HOUSING FOR SINGLE-PARENT FAMILIES

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This thesis poses the question of how we are to house the family of the future. The concept of the strictly nuclear family as a backbone of our civilization is disintegrating under the onslaught of careers, of divorce, of teen pregnancy, and of abusive home life. Though many of these trends are deplorable, there are cases in which the decision to be a single parent is a constructive one. But, whether voluntary or not, the situation of the single parent is a difficult one. Single parenthood entails the combination of roles and tasks usually shared by two adults. A child who lives with only one parent has fewer resources for support, whether financial or emotional, and may lack necessary role models. Single-parent families, therefore, are families with extraordinary needs.
It is the premise of this thesis that many of these needs are related to housing. Among the issues involved are childcare, location of the workplace, the sense of home and of belonging to a neighborhood, of having a 'turf' of one's own. These issues are not limited to the single-parent family, per se. But these families have both greater economic and emotional constraints, and fewer resources for housing and services. The present-day housing market does not cater to this ever-growing segment of our population.

The attempt to define the housing-related needs of these families is paralleled by a design exploration. The site is 21 adjacent lots in a residential neighborhood of San Francisco. The program is for a cluster development of 24 units, incorporating various levels of cooperative living. There are single units and shared units -- all have features that are intended to enhance the possibility of sharing childcare or chores, and to facilitate the reintegration of the workplace with the home.

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INTRODUCTION

A major component of the American Dream is the ideal of the typical family: Dad the breadwinner, Mom the homemaker, and their kids, living in their own house surrounded by their own garden, cars, etc. Families or individuals that fail to attain this dream are considered — by themselves above all — failures. They are, however in good company: only about 7% of all Americans actually live in a nuclear family situation, and homeownership has become an impossible dream for many. In fact, a growing percentage of American families are living in — or on the brink of— poverty. A significant and growing number of these are single-parent families — mothers (or, occasionally, fathers) living alone with, and supporting, their children. This trend is most pronounced in the Black community, with about 50% of all Black families having a single parent: the mother.

All of these single-parent families have needs beyond decent shelter. The lone parent must fulfill both breadwinner and homemaker roles. To do this she needs access to childcare and, possibly, job training.
The scope of this thesis will be limited to a close look at the needs of one-parent families, primarily in regard to housing and related issues such as access to the workplace and to services (such as childcare). These needs are not really different from those of any other family (or individual, for that matter) — only a bit more immediate, since the single parent lacks the resources, emotional as well as financial, that are inherent in the 'ideal' family. The corollary to this is that housing that meets the needs of this particularly demanding group ought to be appropriate for other dwellers. A test of whether a particular dwelling type is viable might well be a look at its usefulness to a range of users. All families change over time, and it would seem to be far more efficient and stability-inducing to adapt the dwelling than to relocate the family.

This thesis will commence with a careful look into the needs of single-parent families, and will then propose a set of possible approaches to the specific problems. Paralleling the theoretical development of this theme, is a site-specific design solution. Though I began with diagrammatic exploration of spatial relationships, it was soon evident that a social problem such as housing cannot be solved independent of context: hence a specific site in a specific and familiar urban residential neighborhood.
The 'design solution', as it stands, is a cluster of townhouse-type dwellings with a range of plans and an unusual number of shared spaces and facilities. It is not intended as a 'project' of subsidized public housing. The neighborhood is diverse, but generally middle-income. The client group for the design exploration is the same. There is a reason for this: as long as the issue of single-parent families is seen as a problem specifically related to poverty and welfare, it is unlikely that the nation's builders and developers will pay it any mind.

If, on the other hand, a prototype for a viable and permanent community is proposed, a community with latitude for a variety of potential 'clients' and for a range of spatial interpretation — whether in the short or the long run — there is a chance that this prototype might be absorbed into our collective notion of what 'home' is all about.
While the needs of single parent families are many and varied, they are not entirely distinguishable from those of 'normal' families. The translation of everyday problems into the narrower constraints of the single-parent situation requires some examination. I will confine myself here to those that, as I see it, pertain to the housing issue. Access to childcare is of primary importance. So, too, is the problem of work: the location of the workplace, hours and wages. Efficiency within the home — the potential for getting housework done with a minimum of fuss and bother — is important, in that a parent should be able to emphasize 'quality time' with her children, rather than having all her (and their) waking hours occupied with chores. There should be time left in the day for the undistracted pursuit of such activities as play, storytelling, and so on. Communality, or neighborliness, or cooperation are all ways of expressing the notion of having someone there to share whatever burdens or duties that come along: and single parents often have fewer resources for self-reliance. Along with this need for neighborly resources goes the need for a sense of belonging. Having a home and community can do a lot towards validating the single-parent family as a real family, rather than some sort of
societal cripple. And of course feeling safe and secure and part of a neighborhood is important to children — particularly those without the full quota of role models. Flexibility in the arrangement of the home is an issue that should be addressed. The way in which various rooms are used is inextricably tied up with how the dwelling is inhabited, and by whom. The ability to redefine this would be conducive to accommodating a shifting population, without creating a patched up or temporary ambiance.

