whilst on the upper level two bedrooms (of corresponding dimension to the sitting and dining rooms) could usually be found. However, a further bedroom accompanied by a bathroom was commonly found placed over the kitchen pantry wing, which was accessible from the landing that occurred about 2/3 of the way up the main flight of stairs. The location of this back appendage, determined the position of the staircase. 'A stair ascending towards the rear of the house suited [these appendages]. Because these appended rooms were narrow, and in function, service rooms, a lower ceiling was accepted and so the rooms

above them had floor levels lower than the main floor' (94).

Variation 1a: With a staircase along its longitudinal axis; WANDERERS VIEW 81 & 92 (date: 1903) [FIGURE 3.2-29]. The entrance into the house was rather typically across a verandah into a secondary zone (as labelled porch) -which was a small area in front of the door where one would have 'collected' oneself before entering. The thin passage way was somewhat wishfully labelled 'hall', which en-route to the back took a gentle kink and became even thinner with the introduction of the staircase. The arch as a space definer was used at this point -defining thus the zone beyond which the visitor did not stray (a private/semi-private divide). The pantry was shielded by the east facing kitchen. The dining room and drawing room were linked by means of large double doors -an idea perhaps more appropriate to such small dwelling units. The upper level had a dressing room over the lower floor's hall, which was accessible from the main floor, and was thus not dedicated to any one bedroom in particular. Access to the balcony was through this room.

The front elevation was riddled with Queen Anne and Old English revival motifs: the half timbering, brackets under the eaves over the balcony, the heavy brick chimney, the mixture of plaster and face brick, the asymmetrical composition of each unit and the windows with both small and large panes to name but a few. The sanitary passage (three quarters of the way along the elevation) was almost lost by the camouflage the facadal embellishment offered.

JOHANNESBURG 268-271 (date: 1895) [FIGURE 3.2-30] belongs to the same category although varies in minor room dimension and elevational detail. The verandah was however, used with greater compositional awareness -binding the whole together, and turning the

corner as an introduction to the spare set of terraces (almost semi-detached houses) onto Quartz Street.

1b: With a staircase placed laterally; NEW DOORNFONTEIN 72-73 (date: 1905) [FIGURE 3.2-32]. The tunnelback was extended back in this example to embrace the staircase. This not only streamlined circulation through the house (the constriction at the stair being eliminated) but also provided for the divide between the private and semi-private areas (the door between the two reinforces the notion).

The front facade had unusually placed gables which were centralised on the fire wall and not the unit itelf -an idea which fitted in better compositionally with the roof hips at either end. The verandah was 'applied' to the surface of the terrace building itself which afforded thus little volumetric integration. The verandah was adorned with cast iron balustrading, brackets and frieze strips -which was an unusually expensive way of making up for lack of creative impulse.

C. THE SEMI-DETACHED HOUSE

The two units which comprised the basic semi-detached house shared a common or party wall, a division which was carried through to the free space back and front as well, effectively slicing the stand into two parts. The variations which follow display to a greater or lesser degree a dependence on established terrace and detached house types. As with most late Victorian speculative house forms the semi-detached house presented one 'good' face to the front, whilst the sides were kept quite simple. The verandah against the front was once again a vital piece of aesthetic tack, used more often than not to bolster an otherwise ordinary building behind.

(i) SINGLE STOREY

The semi-detached plan occurred most commonly with each of the units being only one room and a passage in width; secondly as a double room unit separated by a middle passage; and thirdly as a combination of both the double and the single width types.

As with some of the smaller detached cottages, the division between private and semi-private space within a unit was somewhat indistinct -principally caused by the location of the dining room (the most important room in the house for family and casual entertaining) which was placed at the back of the house next to the kitchen. In terms of gradation of privacy, the sequence of rooms from the front door to the back -bedroom (or in the more genteel examples 'drawing room'), bedroom, dining room, kitchen, was far from ideal.

The roof configurations which evolved over this period varied from complicated forms which emphasised unitary individuality (susceptible to leakage) to simpler all embracing pyramidal forms towards the turn of the century. The earlier roof forms had a main roof, which ran parallel to the road edge and covered the first two room ranges, whilst the longitudinal tail of service rooms at the back was treated to its own pitched roof -which was occasionally further confounded by being doubled and divided by the party wall which ran down the middle of the valley gutter (see TROYEVILLE 335 [FIGURE 3.2-33]). The main roof (or lateral section) often possessed gables (which would have given rise to futher valleys).

Variation 1: 1 room wide. This type had obvious connections with the single room width terrace house unit, but with one important distinction. The semi-detached house having only one common or shared wall, left the outer longitudinal facades free for

fenestration. Since these flanks were seldom hard against the stand boundaries (normally pulled away far enough to facilitate a sanitary passage either side), light and ventilation could be gained to a string of rooms 3-4 deep without having to reduce the width of the house (as say the tunnelback service wing had, in the terrace house.)

la: Front entrance. In TROYVILLE 335 (date: 1905) [FIGURE 3.2-33] -the most common type of single storey semi-detached houses, the passage ran down next to the fire wall until it finally dissolved into the dining room. The plight of the dining room in single room width situation was almost always dire: because of the length that the semi-detached form afforded, the dining room was usually insulated from any decent aspect by the bedrooms on one side and a lateral shield of service rooms (and a bedroom in this case) across the other -whereas if the unit could only have been two rooms deep, the dining room may have at least looked directly out onto the yard). The Queen Anne front with its casement and small paned fanlit windows and 'half timbered' gables was again in contrast with the Queen Mary side -characterised by little embellishment and sash windows. The front verandah roof made use of self-supporting curved corrugated iron roof sheeting, under which elaborate timber balustrading and trellis work occurred. The rest of the roof then embraced a further three part strategy --the first impressive lateral section running parallel to the road was lent prominence by decorative ridging, the whole of which offset two proud gable ends. This in turn cloaked the back longitudinal stretch (already described), which then terminated in a lean-to roof sheltering the service wing. Such unrestrained usage of a variety of roof types was at the time common and quite in line with the pervading spirit of

volumetric fragmentation.

1b: Side entrance. NEW DOORNFONTEIN 22 (date: circa 1903) [FIGURE 3.2-34] made use of the concept which was characterised by an external approach down the side of the house with the location of the house entrance being one room back from the front. In this example private and semi-private space were clearly grouped at the expense of kitchen/dining room proximity. Even the roof was articulated in acknowlegement of these divisions. Interestingly, that although the whole arrangement and circulation pattern of the ordinary semi-detached plan (see variation 1a [FIGURE 3.2-33]) was challenged somewhat wilfully, the e[illegible]ional elements were merely reshuffled, and remained essentially uncontested. One of the most distinguishing compositional fea[illegible]es of this semi, was the manner in which the gablets picking out the respective front rooms were placed next to each other (a common Arts and Crafts motif). The side passage to the front door was accentuated by a pedimented feature which was woven into the fabric of the verandah. The front section displayed a slight departure from the strictly frontal elevational approach in that the embellishment (here typified by American Queen Anne verandah detailing, casement windows and banded plaster work) was carried around and down the side to the front door. The composition of an individual unit therefore, bore the mark of asymmetrical preference -the verandah for once not being a 'tack-on', but convincingly integrated in a way that the unit and the verandah were dependent upon each other for the ultimate success of the overall composition.

Variation 2: 2 rooms wide. This plan type owed its arrangement to the common detached vernacular cottage plan. However, unlike its affiliate which had space all around it (albeit generally modest),

the double room wide unit when mirrored about a party wall to fill the entire width of the stand. Light could thus only be gained from the front and back. As with the terrace house, this severely limited the depth of the unit -reducing it to a mere two rooms.

2a: Symmetrical school- BRAAMFONTEIN 4897 (date: 1895) [FIGURE 3.2-35]. This ubiquitous plan type, was used with minor modification in the detached, terrace and semi-detached house contexts. (Note that once again one side of the semi -against the boundary was treated to an eave whilst the other had a fire wall.)

2b: Asymmetrical school- The most notable difference with respect to this plan's usage in MAYFAIR 199 (date: 1898) [FIGURE 3.2-36] and the other housing types, was the paltry attempt made at tidying the strands of service and extraneous bedrooms at the back. The disorder however began from within -when for instance the sitting room was pushed forward to line up with the verandah edge in other examples, the 'filler' room (usually a pantry or bathroom) usually brought the whole back into shape again -not so in this example. The desire for more slightly larger than average rooms contributed to this misalignment.

2c: By definition JOHANNESBURG 173 (date: 1896) [FIGURE 3.2-37] was not a semi-detached house -since the two units did not share a common wall. However, the intention is clearly congruent with the semi-detached principle -only the sanitary passage (instead of being pushed to one side) was allowed to assume a prime centralised position, thus pushing the units apart. The celebratory arch over the sanitary passage compositionally unified to the front facade -the whole thus read as one building. In plan the two units were an adaption of the asymmetrical detached house.

On elevation a form of Victorian Italianate pervaded, with the

side gables assuming a bi-pedimented configuration -with the smaller curved pediment (over the sitting room window) occurring inside the greater triangular form. The gable was ruled with plaster mouldings and the edges were treated to plaster quoining. Continuity across the front was achieved with the recurring curved pediment motif (used without backing in the design of the sanitary passage arch) in an unusually subtle composition.

2d: The dilemma posed by the corner site, which usually afforded at least two entrance possibilities, was solved in the detached house by either orientating it toward the busier road, or more ambiguously, when neither side was particularly favoured, by means of the 'L'-shaped house. The semi-detached house designer of course didn't have to agonise over which was the more appropriate. In the combination of asymmetrical and symmetrical units, FORDSBURG 346 (date: 1895) [FIGURE 3.2-38] was arranged such that each unit took a different street front. A corner 'celebration' was achieved simultaneously. The mechanism of compositional preference such as it was in speculative housing, is partially revealed here. The unit furthest from the corner was a typical symmetrical four roomed unit -its front elevation was intentionally kept simple. Along the other frontage a typical asymmetrical four roomed unit with its characteristic attendant appendage (the gable) was located towards the corner -a gesture which hints at unity. For the most part everything along these two edges was deliberately banked down, a tactic which collected to maximize the effect for its one excuse for display -the gable and its oriel window -which the designer here really wrings out to last the drop, in a frugal, clever assemblage.

Variation 3: 3 rooms wide

3a: Even in the plainest of semi-detached front

elevations (see variation 2a [FIGURE 3.2-35]) the problem of duality within the overall composition was ever present. Not that this worried many of the designers of semi-detached houses, as many examples are outright celebrations of the fact. However, this was not always the case, as the designer of FAIRVIEW 152 (date: 1898) [FIGURE 3.2-39] resolutely followed a course which aimed at compositional singularity. With the intention of creating a central focus, it became thus a three room wide unit, which although was rigidly symmetrical in elevation, was subject to gymnastic planning in the attempt to achieve equal accommodation in both units. The resulting interlocking plan seems to have removed it far from any obvious ancestry, although the front elevation bore a strong resemblance to a 'symmetrical' asymmetrical composition.

3b: The 1/3:2/3's house -Symmetrical school. Up to now all the semi-detached types that have been investigated have had the same amount of accommodation on either side of their firewalls, and have to a limited extent been somewhat predictable in terms of their arrangement. For the exception of the last mentioned example, all have had an overall width in rooms, of a multiple of two. The 1/3:2/3's house was in principle the same as the semi-detached house although as the title suggests, the proportion of accommodation either side of the firewall varied. The usual format was a typical two room wide (or four roomed cottage plan), placed next to a typical single room width unit. See WANDERERS VIEW 39 (date:1896) [FIGURE 3.2-40]. Although the single room wide unit was seldom altered (usually lurking behind its full width front verandah), the two room wide unit was apt to adopt either the symmetrical or asymmetrical format. (Somewhat unusually in this example, each unit possessed two pantries -which probably meant that vegetables and

meat were stored separately.) The front elevation was dominated by an imposing gable festooned with a blend of Italianate (quoining, formal architrave and pedimented head), and remote gothic motifs (with reference being made to the hammer head truss, fretwork at the apex and an elaborate crowning finial). The outer hips of the roof reinforced the centrality of the composition by pitching in sympathy with the central gable.

3c: -the 1/3:2/3's house the -Asymmetrical school. See BRAAMFONTEIN 5044 (date: 1895) [FIGURE 3.2-41]. In this example no attempt was made at formal unity -each of the units expressed its own inherent compositional characteristics. The four roomed unit was symmetrical although not overtly of the vernacular cottage pursuasion - but rather of the English colonial type which eminated from the Cape. The dining room in this larger unit was rather atypically demoted to the tunnelback, although almost as a concession, was placed squarely on the major axis. This trait is taken through to the adjacent single room width unit. The persistent use of sash windows in the front and the bracketed roof eaves (an unusually mid-Victorian hang-over to be found in a speculative semi) rooted this example to a time slightly before Johannesburg's establishment.

(ii) THE DOUBLE STOREY

The double storey semi-detached was not as common as the single storey -probably for the same reasons that suppressed the double storey in a detached house situation. The plan types again in the simpler forms bore a strong resemblance to established terrace house patterns and in the more complex configurations the detached house patterns.

The approach to verandah design on the front elevation of the double storey semi-detached displayed a variety that was unequalled in other

housing types. As has been seen in the other plan types the verandah/front wall relationship was handled in two ways:

1. Where the face of the building was flat or on a single plane, the verandah appeared to be 'stuck' onto its surface, becoming therefore a layer that had to be traversed before the main building was reached. This usually occurred in symmetrical compositions.

2. Where there was a volumetric interplay between the building face and the verandah, such that it was difficult to pull the two apart. This was usually a trait of the asymmetrical pile -although this asymmetry was exploited 'symmetrically' in runs of terraces and semi's, in the act of mirroring the unit about the party wall.

The double storey semi often mixed these two approaches by adopting one on the ground floor and the other on top, or more commonly one on the ground floor and nothing on top.

Variation 1: 1 room wide . Unit width = one room and passage (the passages flanking the firewall.)

1a: The longitudinal staircase being situated on the principal passage running from front to back, with the circulation pattern following suit on the upper level.

The flat facade -JOHANNESBURG 2546 (date: 1896) [FIGURE 3.2-42]. This house spread itself right across the stand width, thus placing the two room depth limit on itself -this usually indicated a sanitary lane existed along the back boundary. The first and second range of rooms were covered by the main roof, the back rooms were sheltered by mono-pitches (perpendicular to the main roof), sloping away either side of the firewall. The decorated front verandah was a flat two storey feature.

The articulated facade -TROYEVILLE 348 (date: 1902) [FIGURE 3.2-43]. The internal arrangement of this example bore

similarities to the former, although its elevational treatment displayed a different approach -characterised by the presence of an uncloaked (by a verandah) double storey gable front. The verandah was not allowed to dominate, being kept in line with the subjugate gable and its bay windows -in contrast to the previous example in which the one privilege afforded the drawing room -its bay window, was foresaken by being hidden behind the screen of the verandah.

The plan of WANDERERS VIEW 76 (date: 1903) [FIGURE 3.2-44] almost the same as the former, although the elevation was manipulated in the production of a far more subtle articulated composition. The verandah on the lower level projected from the front plane on a stone plinth in its usual manner, although the roof was interrupted by an extraordinary balcony projection (over the entrance) which sported a dummy pediment. This however, lent the entrance a volumetric prominence within a relatively ordinary lower verandah stretch. The different verandah approaches were however slightly mannered (especially on the upper balcony) and combined to produce a special architectural effect. The chimneys, centred over the gables, acted as effective stops to the thrust of the sloping main roof which fell from the middle firewall. This crowning, pitched or pyramidal main roof form was strong enough to unify the whole composition.

1b: -Lateral staircase. The staircase was located in the centre of the house although was swung through ninety degrees such that it lay perpendicular to the main front to back passage. The circulation on the ground floor therefore tended to conform to a 'T'-pattern, whilst on the upper level movement occurs parallel to the front facade.

The flat facade -In TROYEVILLE 489 (date: 1902)

[FIGURE 3.2-45] the staircase was sandwiched between the parlour and the dining room on the lower level. Apart from this oddity, the plan type is still recogniseable as being inextricably linked to semi-detached house norms. However, the arrival point of the stair on the upper level and the reluctance on the part of the designer to double back on this 'lateral' circulation pattern, resulted in unconvincing planning tangle -which perhaps explains why this type was not as common as the longitudinal solution. In order to reach the three bedrooms on the upper level, the passage was run down the outer edges of the unit, which in an effort to provide light and air to the rooms in the second range, became an external passage. Also because of the differing room arrangements on each level extensive use of lightweight partitioning has had to implemented. The verandah was merely a two storey 'tack-on'.

The articulated facade -NEW DOORNFONTEIN 227 (circa 1905) [FIGURE 3.2-46]. Because there was no mid-floor level at the rear of the house (traditionally used for a bathroom and an additional bedroom), the ground floor was lumbered with this additional accommodational requirement. Located in a range across the back, this inevitably produced some planning problems, such as the bedroom leading off the dining room -a trait of humbler dwellings without passages. The upper level was however more successful, since there were only two room ranges (as opposed to three in the previous example), and the passage was wide enough to allow for a movement which doubled back on itself. Four bedrooms were achieved with the aid of partitioning. The covered verandah only occurred on the ground floor, whilst the upper level was treated as an open balcony. This recession at the upper level emphasised the rather fine double storeyed bay windows -which were

celebrated further by having their own roofs and backing gables -which visually pushed them forward.

Variation 2: 2 rooms wide. Unit width = 2 rooms separated by a middle passage.

2a: In JOHANNESBURG 2659 (date: 1896) [FIGURE 3.2-47] the staircases were squeezed between the drawing and dining rooms although the circulation pattern remained essentially longitudinal. The accommodation offered in this two roomed unit (in length, breadth and height) was far more than the average semi-detached house. This led to an indistinct division betwixt private and semi-private space (which formerly made use of difference in level as a barrier). The width of the whole house and the effort required in building a double storey must surely have counted against this type's wide use. The elevation was of the articulated facade variety, the verandah (a double storeyed element) firmly held in position by the end gables. The double sash windows used on the gable on both the upper and lower level give away its vintage as later versions were sure to have had bay windows. The use of face-brick at a time when the quality was suspect, is probably an indication of a tight budget.

Variation 3: Whereas before one would have been hard pressed to find almost exact replicas of types in pattern books emanating from England, NEW DOORNFONTEIN 603 (date: 1902) [FIGURE 3.2-48] has just such a pedigree (95). The elevation took few clues from Southern African precedent -the most noticeable absentee being the verandah on the ground floor and/or a balcony on the second. An unusual reversal of planning and elevational norms pervaded; the entrances were not either side of the firewall but on the extremities, the gables and their uncustomary full width bay windows were placed next

to each other with just the firewall between them. One of the advantages of this plan was that the chimney stacks were few since the fire places were back-to-back.

D. THE CORNER SHOP/HOUSE COMBINATION

Generally the corner shop/house combination was an amalgamation of an established house type with a shop attached -although this was not always the case. The 'attached' types may have been any one of the varieties of detached, terrace or semi-detached houses already examined, in which case to re-list them here would be repetitious and of little benefit.