Now, these concerns are not unique to the single-parent family, but building a case for an ideal housing type for this heretofore neglected family type cannot but have a beneficial 'trickle-down' effect on other family housing.

Percentage of women in the labor force with children under six years of age.
Source: Bureau of Labor Statistics
The question of what a parent is to do with the children to keep them safely occupied has always been an issue. In different ages and different societies various solutions have been found. The extended family provides a certain amount of latitude as to who is going to mind the children: it is a task that an otherwise marginally useful member of the family enterprise (an aged grandparent or a slightly older sibling) could take on. In an age when the greater part of a community's economic life took place within the confines of the home or farm, 'childhood' was brief indeed. Children were considered small citizens — with equal responsibilities if not equal rights. Thus they were included in whatever work was at hand at an early age. Sons who showed little predilection for their father's trade were frequently sent out as apprentices when they were 8 years old. The Puritans favored this system of what were, in effect, foster homes as a form of insurance that their sons would not be raised indulgently.

The early settlers' attitude towards children did not change much in the following centuries. The Victorian middle-class did begin to think of motherhood and childrearing as a skill, and to extoll the virtues thereof. This did not, how-
It was not until this century, really, that the patterns of work and of dwelling changed to the extent that childrearing emerged as an issue for all strata of society. It is generally accepted that the proper way to raise children is in the suburbs and with the undivided attention of Mom, the happy homemaker. Except for a brief reprieve during World War II, women have been expected to consider this their career. However, women have now reentered the workforce in earnest. Nowadays there is seldom an extended family to fall back on. Citizens have been agitating and working for daycare for decades now, and a great deal of progress has been made. We have community daycare and preschool and preschool preparedness programs. What we don't have is equal access to childcare. It goes without saying that the middle-class mother has somewhat better access to transportation, among other things, than her inner-city counterpart. Also schedul-
ing can be a prohibitive stumbling block for the parent who works at odd hours — on the night shift, for instance.

It is not within the scope of this work to outline a plan for the restructuring of society. Suggestions for physical solutions to specific problems, on the other hand, are within the purview of architecture. One straightforward approach to the twin problems of access (transportation) and scheduling would be to reintegrate the childcare function with the dwelling. In terms of formal daycare, this would mean having a professionally staffed daycare center on the premises or within a block or so. While this would be impractical in a single family dwelling, it would be simple enough to provide in a cluster development situation. Now, it is unlikely, even in an on-premises situation, that a daycare center would be able to stay open 24 hours a day (though there's nothing to say it couldn't, if there were sufficient demand from the clients).

There are other forms of daycare which are suitable both to a residential situation and to the care of tots and infants. The first of these is licensed in-home daycare. While it is a small-scale proposition (limited by regulation to six children), it has the advantage of creating an at-home livelihood for the provider. Another feature is that, being licensed, there is some mechanism for inspection and enforcement of standards of space, hygiene, etc. There are possible drawbacks to this form of childcare — the in-home provider can find herself in a
situation similar to that of the classic 'trapped housewife': cooped-up with obstreperous children, there is the possibility that she will park the kids in front of the TV set or make them the target of vented frustrations.

Another, more flexible daycare alternative is the parents' cooperative or play group. This may take a round-robin format, with parents taking turns watching a small group of children in their home, or it may be more formal, with a separate space and a core of one or two full-time daycare providers and parents participating on specific shifts.

However, complete arrangements for childcare might be, other provisions for children and their activities must be considered. Both outdoor and indoor play space are important considerations. The supervisability required of such space varies with the age of its users. Small children feel safer when they know that their mother is near. As they grow older, of course, they seek more independence and

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Childcare arrangements for preschool children with mothers working full time.
Source: U.S. Bureau of the Census
more territory. Naturally parents feel more secure if they know where their children are and what they're up to. This is equally valid for any family, within the range of personal style, but think for a moment how much time is consumed by the average mother in merely keeping track of her offspring. An environment that permitted child supervision along with other household activities would, it seems, ameliorate the pressure.