Having stated that 'generally' the pattern was an alma'gamation, however, merely defines one of the ways of handling [illegible] shop/house design -and does not really embrace the other approaches. Clearly another form of classification must be used here to distinguish between the differing attitudes to the design problem. Obviously it's not enough to point out that a specific example was a double storey semi-detached house linked to a shop any more than it is satisfactory to recognise that a round block fits into a round hole when it's chromatic quality of the block that is under scrutiny. Observation reveals three obvious approaches:

Variation 1: The first is a pure form -a perfect fusion derived from an accurate assessment of the two individual functions, and a subsequent coalescence which is neither in plan or appearance immediately recogniseable as being of one or the other, yet is imminently appropriate to the function of both. This somewhat theoretical notion was hardly a conscious criterion for design amongst the early speculative builders, yet the corner shop/house eventually developed a language that was to become unique to it. The first unconscious beginnings are crude in the extreme, probably due

to a reluctance on the part of the designers to think out the problem for the time it would have taken. See FORDSBURG 196 (circa 1896) [FIGURE 3.2-49] for basic type. FORDSBURG 331-332 (1892) [FIGURE 3.2-50] begins to acknowledge that such combinations deserve a different elevational aesthetic treatment, although in plan merely pre-empts the next category:

Variation 2: The second type was the lazy solution -that of attachment: the development (and this must be stressed, that the shop was part of a speculative development) merely incorporated a shop between established self contained house types -this was the most common shop/house combination and has already been briefly discussed. Although the shop lay between or next to these types, little or no alteration was made to their initial status. The idea was thus one of assemblage -the placing side by side of 'ready mades' with elevational concessions to compositional coherence by the repetition or extension of a particular architectural element or detail. FERREIRAS TOWN (circa 1893) [FIGURE 3.2-51], was fairly basic, whilst JOHANNESBURG 3117-3118 (circa 1893) [FIGURE 3.2-52] was a larger and more flamboyant example of the same idea. A variation of this type can be seen in MAYFAIR 108 (date: 1904) [FIGURE 3.2-53] where the shop was surrounded by clearly distinguishable units, though the accommodation above the shop was a compromise to suit the condition.

Variation 3: The third type was one of substitutions; in which the shop sat within an established type -merely displacing one or two of its rooms. It read therefore as an impurity within the fabric of the house (see HERONMERE 453 (date:1905) [FIGURE 3.2-54]).

As can be seen none of these categories is specifically late Victorian in the sense that it can be related to a conscious theory of style -they

are more syntactical arrangements or re-arrangements which pertain to the broader spectrum of architectural invention.

N O T E S

(1) Johannesburg Census, 1896. Deel IX.- Woningen en Gebouwen enz; binnen een cirkel van 3 mijlen uit het Marktplein.

(2) Muthesius, Stephan. The English Terrace House. 2nd. ed. New Haven: Yale University, 1983. p147.

(3) Radford, Dennis J.C. The Architecture of the Western Cape 1838 to 1901. Phd. Thesis, University of the Witwatersrand, Johannesburg, 1979. p.99.

(4) Dutton, Ralf. The Victorian Home. 1st ed. London: B.T. Batsford Ltd., 1954. p.18.

(5) Edwards, Arthur M. The Design of Suburbia, 1st ed. London: Pembridge Press, 1981. p.73. An interesting sideline under the heading 'Notes and Queries' could be found in 'The Illustrated Carpenter and Builder', in which a prospective developer who required plans would write to the editor, stating his needs, and asking for suggestions. A few weeks later, a reply would be published, illustrated by a small-scale elevation and plan. Although essentially a facility available to the speculator in England, the advice in both the literary and illustrative sense proved invaluable to those in the colonies.

(6) Cook, Olive. The English House through Seven Centuries. Hammondsworth: Penguin Books Pty Ltd., 1984. p.286.

(7) Ibid. p.300.

(8) Girouard, Mark. The Victorian Country House. New Haven and London: Yale University Press, 1979. p.46.

(9) Ibid. p62. Diagonals -and therefore roofs and gables -play a minor part, often no part at all in standard late Georgian picturesque composition.

(10) Irving, Robert. (Compiler). The History and Design of the Australian House. 1st ed. Melbourne: Oxford University Press, 1985. Chapter entitled 'The Portable House' by Miles Lewis, p.283.

(11) Same reference as (2) p232.

(12) Same reference as (10) p93.

(13) Same reference as (8) p.72.

(14) Same reference as (2) p.231.

(15) Although this list was produced by a supplier in Port Elizabeth, the materials mentioned are typical of the range which would have been available to the Johannesburg builder. It is from such suppliers at the ports, that most of the goods were dispatched.

(16) Same reference as (2) p.200.

(17) Kearney, Brian. Architecture in Natal from 1824 to 1893. 1st ed. Cape Town: A.A. Balkema, 1973. p.68.

(18) Ibid. p.76.

(19) Building by-laws as set by the Johannesburg Gezondheids comite, clause 12.

(20) Census of 17 April 1904. Witwatersrand district.

(21) Same reference as (3) p287.

(22) Same reference as (4) p.20.

(23) Same reference as (10) p.75.

(24) Ibid. p.76.

(25) Downing, A.J. The Architecture of Country Houses. New York: Dover Publications Ltd., 1969 (originally published 1850). '...A much higher character is conferred on a simple cottage by a verandah than by a highly ornamented gable, because one indicates the constant means of enjoyment for the inmates -something in their daily life besides ministering to the necessities -while a more ornamental verge board shows something, the beauty of which is not so directly connected with the life of the owner of the cottage, and which is therefore less expensive, as well as less useful.' p.47.

(26) Same reference as (17) p.41.

(27) Same reference as (25) p.112.

(28) Same reference as (17) p.41.

(29) Same reference as (25) p.286.

(30) Same reference as (3), Illustration 276.

(31) Same reference as (10) p.100.

(32) Same reference as (17) p.68.

(33) Ibid. p.68.

(34) Same reference as (5) p.1.

(35) Ibid. p.25.

(36) Ibid. p.27.

(37) Radford, Dennis. Public and Private in the Early suburbs of Johannesburg. Architecture SA. Jan/Feb 1982. p18-19.

(38) Same reference as (25) p.372.

(39) Same reference as (17) p.42, Referring Eastlakes recommendations of 1872.

(40) Same reference as (25) p.368 .To achieve these colours; finely powdered charcoal added to whitewash would provide an effective grey; raw amber, drab; and charcoal, Indian red and yellow ochre would provide fawn.

(41) Ibid. p.369.

(42) Ibid. p.370.

(43) Ibid. p.366.'...mouldings comparatively flat and broad always indicate the finish of the classical styles, and mouldings rather thick and projecting, the pointed styles.'

(44) Muthesius, Herman. The English House. ed. D. Sharpe .Republished 1979 from 2nd ed. of 1908. New Haven: Yale University Press. p.166. '...The dado may be panelled in wood, papered or covered with leather or matting or even plain plaster, with or without stencilled patterning, stucco, Japanese leather hangings, any kind of relief facing in plasterboard or -an extremely popular motif -half-timbering with plain infill.'

(45) Ibid. p.166.

(46) Same reference as (25) p.372.

(47) Same reference as (17) p.43.

(48) Same reference as (44) p.191.

(49) Same reference as (17) p.68.

(50) Same reference as (44) p.79. Muthesius finds practical as well as aesthetic reason for this '...In the English room there are almost always two entire walls without openings, whereas we in Germany are only too fond of sacrificing wall surface to communicating doors, which is a grave disadvantage when it comes to furnishing and giving the room a homely atmosphere...'

(51) Ibid. p.67. '...At all events, its justification in England lies in its capacity to ventilate far more than to heat, as is demonstrated by the English belief that every bedroom must have its fire-place, even if the fire is rarely lit...Every fire-place has a flue of its own...'

(52) Same reference as (44) p.85.

(53) Same reference as (17) p.43.

(54) Same reference as (44) p.182.

(55) Ibid. p.130.

(56) Burnett, John. A Social History of Housing (1815-1970). Newton Abbot: David & Charles, 1978. p.111.

(57) Same reference as (37) p.19.

(39) Same reference as (17) p.42, Referring Eastlakes recommendations of 1872.

(40) Same reference as (25) p.368 .To achieve these colours; finely powdered charcoal added to whitewash would provide an effective grey; raw amber, drab; and charcoal, Indian red and yellow ochre would provide fawn.

(41) Ibid. p.369.

(42) Ibid. p.370.

(43) Ibid. p.366.'...mouldings comparatively flat and broad always indicate the finish of the classical styles, and mouldings rather thick and projecting, the pointed styles.'

(44) Muthesius, Herman. The English House. ed. D. Sharpe .Republished 1979 from 2nd ed. of 1908. New Haven: Yale University Press. p.166. '...The dado may be panelled in wood, papered or covered with leather or matting or even plain plaster, with or without stencilled patterning, stucco, Japanese leather hangings, any kind of relief facing in plasterboard or -an extremely popular motif -half-timbering with plain infill.'

(45) Ibid. p.166.

(46) Same reference as (25) p.372.

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(48) Same reference as (44) p.191.

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(52) Same reference as (44) p.85.

(53) Same reference as (17) p.43.

(54) Same reference as (44) p.182.

(55) Ibid. p.130.

(56) Burnett, John. A Social History of Housing (1815-1970). Newton Abbot: David & Charles, 1978. p.111.

(57) Same reference as (37) p.19.

(58) Same reference as (4). Dutton quotes Kerr - 'In suburban villas and other small houses where accommodation is radically insufficient for the numbers occasionally received, it may be required that the dining-room shall be connected with the drawing-room...a grievous informality.' p.104-105.

(59) Same reference as (44) p.83. The derivation of the name 'drawing room': '...It was first used to describe the private room that split off from the great common hall of the English manor-house and was intended for the use of the gentry when they wished to withdraw.'

(60) Same reference as (17) p.42. This quote incorporates a passage from 'Belinda's Aid To Colonial Housewives (c. 1890).

(61) Same reference as (44) '...The drawing room, the mistress's throne room,...the room in which one talks, reads and spends idle hours, the room in which the occupants assemble before meals and amuse themselves afterwards with conversation and play...Thus...the drawing room combines the use of the lady of the house's room, the living room and the reception room...its function is the same at every level of society'. p.83.

(62) Same reference as (56). p.169.

(63) Just because the drawing room is in the front and accented by gables, turrets, verandah's etc, this does not mean that it is the most important room in the house (as the semantics interpreted by today's standards ,would have us believe). The dining room already mentioned, would have been the most 'important' room in the house (even in a social context), although it would have received very little external embellishment- if one is looking for contradictions in the late Vicorian speculative house, then this seems to be one of them!

(64) Same reference as (4) p.2.

(65) Same reference as (44) p.85.

(66) Same reference as (4) p.136.

(67) Same reference as (44) p.91.

(68) Ibid. p.92. Here Muthesius says: 'In English opinion the bedroom belongs to the woman and it might also be said that the man enters as her guest...'

(69) Ibid. p.92.

(70) Fletcher Bannister and H.Philips Fletcher The English Home. London: Metheun and Co. Ltd. p.46. '...the sun should enter the living-room at some period of the day, for it is just as important to the air of a room as water is to the human body, and no apartment can be considered healthy which is not periodically disinfected by its rays...Even in awkwardly situated rooms it is often possible to put in a small sun-window, which adds much to the cheeriness of the house, and affects in no small degree the health and spirits of the occupants.'

(71) Same reference as (44) p.96.

(72) Ibid. p.100.

(73) By-laws of the Gezondheids Comite 1891, clause 31, prohibits a habitable room being built over a 'privie or ash-pit'.

(74) Same reference as (44) p.93. The inclusion of a toilet within the house when it was a pail system was obviously not entertained. Even if it were available current trends lobbied against its inclusion within the bathroom: '....it would be considered barbarous and is, we repeat, totally inadmissable [to put them in the same room]...it is...entirely out of place in the bathroom...for bathing is pleasureable and not a necessary evil'.

(75) Extracts from the Gezonheids regulations. Building by-laws and general forms, relating to new buildings. Clause 2 -Closets or Privies. 1893.

(76) Same reference as (10) p.310. Chapter by Ray Summer on the 'Queensland Style'.

(77) Ibid. p.306. Summer confesses confusion as to the origin of the verandah house but states; 'The suggestion has been frequently advanced that the Anglo-Indian bungalow was a model for this kind of house. But a very distinctive feature of the Indian bungalow, 'a European version of the Bengal double-roofed house', is that the wall section between the two separate elements (core and verandah) incorporates clerestory windows to admit light to core rooms, or at least small vents to cool by exhausting hot air from the roof space. This pattern seems virtually unknown in Queensland...'

(78) Kearney, Brian. A Revised Listing of the Important Places and Buildings in Durban. Durban 1984. Prepared for the City Council of Durban. Published by Lithotone. On page 5 Kearney refers to an evolutionary step in the verandah house's life,'...the verandah house would be translated into brick and slate or, wood-and-iron and indicate a strong desire on the part of architects and builders to depart from 'a primitiveness' and to decorate and embellish the form and the elements.

(79) Same reference as (3) p.327.

(80) Same reference as (17) p.42. Kearney makes the point that the verandah house was closely related to the plans of the 'typical English house' (presumably the English cottage plan with or without the triple range), being variations on the central corridor type with rooms leading off both sides. Although the verandah house must have evolved from something, it possessed morphological and planning characteristics that justify separate classification.

(81) What is particularly interesting about this set of plans (in the physical sense, not as a representation of a house) is that they are obviously printed off from a set of existing house plans, cut out and pasted on a new sheet with the appropriate site information for stand 453-5 Jeppestown. Although house types were often reproduced, it's rare to find that they weren't completely redrawn. Copying equipment in the early 1890's in small architectural practices was almost non-existent, and might only have occurred in large offices which could afford it. However, the fact that no name is given under the architect further thickens the mystery.

(82) There is a semi-detached 'verandah house', flanked by Owen Letcher, Willem Boshoff and Broadway roads in Kensington.

(83) It must be emphasised that this applies to the speculative small house only -larger houses using the verandah house concept occurred slightly more frequently.

(84) Radford, Dennis. The South African cottage in the 19th century. Lantern, July 1982. vol XXXI no. 3.

(85) Same reference as (84) p.300 and illustration 313.

(86) Same reference as (84) p.65.

(87) The 'Agterhuis' in the earlier cape houses was originally a part of the kitchen which was divided by means of a wall-cupboard or 'muurkas'. With time however, it took on a clear function and identity of its own, being geographically placed at the centre rear, '...This part of the kitchen, now reserved as a dining room, ulitmately developed into the inner hall, or agterhuis.', from James Walton, Homesteads and Villages of South Africa. 2nd. ed. Pretoria: J.L. Van Skaik, 1965. p.8.

(88) Same reference as (3) p.287. 'Double storied houses, because of their more imposing nature, were always preferred to a single storey house.'

(89) Aerial photo of 1922.

(90) Same reference as (3) p.310.

(91) Same reference as (10) p.264. Chapter by Saunders, David . The Australian Terrace.

(92) The Johannesburg boarding house layout was usually typified by communal facilities (such as the kitchen and dining room) against the road edge, with the rooms thrust out against the remaining boundaries. The resulting 'court' was occasionally occupied with communal ablutions.

(93) See Stephan Muthesius's book entitled 'The English Terrace House' New Haven: Yale University, 1983.

(94) Same reference as (91) p.272.

(95) Middleton, G.A.T. (Editor). Modern Buildings. Their Planning, Construction and Equipment. London: The Caxton Publishing Company, 1907. vol.2. p.17. Illustration 11.

CHAPTER FOUR

JOHANNESBURG AFTER THE SOUTH AFRICAN WAR

The transition which is evident in Johannesburg's domestic pattern after the South African War, did not occur against a backdrop of a stable or even gently growing populace -the demands made on the house and environment were certainly not a simple extension of trends initiated before the war. Socially Johannesburg took a radical jolt which placed much of the post war effort in a revolutionary (as opposed to evolutionary) light.

> 'About forty-five thousand Johannesburg inhabitants had returned since the tide of the war had receded and all were looking eagerly forward, planning for a future full of hope.' (1)
> '..By 1896 the 3 000 diggers of the original mining camp were lost in a town of 100 000 residents and by 1914, these 100 000 were in turn becoming harder to find in a city with over a quarter of a million inhabitants. The inexorable pressure exerted by people, houses, shops offices and factories pushed back the municipal boundaries from five square miles in 1901, and then- more ambitiously still- to an enormous 82 square miles in 1903.' (2)

The population increase was of a specific type -not simply a hoard of new and returning miners, but entire families, in almost all the social classes.

> '...In general, the period between 1908 and the outbreak of the war saw a marked decline in the number of single male workers based in the boarding houses of the inner city, and a sharp increase in the number of working-class families located in the suburbs. In 1897 only 12 per cent of the Witwatersrand's European mine employees were married and had their families resident with them in the Transvaal; by 1902 this figure had crept up to 20 per cent, and in 1912 it reached 42 per cent. It is largely against this backdrop -the emergence of a more socially ordered

colonial city...' (3)
'...this shift heralded a decline in the male-centred leisure time activities of drinking, whoring and gambling in various forms, and the rise of more 'balanced' family entertainment centered around the theatre, cinema and communally organised sport and recreation.' (4)

What brought about the change? In Johannesburg much of what followed the South African War was run through with a fervour which was attributable to a number of primary factors:

(i) A stable, and more favourable political scenario, ruled by a government comprising 'uitlanders' -and which was naturally more sympathetic towards Johannesburg's inhabitants than had previously been the case. After the war Lord Milner shifted (albeit temporarily) the seat of government from Pretoria to Johannesburg, and with the aid of several young helmsmen attempted to create a new, ordered society. Unashamedly of Imperialist's methodology, his mission was to create order and give direction to the bereft republic.

'Milner occupied his headquarters at Sunnyside in Parktown "in a hilly area on the northern outskirts of the town". For four years this was to be the residence of a near Absolute Ruler situated not in a lesser Versailles but in a Nouveau riche enclave of a brand new mining town. Johannesburg's proconsular presence...
'The young members of Milner's new administration, mainly products of Balliol and New College, had begun arriving in Johannesburg at the end of 1900. This all male fraternity established norms of Johannesburg's aspiring Patrician set for the next two generations.' (5)

(ii) The prospect of a secure gold yield. Before the South African War the keystone of Johannesburg's existence (gold) was in terms of its sustained production, a great unknown. Prospectors were well aware of the ephemeral promise that Barberton and Pilgrims Rest had held. (The uncertainty as to Johannesburg's solvency being one of the main reasons why most prospectors weren't even prepared to bring their wives and children before).

(iii) The effect of these criteria naturally helped to stabilise the economy. The growth promoted the development of further secondary

industry (another sign of the growing confidence), in which Johannesburg's dependence on surrounding centres for supplies and services was lessened.

Once these broad and essentially local conditions prevailed, the field was ripe to receive the advances of more general, global influence. Predominantly informing the physical, these were a function of, artistic, scientific and financial progression -influencing the environment only as much as local condition allowed, they included:

(i) The increasing role played by the building Society which afforded freehold to thousands of moderate income. These institutions flourished under the prevailing tendency of a society to seek greater indeperdence under conditions of stability and security. Advice was abundant:

> '...when one wants to make an addition to a house or garden which has been taken on an agreement or lease, it is generally found that spending money on other people's property is somewhat disappointing work.' (6)

which the Building Societies translated into:

> 'Rent receipts won't buy a home!
> They are merely evidence of either thoughtlessness or thriftlessness -probably both. If you don't realize the force of this argument now, you certainly will in a few years time. So why not wake up and shake off the rent-paying habit?
> Call or write and let us show you how our NEW LOAN SCHEME has helped many men to become their own Landlords by making small monthly payments probably no greater than you now pay as rent.' (7)

By this time the building society had become a permanent institution (graduating from the small, temporary society (8). With outsiders lending money not to build but to reap interest, the building society became more professional, institutionalised and permanent (9) -although a thoroughly market orientated practise, it afforded homes for thousands of families:

> 'Emotionally, it satisfied the deeply felt needs of ownership, of security and of control of one's environment. House-ownership defined status better than anything else, conferred respectability and responsibility and made a man a fully participant member of society'. (10)

(ii) Aesthetic advances made regarding the manipulation of the built environment -on both the urban and architectural fronts:

a.) Urban; Ideas were lifted from the escalating 'garden city' movement (more generally honed down to the 'garden suburb' movement), originating from Britain (and practiced on enormous scale by the Americans). The basic tenet clearly defining working and living areas was the one idea generally adhered to. The consequence of this adoption -an idea which abhorred dense habitation, was the bold move made by the town authorities to extend the boundaries in the series of massive leaps already mentioned. Its justification lay in the radical increase in the population and a generous projected growth. Suburbs were established for the middle and lower middle classes on a much bigger scale than had previously been the case. Areas which had been proclaimed townships on the outskirts of the town before the war and had not been built upon, flourished. One of the attractions of the more remote townships (particularly those south of the mining belt Turffontein, Kenilworth and Regents Park) was that the land was cheaper. As for the older areas:

> '...the business centre of the town is expanding, and land that was formerly used for residential purposes is now required for business sites ...the present value of land within the vicinity of town is based not on its value to-day for residential purposes, but on its prospective values several years hence for business sites.' (11)

It should be noted however, as a corollary to this impetus, not all who moved into the new, outer townships were newcomers, since many grasped the opportunity to re-kindle a command of respect:

> 'For those who moved from an older terraced or semi-detached house in a Victorian middle-class suburb the advantages were ...[sometimes] of amenity rather than space ...advantages lay in such things as a convenient, modern kitchen, a bathroom with hot water supply, electricity for lighter, sunnier rooms and, almost certainly, a substantially larger garden.' (12)

b.) Architecturally;

> 'It was not surprising that when Milner surveyed his task of reconstruction in the Transvaal one of his first thoughts was how to avoid the squalor which buildings of a temporary nature, built in haste, would bring. He was determined to establish a system of building which would give the Transvaal the gift of permanence. So with the promise of abundant work, Baker set forth...' (13). 'Baker, Rhodes' architect, arrived in Johannesburg in 1902, at Milner's request... Baker's mind... was filled with Imperial imagery and classical architectural quotations...' (14)

The imposed aesthetic order which was to follow, brought to the area an aura of almost first hand modernity -whereas before the prevailing taste had been content to abide under locally digested 'aesthetic hand-me-downs'.

(iii) Advances made in the field of transport. Horse drawn taxis and trams had been around before the South African War but they had not been geared to mass transportation to limits beyond 2-3 miles of the town centre. After the War the larger scale ventures which were responsible for the electric tram greatly facilitated growth in outer reaches, 4-5 miles out of the town centre. The railway was also of great importance, but being less flexible catered only for those in the vicinity of the east/west line. Those wealthy enough to keep their own carriage could and did live beyond the limit of bus and train service. However, improvement in transport facilities did not automatically imply a more sumptuous living pattern. It often lowered the social tone of the neighbourhood by making possible denser housing and commercial developments. The influence of the motor car only began to be felt in middle class suburbia after the First World War, having a major impact during the latter half of the twenties.

Dates of selected influential events (15):

1903	May	Rand Water Board established.
		Boundaries of Johannesburg increases to 81 and a

		half square miles.
1905	April	Milner's term of office ends. Succeeded by the Earl of Selborne.
1906	February 14	First electric trams run from Market square to Siemert Road railway bridge.
1910	May 6	King Edward VII dies. Crown assumed by King George V.
	May 31	Union of South Africa declared.
1914	August 5	Outbreak of First World War.
1918	November 11	Armistice signed. World War One ends.
1922	March 14	Fordsburg falls. Rebellion crushed.
	March 17	Strike called off.
	October 4	University of the Witwatersrand established.

N O T E S

(1) Greig, Doreen E. Herbert Baker In South Africa. Cape Town: Purnell, 1970. p.52.

(2) van Onselen, Charles. Studies in the Social and Economic History of the Witwatersrand 1886-1914. 1st ed. Johannesburg: Raven Press, 1982. p.2.

(3) Ibid p.31.

(4) Ibid p.39.

(5) Chipkin, Clive. View from Parktown. Architecture SA. Sept/Oct 1985. p.32.

(6) Allen, Gordon. The Cheap Cottage and Small House. 6th. ed. London: B.T. Batsford, 1919. p.14.

(7) The Star, 1912 -Advertisement for the United Building Society.

(8) The early building society though legally sound, was less formal than the later institutions. It made use of a pooled resource until all its members were satisfied that the particular goal for which they had originally assembled had been achieved (usually a limited number of buildings -be they domestic or otherwise). Thereafter they then disbanded.

(9) A pamphlet of The Alliance permanent Mutual Building Society and savings Bank, 14 July 1904, set out the general principals of a building society in its relatively simple mandate:

a.) To offer facilities to the thrifty section of the community for the weekly investment of their savings by acquiring shares in the society, for which they shall pay in weekly instalments: thereby becoming shareholders with a pro rata interest in the profits of the society.

b.) To enable those who have sums of money for investment to deposit the same either at call or for a fixed period, at an agreed rate of interest, on security of first lien on the society's assets.

c.) To lend money to any member who wishes to purchase properties, to build on land already purchased, to pay off exisitng mortgages, or otherwise to employ his capital, on security of first mortgage of landed property or stands, or on security of the Society's own shares.'

Pamphlet held at the Strange Library Johannesburg.

(10) Burnett, John. A Social History of Housing (1815-1970). Newton Abbot: David & Charles, 1978. p.270.

(11) Transvaal Colony, Report to the Johannesburg Housing Commission 1903, p.9.

(12) Same reference as (9), p.269.

(13) Same reference as (1), p.117.

(14) Same reference as (5).

(15) This list is based on the Chronology compiled by Franco Frescura and Dennis Radford in 'The Physical Growth of Johannesburg -A brief survey of its development from 1886 to date'. Outline of a paper to be presented to the Urbanisation Conference, South Africa Institute of Race Relations: October 1982.

CHAPTER FIVE

THE EDWARDIAN SPECULATIVE DWELLING

Much as the chapter on the late Victorian speculative dwelling was split, so this chapter also contains a two part division; and whilst the first part still deals with aspects of a general and abstract nature, such as Edwardian preference, emphasis has been shifted from the preoccupation with style, to a preoccupation of another kind -the institution of the hall. The second part still contains the survey of the differing though commonly found Edwardian house forms built in Johannesburg, and the extent to which they depend or challenge the tenets of the first part.

5.1 PART ONE -Background To Edwardian Preference

If a certain 'time-lag' had retarded the flow of ideas from England to the colonies in late Victorian times, the south bound flow was to be short circuited during King Edward the VII's reign by the resolute Imperialist vision to create a firm (and of course lucrative) base for the Empire in South Africa. Thus the location of impetus shifted -before those in the colonies had struggled to keep abreast of developments in the parent countries -and as to whether they succeeded or not was to the originators of little interest: but with the richest gold fields in the world in their hands, England was awakened to the importance of maintaining a political stronghold. With the posting of innovative governors to the region, ideas

were, from then on (though not being first) at least second hand -as opposed to third or even fourth in Victorian times. The consequence for architecture was an exposure to an array of new (and particularly British) ideas.

'It was not surprising that when Milner surveyed his task of reconstruction in the Transvaal one of his first thoughts was how to avoid the squalor which buildings of a temporary nature, [or] built in haste, would bring. He was determined to establish a system of building which would give the Transvaal the gift of permanence...' (1). His hand picked group included an architect who was to have embodied '...Christopher Wren's belief, and Rhodes' too, that "Architecture has its political use", [in the hope] that it would "establish a nation".' (2)

A. FROM STYLISTIC EMBELLISHMENT TO SPACE

(i) PREAMBLE

Firstly a common Edwardian display of disenchantment:

> 'The most prevalent fault in modern architecture is the striving after picturesque effect for its own sake, which generally results in crowding the building with miniature features which are supposed to give scale, but of which the net result is often a toylike structure, with a fussy strained effect, which is an outrage on good taste. It is perhaps a question whether any design of intentional picturesqueness has ever equalled the accidental grouping that is sometimes found in old houses, whose history clearly shows that there was no deliberate intention to produce the total result.'(3)

Secondly a common Edwardian cautioning and remedy for the ills of contemporary practises:

> 'Indeed, the greatest necessity of all is that every architect should impress on his client the importance of having a definite aim in plan and design of his house. What he needs and should have is a complete, uniform scheme throughout his home. Opposed styles cannot be made to accord in the same building. It is the hall, too, remember, that gives the keynote which is struck for the whole building.'(4)

These two important quotations confirm the Edwardian stand and the course of future domestic work. The first is predominantly concerned

with misguided compositional pursuits, and targets the dubious intention of the picturesque pile, thus seriously taxing its integrity. The second reference picks on detail, stating that to mix one's stylistic media is aesthetically an exercise in futility. Although the remedy offered is initially clouded, it is very specific as to what should be central to the 'new way'. As with all great architectural ideas this does not exclusively relate to one dimension or detail. The 'keynote', is in fact 'a space' -NOT an elevation, plan or form of stylistic applique. Attention has thus been transferred to the realm of INTERNAL concerns. This is one of the biggest differences between the concepts which characterise Victorian and Edwardian archetypes -the shift in emphasis from the outside to the inside. The elevation although important to the identity of the Edwardian house was secondary to the fundamental idea.

The change that occurred was somewhat radical; the Edwardian domestic 'archetype' had a powerful central theme which was not exclusive to a particular type, but could be applied to most house forms -an influence which clearly bound them together. This idea was the hall. The concept was essentially an imposed one, and whilst it was adopted locally quite quickly, developing a host of particularly regional permutations, its effect on the contemporary architectural scene was REVOLUTIONARY. Revolutionary because it was a contrivance which took little or no cognizance of the late Victorian domestic norms. By comparison the Victorian vocabulary (though also largely imported) had been around long enough to have developed a syntactical peculiarity which can be described as EVOLUTIONARY.

A brief look at the history of this space so central to the Edwardian archetype follows hence:

(ii) THE DEVELOPMENT OF THE HALL HOUSE

The hall was to Edwardian planning as irregularity was to Victorian composition -a distinguishing characteristic used commonly in the largest to the smallest domestic work. Requiring a centralised position within the domestic fabric it involved internal re-structuring which inevitably had an external consequence. Historical precedent pointed to a volumetric generic which in architectural jargon is known as 'plug and core' -a central pivotal space (core), which is surrounded by secondary, smaller and perhaps more specialised spaces (plug). The rationalization of the 'plug' into an acceptable formal arrangement around the core was most probably a concession to external appearances. The result was a 'tri-partite' or three bay system -a central hall with symmetrical wings either side -just the ammunition needed by the 'pile' disclaimers, and a clear, historically backed path to bi-lateral symmetry.

Before scrutinising common Edwardian interpretation of the hall, a brief outline of its use would serve to place the notion within a historical succession. The fact that it had enjoyed revival after revival seemed to strike a chord of appropriateness deep in the English way of life. The Edwardians saw themselves as merely continuing the legacy, feeling that another revival could hardly be construed as a device wilfully employed by expedients seeking mere novelty. For instance, Mervyn Macartney crashes straight into the subject of the home and its halls with the opening sentence: 'In England the history of the hall is practically that of the house.' (5). The mediaeval hall within a domestic enclave seems to be the first conscious, formal attempt at making use of the device. Its recurrent use suggests that it fulfilled a particular need both in a practical and symbolic way, '...The great hall met a social need as the central point of the

estate, a place of assembly for the tenants, for legal and administrative purposes, as well as being the main living room of the lord's family and personal staff, where most of them dined and, at first, some of them slept.' (6).

By the end of the 14th century the H-plan house was a common phenomenon, taking the form of a central hall and side wings. With the rationalisation of the plan, the sleeping and service areas became separated into the two separate wings. The great chamber or 'solar block' was set at right angles to the upper end of the hall which was the owner's private wing, with the bedchambers. The great hall was however, still used for sleeping by many of the servants. These divisions hardened into a form which can be easily recognised in some of the later revivals -Cathay Manor in Somerset (1480) is a good example in which the tripartite division of hall, service rooms and private apartments is clearly apparent from the main facade -not coincidently many examples of Edwardian vintage bore a striking likeness to its compositional assembalage.

'It is to the practical mind of Inigo Jones that we owe the true house plan -the plan that has come down to our own times. Here the rooms are joined together into a single block, with the hall and staircase in the centre..' (7). Internal division and external appearance distinguish this period from the past by virtue of the fact that the houses are less products of necessity than conscious attempts at moulding the idea into an 'art form'. The use of the hall by the Palladians was seen by later generations as a crass misinterpretation of the concept. As an agent of the 'Grand Manner', it inevitably became exaggerated, a process which denied it the intimate qualities when it had served as a 'living room'. Not only did it lose its domestic scale, it was completely surrounded by rooms thus necessitating clerestorey

lighting. 'Pugin by his writings and drawings brought about the overthrow, and succeeded for a time in turning back the style of planning to mediaeval types...' (8). Its resurgence in the early part of the nineteenth century -which saw the revival of a multitude of mediaeval and assorted strains, was described by Muthesius as '...an attempt to restore the hall to its former glory after the Palladian period had reduced its significance to that of of a banal vestibule.' (9).

Hints of the idea of the open living hall can be found in Robert Kerr's 'The English Gentleman's House' as well as from other publications such as 'The Builder' of the 1860's. Eminent architects such as Richard Norman Shaw and Ernest George (whose inspiration can be directly linked to late Tudor and Jacobean examples) incorporated the concept into their designs -although the hall was treated more as a novelty or show piece than a room for living in. These attempts however, represent the revival in its infancy.

Although initially the group that favoured the reimplementation of the hall was small, their enthusiasm and persistence eventually crept into contemporary publications, which began making references to what was to become known as the 'living room' -the emphasis being on the use of the room as a gathering place, rather than an archaeological exhibit. Acceptance was slow -its usage in late Victorian times being limited to the large, custom made villas of the wealthy. During the last years of the century however, its popularity escalated to the point where it became accepted as an essential adjunct to the 'artistic cottage', an entity certainly open to most of the middle class. Ways of utilising the hall were displayed in the work of M.H.Baillie Scott and C.F.A.Voysey, who wove it into the fabric of the ordinary house with such brilliance, that the influence spread throughout America and the

British colonies. Baillie Scott's use of the hall was idiosyncratic and exceptionally skilful- using it as a visual link through changes in level by treating it as a double volumed space, thus minimising the visual isolation from floor to floor -a practise which established the hall as the core of the house on both levels. The danger that the hall may have just become a wide circulatory space (due to its centralised position) was overcome by creating a corridor (and in the case of a double storeyed house -a stair corridor) adjacent to, but distinct from the hall. Even with the corridor, the option of direct inter-room movement (if occasion warranted) was left, by using moveable wooden panels between the hall, dining room and drawing room (which was sometimes '...retained as a concession to Victorian domestic routine and, as Scott put it, as the necessary place where "they bury strangers"' (10) -no longer the room of importance). Baillie Scott's design strategy is here neatly defined

> '...Having arrived at the idea of the hall or living room it follows naturally that one must group around this the various other rooms which may be regarded as mere appendages and dependencies on the hall, not pretending to compete with it as rooms, but rather becoming merely recesses, each specially modified for its particular function.' (11)

-a systematic priority which was shared by many (including the South African designers).

Voysey shared similar sentiments; principally that the home was a place for the family, catering rather for their particular demands of comfort and repose, than be a show piece intended for the approval of others. However Voysey's use of the hall didn't always coincide with Baillie Scott's. He favoured 'coziness', a quality which he achieved by making the room single storey with a low ceiling crossed by heavy dark timber beams -a treatment which was in conflict with the notion of the hall as a spacious airy room -"chacun 'a son gout". Despite this its

hierarchical position and significance within the body of the house was not diminished. Voysey also lent prominence to the room by exaggerating the fireplace and flue either in scale or by way of his highly personalised design -thereby creating a focal point (an idea later taken further to the point of caricature by Frank Lloyd Wright with his 'hearth as heart of the domestic seat' slogan). The hall's relation to the exterior was strengthened with its longer side being placed against the outside edge, with direct access to the garden over a patio or through a verandah -whereas previously it had always been slightly remote. In an article in 'The Studio' Voysey gave advice as to the qualities a hall should embrace; '...the hall should receive its guests with composure and dignity, but still with brightness, open arms and warmth; warmth of colour as rich and luxurious as you like but above all things, sober and reposeful...' (12).

Although only two Edwardian architects' attitudes have been examined here, other great British architects such as Prior, Lutyens, Mackintosh, Harrison Townsend, Macartney and Baker, all made innovative use of the hall, influencing domestic design in locations far beyond the Mother Land.

How did the hall ultimately become used in Edwardian speculative housing in Johannesburg? A chronological coincidence of its rise in popularity in England just at the time Jonannesburg flourished was the primary reason, although this was not all -the hall's survival from the Saxons through to the Edwardian period suggested a fitness to a fundamental domestic requirement that was above mere fashion. Its use was by no means confined to Britain; it has been suggested that the Cape Dutch plan pattern also incorporated a centralised hall (13). Thus after South Africa had achieved a measure of independence in the social, political and cultural fields, (which occurred at much the same

time as the hall house became popular), claim was laid by both the English and Dutch communities. However, even the most cursory of glances will reveal the pattern as used speculatively, to be of predominantly English ancestry, the alternative (Cape Dutch) argument being largely fabricated with the increasing nationalistic fervour which occurred at the establishment of Union.

(iii) CONDUITS

There were two principal bearers of ideas:

a.) By far the most influential (though most humble and indeed underrated) lay within the capacities and the tools of the ordinary person -the journal, the book, the people's tradition, and the 'humble' designers and draughtsmen of no great pretension. The journal was probably the single most tangible influence, bearing ideas from England and less frequently America. Although a slow conveyor, its pictorial content put it at an advantage over other forms. South African journals had a presence but were very much under the British influence, often taking articles directly from their publications some time after they originally appeared. The less tangible sources however, were generally characterised by the innate desire to cling to the viable working solution or the 'known'. Being simultaneously emotional and pragmatic, it encompassed the (predominantly sub-conscious) desire to maintain a cultural link with the past -design decisions often being based on personal interpretations of how 'things ought to have been done'. Both English and Dutch traditions (in varying proportions) were drawn upon.

b.) The second 'high profile' route, came with the arrival of a talented and well connected individual -Herbert Baker -who was a prolific English architect who moved up from the Cape at Milner's

beckon. A note of caution however;

> 'Herbert Baker's influence on the reformation, as it were, of contemporary work has been stressed (Doreen Greig's book on Herbert Baker in South Africa, p.222.) but although he was obviously a prominent member of the profession and extended some influence through his work and writing, his influence would seem to have been on the younger architects... There is no evidence to suggest that his contemporaries did not derive their influence from the same sources as he did rather than through him.' (14)

That Baker had a substantial influence on the hall's implementation there can be no doubt, as he moved in high and influencial circles after the South African War. But his contribution lay more in the shaping of the device into a readily accessable form (thereby preparing the way for a revolutionary new domestic archetype), and not in its initiation. His involvement was therefore a process which made adjustments to the basic concept, appropriating it to local climatic, material and social demands. It is his interpretation which shines through, much as a conductor becomes admired for his reading of a particular composer's work. The influence he did have must therefore be limited by this qualification.

Although it may appear that the late Victorian and Edwardian speculative houses have at least their 'methods of conveyance' in common, the former (though also influenced by foreign trends) had a local history which had to some extent re-shaped it. The Edwardian archetype was in its most developed form fundamentally different -more by design than accident. Much as the Milner government 'imposed an order' on a rather nebulous and directionless community, so the Edwardian house was born of equally rigorous intention. An imbalance of local to foreign content (in the latter's favour) was a chief characteristic. The houses became more rigid and formal, and more often than not, adhered to symmetry in both plan and elevation.

B. STYLE

The Victorian period was subject to severe criticism by the Edwardian theorists, for its superficiality and slavish conformity to type and style (the prefabricated element often being cited as the chief villain). Counter theories embrace two broad categories -Edwardian Free Style and Edwardian Classicism. And whilst these do not occur simultaneously, there is a considerable chronological overlap.

(i) EDWARDIAN FREE DESIGN

The two sub-categories which fall under this movement's directive include; a.) Arts and Crafts (an aesthetic based on rural fundamentalism), and b.) Free Style (a style born of a commitment to artistic refinement), and since one grows out of the other, it is inevitable that they share a certain amount of theory.

a.) Arts and Crafts

The Arts and Crafts movement had contained within its ranks almost as many differing ideas as individuals. Most however, shared the common aim of achieving visual simplicity -a conscious effort in moving away from what they considered to be the over decoration of the preceding period. Of course 'simplicity' was achieved by way of several differing approaches. One group held the belief that a building should grow from the ground on which it stood - achieving an 'organic' relationship with its surrounding environs through the use of local materials such as stone. Although an early use of these ideas can be detected in the work of the American architect H.H.Richardson, the London based Art Workers Guild adopted and formalised a body of theory about them in 1889. William Lethaby outlined the principal ideals as, ''One, the 'motive' or central thought in design. Two, that dignity in realisation we speak of as largeness, breadth, style. Three, the use and limits of a study of

past art. Four, the reference to nature.' ...Lethaby went on to say that there are ancient architectural principles which should be adapted to ever-changing situations and to dismiss as irrelevant questions of 'pure' historical styles (15). In the face of several withering attacks on pure copyism, the taste for Gothic, Italianate, and even the more frivolous aspects of Queen Anne disappeared. The chief exponents of this group in England were William Lethaby and Edward Prior.

One of the compositional consequences of the 'harmony with nature' phenomenon, was the fracturing of the monolithic house block into gradual ascending masses -an organic effect true to the Arts and Crafts theory. The use of the butterfly plan being one of their manifestations -part of a deliberate attempt to blend the building with the site by avoiding the imposition of the man-made rectangular form on nature. [See FIGURE 5.1-63, FIGURE 5.2-5 and FIGURE 5.2-13].

b.) Free Design

The other main branch of the Arts and Crafts movement, having its origins in the earlier 'Aesthetic movement', interpreted 'simplicity' in a far plainer and more refined way. Their principal executor was C.F.A.Voysey, whose work from the 1890's onwards was very influential. His highly developed and personalised style (particularly evident on elevation), was quite different to previous Victorian standards. 'Voysey's houses were not so much 'astylar' as 'non-stylar' or even 'anti-stylar' -the deliberate replacement of style and precedent by the abstract visual stimulus of 'Nature' and the overriding conviction that form should grow organically out of requirements.' (16). The Voysey vocabulary (which was eventually emulated by architects and draughtsmen in the speculative field in Johannesburg), included a simple horizontal composition (rooted in

the long vernacular houses of the Cotswolds), low sweeping gables (often concealing an upper storey), plastered wall surfaces painted white, bands of windows, simple geometrical hipped roofs and delicate gutter bracketing. The rich textural and colour variations achieved by 'the earthy branch' of the Arts and Crafts movement were here foresaken for the pristine cleanliness of the white painted plaster wall (Voysey rejected the idea of using local materials and of adapting regional building traditions for each house). Baillie Scott was another principal in the circle, whose facadal treatment although in detail similar to Voysey's, was compositionally distinct, usually incorporating a major gable accent, with the openings in the wall surface -be they simple arches or windows, floating as voids in a flat unembellished plane. The overall treatment of his domestic work tended to be of a smaller scale and more 'cottage-like' than Voysey's -'Charm and individualism together with experimental open plans, were Baillie Scott's particular contribution to domestic architecture' (17). [See FIGURE 5.1-30, FIGURE 5.1-45, FIGURE 5.2-14 and FIGURE 5.2-17].

(ii) EDWARDIAN CLASSICISM

The Neo-Georgian style, an offshoot of the Arts and Crafts movement, was in some ways the quieter counterpart of the Baroque revival in larger buildings. The houses were usually rigidly symmetrical, carefully proportioned so that the roof (always quite steep) didn't overpower the main facade (which was usually double storey). Although plaster was used on the walls, facebrick (often quoined at the corners) was the most popular. Roofs punctured with symmetrically placed dormer windows and heavy brick chimneys, were usually covered in clay tiles. The style was used mainly in larger domestic projects in the more affluent parts of town with very little direct influence -with the

exception of superficial detail pilfering, in the speculative field. [See FIGURE 5.1-31, FIGURE 5.1-57 and FIGURE 5.1-74].

(iii) THE EFFECT ON LOCAL THEORY AND PRACTICE.

The concerns of the theoreticians in England were seldom shared with a matching degree of passion in Johannesburg. Although clearly cognizance was taken of the fruits of these various persuasions -displayed by the apparent iconographic emulation, the processes by which they were justified, seem to have been sadly by-passed -the 'style game' was on once again. Even the 'Architect's architect', Herbert Baker, played the field, mixing strains from the different approaches;

> 'Two suggestions were made by the lecturer [Herbert Baker] as to the style of architecture. They might either try and evolve a style suggested by the architecture of the kindred climates of South Europe, a style of cool recess, of void and spaces, and plain surfaces and deep shadow. They could, as an alternative, further develop the architecture originated for them by the early settler at the Cape, a style which came into existence to suit local needs. (Applause.) In many respects it was well suited to the country, being adaptable to cheap materials, and simple therefore cheap in its essential features. The Cape-Dutch style was more suited to the cooler climate of the highveld and the Cape coast, the South European style to hotter districts.' (18)

Clear cut allegiances to one or other of the movements were not in evidence. It is thus that Doreen Greig says of Baker (although it could well refer to any of the local architects);

> 'He was not a stylist in the sense that he evolved one particular form of expression but in the sense that he collected and adopted architectural idioms. Here he fused them and the result is one of characteristic ideas rather than of independent style.' (19) and '...but theirs [those dedicated to the 'new order'] was more an attitude of mind towards all the arts affecting domestic living than a formulated theory of architecture.'(20)

Having loosely alluded to the prevailing aesthetic glossary, it would be unfair to ignore that element inside many local Edwardian designers that consciously attempted to break with the 'superficial past'. In South Africa it was a sentiment that lacked conviction

however, with the result that for most 'the break' was only just achieved, though not really felt -as their efforts tended to fall short of the rigorous and distinctive realisation characterised by the British models. Although the occasional progressive bleat was to be heard, it hardly amounted to a debate. These gripes tended to shadow those heard in England, which broadly campaigned for a more practical and pragmatic approach to design and stressed the importance of tailoring the building to suit the local and social conditions. Even if a rigorous design philosophy was absent, contemporary articles written in South Africa did encourage those architects whose work only looked as though it conformed to one '...He has kept his work simple, and under this influence, ornament that has no message or suggestion, that conveys no memento of a maker's pleasure, rarely exists in the better type of house.' (21). To be fair, the Arts and Crafts obligation placed on those within differing territorial locations, to seek and promote that which was appropriate to them, was a challenge which some took up in South Africa;

> 'A real obstacle to an advance towards the more simple and suitable method of building is the ignorance of that section of the building public which demands the cheap and the showy, and, further, the want of traditional training amongst builders and workmen. When the country's architecture rids itself of such vices as plaster work jointed to imitate stone, and half timber work painted on buildings innocent of framing; when it learns to protest against following out in one material a style that had its birth in another; when South African architects realize that the climate of the country with its constant sunshine and clear atmosphere renders particularly unsuitable any attempt to reproduce in its entirety the English type of domestic building, then only will they attain that perfection in their work which will make it a living art representative of the country's best and noblest traditions.' (22)

An important consequence of one of the Arts and Crafts' principles was that it allowed designers to weave Cape Dutch iconography into domestic architecture, without the possibility of them standing accused of being copyist -because of its link to fundamental tradition, which

ostensibly embodied the virtue of a timeless functionality. The theoretical justification lies here: 'These then were the principles of the domestic free architecture of the Arts and Crafts movement in the 1890's: simplicity, strength, and harmony with existing buildings and surrounding nature.' (23). The irony in this theory's post-Union acceptance and implementation, was that although of certain Anglo-Saxon stock, the whole package was unashamedly commandeered, and re-classified under the rising tide of Nationalism. Various publications appeared, such as the series written by Gerard Moerdijk (who was educated in England) in the Afrikaans magazine 'Die Boerevrou', in which the virtues of the hall are expounded upon at great length and even illustrated, under the article title of ''n Afrikaanse Woning' (24). Most of the examples illustrated in these articles were heavily influenced Baker although a rhetorical connection was made to Cape Dutch precedent. A rather conspicuous absence of any credit to the efforts of the original revivalists characterises these articles.

With watchwords like 'truth to materials', 'essential planning' and 'fitness of design', a conscious reworking of previously accepted norms resulted in a narrowing down of domestic types, although this was as much a consequence of aesthetic conviction as a tougher more acute business like temperament which coloured the speculative field in increasing degrees during this time. As might be expected production line tactics were utilised in the service of housing as many as possible in the shortest time period. Various contemporary architectural writings certainly benefitted the speculator by advocating simpler architectectural embellishment, compositional form and a 'rationalisation' of what was considered to be an unnecessary duplication of rooms (25) -which he exploited as an excuse to less.

C. A GLOSSARY OF EDWARDIAN ELEMENTS

(i) EXTERNAL

Victorian compositional technique and facadal embellishment were to the Edwardians deplorable aesthetic practices. The whole notion of fragmentation was incompatible with their preference for unity, which they maintained, was achieved through simplicity and honesty to materials. The implications of this credo were amongst other things a rejection of the prefabricated (and especially imported) artefact (26) and ersatz plaster work (the most common Victorian facadal crutches).

With greater numbers of detached houses being built in the Edwardian era and subsequent relaxing of tight suburban environment, the house's relationship to its site changed. Advice to the designer of a detached house was to make the elevations interesting from every point of view -the Queen Anne front and Mary Anne back was deemed an undesirable and unacceptable solution. Unfortunately the space about the typical speculative detached house was only occasionally larger than before, and the ideal was not always realised.

Cloaked by the argument against duality and the prefabricated element was the desire to simplify facadal treatment and composition -a sort of anti-fragmentary drive:

> '...the most usual mistake is the absence of 'breadth' and character, caused by the introduction of too many features, too many sorts of material and too much detail. One material should always predominate... Simplicity and an effect of strength are essential in cottage work... A most restless appearance is given to elevations where many materials are employed; one only for the walls and one for the roof will give sufficient variety, provided they be chosen with care...' (27)

The call for honesty in approach to design did not concern itself wholly with external appearance, but also to a limited extent anticipated 'the form follows function' postulate of the modern

movement. And whilst concern for functionality was gaining momentum in the Victorian era, it tended to be on the periphery of architectural theory. The Edwardians didn't achieve a clear cut theory either, although they were less tacit in their expositions ...'If economy, convenience and beauty are to be found in our cottage, the exterior must be a direct and straight forward outcome of the internal requirement...' (28).

The result inevitably effected the 'house in the round' (compositionally) and in its finer detail. The preferred compositional emphasis was simple, low and horizontal; 'If the eaves are kept low, and other horizontal lines emphasised, the result will be that most pleasing cottage-like proportion -a long, low and spreading appearance.' (29). The origin for this preference is obscure although Banister Fletcher did venture an explanation '...the building should have the long low effect which is so much admired in the old farmhouses.' (30). On a smaller scale, decoration to the elevations was indeed sparse, the rich ornamentation of the late Victorian period being totally rejected. However, substitutes of subtler forms did creep in -inevitably they looked quite different from preceding types, since new emphases such as being 'in harmony with nature' and an obedience to 'the clean look', obliged reinterpretation. The vehicle was ultimately one of textural variety. The effect was twofold; firstly a planar approach to wall surface, in which specific areas were 'picked out' in different materials, and secondly a re-working of selected elements that were common to the Victorian house, only this time executed in the material of origin (for example quoining on external wall corners instead of being a plaster emulation was executed in stone). In this sense, far greater use was made of different (though regionally obtained) materials. Of course other factors like the increase in the

number of skilled tradesmen encouraged the trend. '...The elevation treatment of a house is greatly determined by the materials which are chosen...' (31) -expression within a typical Baker elevation for example is largely dependent on the quality of materials. Greater proportions of energy were expended in the detailing and execution of the building -good workmanship which rapidly became an essential part of the building's conception.

Despite the eradication of stylistic ornamentation and detail, the larger and more significant elements of late Victorian elevation such as gables and porches (which weren't bound to any specific style) did remain.

a.) Plinth

Stone was still being used in the plinth and foundations up until after the First World War. Even when an efficient alternative had been discovered, the stone plinth was in certain instances maintained in compliance with the Arts and Crafts idea of rooting the building to its territory.

> 'The base of walls should be treated so as to give an appearance of strength... one method being to project the lower portion. This projection should be of sufficient width and height, and is sometimes made to coincide with the sills of the ground floor windows in order to obtain an effective proportion. In place of any projection... a stone or rough granite base may be formed...' (32)

The result was an exaggerated base which was often taken up to under the window sill [FIGURE 5.1-1].

After the First World War this practise became too expensive, and particularly in the lesser houses was replaced by damp proof coursing (in the form of a layer of tar and sand and later bituminous or asphalted felt), and a good hard facebrick.

b.) Wall

-Wall Surface: The most common wall treatments were a smooth

plaster or a natural facing (either face brick or stone). The combination of plaster and a natural face (sometimes with both stone and facebrick) was the common approach for those of rural Arts and Crafts propensity, with only the occasional facade treated entirely to one natural material. The other common approach characterised by the entirely plastered surface, was the ploy of those of the Voysesque school. Plaster either took the form of a rough cast or trowel finish and was usually painted white or a very light cream tint (to lend the whole a stark, elegant simplicity).

-Wall Corners: There were three common ways of celebrating an external corner: 1. Buttressing, 2. Quoining, and 3. Corbelling. Corners to the front elevation were also occasionally 'dematerialised' when treated to semi-circular bay windows (see bay windows).

1. The use of the battered form, (which was usually limited to the ground floor) seldom performed a structural function,and merely served as a piece of elevational iconography. It was not unknown for it to be executed in plaster, stone and facebrick. Two different approaches can be observed, the stepped buttress [FIGURE 5.1-2] in which several reductions in buttress width occur (each kink accentuated by stone flag), and the straight plastered buttress [FIGURE 5.1-3] sometimes capped with a ceramic tile or stone [FIGURE 5.1-4] -the application of which depended on whether a rural or sophisticated elevational effect was sought after.

2. Quoining in the late Victorian era was usually of the same material as the rest of the wall (plaster), although in Edwardian times it took on a more practical and honest air in the sense that the material was left unfaced. It has been suggested that its use in tight budget houses allowed for the protection of vulnerable corners

where inferior brick infill panels were used (33). This may have been true in some cases, but unlikely to have been the prime motivator in all instances -which most probably would have been aesthetic. Despite the scorn showered on the Victorians for their persistent use of unprofitable detail, this appears very much to be a piece of Edwardian decorative 'applique'. Again the materials were either undressed stone [for the rustic look see FIGURE 5.1-5] or dressed stone or face brick frequently used in a way that was reminiscent of the neo-Georgian aesthetic [FIGURE 5.1-6].

3. The corbelled corner was characterised by a rounded or chamfered lower section -including the plinth and window, above which a transitional or corbelled section developed into a square corner below the eaves. This feature began to appear around 1911 and was found in single [FIGURE 5.1-7 and FIGURE 5.1-8] and double storey units (although it was usually confined to the ground floor).

-Features: Gables. Although the hipped and pyramidal roof is seen to be a particularly 'Edwardian' contribution to speculative housing, it was by no means the only, or indeed dominant solution of the time. The gable flourished as ever before, assuming numerous new identities which were singularly un-Victorian. Its value as one of the prime frontal identification features did not diminish at all. The three basic forms included: 1. The Parapetted gable end, 2. The eaved gable, and 3. The hybrid. It ought to be noted that no one form pertains exclusively to only one of the Edwardian aesthetic strains. Mixing gables and hipped roofs led to a confusing result (34) and was not generally advised. The contemporary feeling tended to favour either one or the other.

1. The ubiquitous gable was once again the 'tabula rasa' which became adorned with the stylistic emblems of both the Classical

(including 'Baroque' features) and the Arts and Crafts' inspired usage of the Cape Dutch gable. The parapetted gables in FIGURES 5.1-9 and 5.1-10 incorporated details such as pediments, arched and oval keystoned roof vents, dentils and bold string course mouldings, the effect of which, although lacking consistentcy, owed something to the 'classical style'. The gables in FIGURE 5.1-11 which display alternating bands of brick and plaster voussoirs, lie somewhere between Queen Anne and 'free-Baroque', although the manneristic cheek of these creations lifts them way above stylistic categorial constraints. The gable in FIGURE 5.1-12 bears a clear affinity to muscular-Baroque with its concave-convex cornice and terminating volutes -a subtle if not obscure reference to the Cape Dutch gable. Other gables of Baroque/Cape Dutch extraction [FIGURE 5.1-13 and FIGURE 5.1-14] underwent a transformation, and developed an almost independent identity [FIGURE 5.1-15 and FIGURE 5.1-16]. 'Purer' Cape Dutch interpretations (which occurred as early as 1903) ranged from literal [FIGURE 5.1-17 and FIGURE 5.1-18] to simplified and associational versions [FIGURE 5.1-19 and FIGURE 5.1-20]. The twin gable was not a common parapetted form, although it did appear occasionally [see FIGURE 5.1-32]. Even though this had half timbering its heavy almost 'volumetric' qualities lent it the requisite Edwardian air.

2. The overhung gable. This had as many variations as the parapetted gable. Before looking at decorative applique, an investigation into the variety of basic forms will help in begining to define the general preference. The symmetrical gable was common to both the parapet and the overhung types, although the latter was also frequently treated in an asymmetrical manner. Another peculiarly Edwardian gable form that utilised this type in tandem,

was the double or twin gable (usually in a detached situation). This feature was interpreted in both the asymmetrical and symmetrical form.

(i) The symmetrical gable: Exponents of the stripped aesthetic produced gables such as exemplified in FIGURE 5.1-21. Other simplified examples include FIGURE 5.1-22, in which the strategic placing of the chimney stacks either side of the gable, combine to create a powerful statement of symmetry within the composition. The use of dentils to carefully close the eaves in FIGURE 5.1-31, displayed a tight and disciplined control within the gable design -a product of the classical influence. The tile hung gable was a particular Arts and Craft feature, which was used in two different ways; as a 'pedimented' FIGURE 5.1-23, or as an attic room facade pierced by windows FIGURE 5.1-24.

(ii) The asymmetrical gable: The asymmetrical gable was typified by one side being longer than the other. This again was an Arts and Crafts feature (which was extensively used by C.F.A. Voysey). Its characteristic swoop was a compositional ploy used to unite disparate elevational features -see FIGURE 5.1-25 in which the front gable embraces an otherwise loose, floating entrance arch. (See also FIGURE 5.1-26 for use of asymmetrical gable). The gable was usually treated as a flat plastered surface or even pebble dashed, but with very little decorative embellishment.

(iii) The twin gable exploited both the symmetrical and asymmetrical types. The latter was used only in a double storey situation because of the low sweep of the eave and the high window position. As can be seen in FIGURE 5.1-27 the whole triangulated gable section was boxed and extended out over the lower wall line -a common treatment that was also Arts and Crafts feature [see also

FIGURE 5.1-28]. It had functional advantages too; 'Gables when employed, should be of simple outline, with the tiles or slates projecting, and thus keeping the walls dry...' (35).

3.) The hybrid. This gable is typified by a mixture of both parapetted and eaved sections or hipped ends [see FIGURE 5.1-29 and FIGURE 5.1-30]. More like an architectural doodle, it was essentially a feature of contrivance.

c.) Elements within the wall

-Windows: Ordinary. The distinct move away from the sash window, was justified on aesthetic as well as functional grounds. The casement window was of simpler construction and more cost effective. Compared to the sash, its opening action made it more attractive in at least four respects: the bigger opening area and hence more efficient ventilation of the room, resistance to the weather, the facility of being able to clean it from the inside, and non-interference with the curtains or blinds. Aesthetically, the sash's most pleasing proporion tended to stress the verticality of the element, an aspect that was in direct conflict with the Edwardian compositional objective of a long, low and horizontal appearance. The sash also required a more formal treatment which the Edwardians found to be too constricting. The arguments against the sash were many: '[It]... is held by some to be inartistic, and it does not always lend itself to poetic fancy, for we cannot imagine Romeo conversing with Juliet through a sash window; but rather from the casement or lattice window of Shakespeare's time.' (36) and 'Large sheets of glass look dreary and uninteresting and cost more, both in the first instance and when breakages occur, than smaller window panes... Square panes are satisfactory in appearance, but a proportion of four in height to three in breadth always looks well.'

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