This notion of arranging space for the convenience of the responsible adult is not the only consideration. It is equally important to provide space that is conducive to the activities of children. I do not mean kid-proof rooms (like the rumpus room of the 50's) but rather, spaces in which children feel at home, happy and creative. To achieve this both their size and their dreams must be considered.
Both indoors and out, children need space they can claim as their own. Within the home this might mean a definable sleeping alcove (space permitting, a whole bedroom), a place to store possessions or to keep secrets, or a nook that's just the right size for curling up with a book. The claimability of space is partially conferred by assignment ('this is your room') but there are issues of control. Territorial control, the right to close the door, is important. Intrinsic to the ownership of space is the right to alter it. As with other things, children learn about their environment by manipulating it. Lacking a kid-sized space in the built environment, kids will build their own with what is at hand -- blankets, chairs, whatever.
The home and its immediate surroundings constitute a child's first lessons in the nature and structure of reality. The average home is adult-sized, subdivided by fixed walls, mostly hard-surfaced, and generally off-limits for experimentation and decoration. It is perhaps the essentially boring nature of the home and its appurtenances that challenge kids to improvise, to draw on walls or to line up furniture into a long 'train' to push over the cliff (downstairs). If the home environment were designed so as to be a naturally rich environment, it is possible that less of a parent's time would be taken up with saying 'No!'

Outdoors the same holds true. 'Own turf' is important to a child's developing sense of self, and expands along with the child's confidence from playpen to yard to block to neighborhood. Within this expanding realm, kids need their own private or 'secret' places. Hence the importance of the clubhouse or tree-fort. Limits are important too. An exploring tot might
prefer to know where the known world ends and where 'here be dragons' begins. Certainly her mother prefers it to be spelled out in the form of a fence or hedge. But limits are also challenges. When ready, the young explorer reads the hedge not as 'stop' but as 'tally-ho'. It is not within the purview of this work to elaborate on the design of creative play environments, but kids constitute at least half of any given one-parent family, and both their needs and the constraints that they impose must be taken into careful consideration.
The foregoing discussion of the family has cited historical models, most notably the extended family and the home workplace, be it farm or sweatshop. This is not mere nostalgia. While it may be true that these models were justifiably shunted aside by the march of progress -- that they were obstacles to bonafide improvements in the quality of life in this country -- we may have a situation of the baby being thrown out with the bathwater. The 'ideal' American family has been redefined over the course of our history. We have come a long way from the egalitarian communal vision of our founding fathers.

This reevaluation has been prompted by factors too diverse to delve into here — suffice it to say that among these reasons, the salutary effects of suburb-building on the national economy and on the stability of the workforce were not insignificant. For the greater part of this century, it has been considered right and proper for kids to be raised in the healthful atmosphere of the suburbs, while dad commutes to work. Now, with commuting becoming ever more expensive and time consuming, we begin to hear it said that the job of the future will be located in the home and conducted with the aid of
computers. The ideology of the Family has not yet caught up with this futurism: it still supposes the nuclear family, without taking into account the havoc that a two-year-old can wreak on a home xerox machine. One might argue that the home office is more appropriate to the married individual who does not rely on office contacts for dates, who would, rather, welcome the additional time to spend with his family. But there remain the issues of separation of activities, of isolation, or of the need for privacy. The present-day adult is so accustomed to having his or her 'own space' that the very idea of not being able to get away from it all (either the from the job or from household chores) would be appalling to many.

The notion of moving the workplace back into the home does, however, have some points to recommend it. The savings in both time and money that would be effected are not inconsiderable. Then, too, the separation of work and living have been blamed for the sense of alienation so prevalent today. Working at home would have many advantages for a parent who must mind her own children for a portion of the day. It could not be expected that she would get as much done or do it as efficiently as would be the case in an office, but this might well be a reasonable trade-off. Of course, working at home is not a solution that is applicable to all people or to all jobs. But to an ever increasing degree, people are seeking new job defini-
tions, new services that can be marketed. A number of occupations traditionally associated with the home are natural candidates: in-home childcare, tailoring, catering, crafts and so on. A growing segment of the nation's retail sales are being conducted through various network marketing schemes, most of which are immanently well suited to the work-at-home entrepreneur. Also, nowadays, most clerical tasks can be transported to the home office, since so many of them are now accomplished with computers. A growing number of single parents are career women who have decided to have a child alone rather than take a chance on 'missing the boat'. While most careers involve a certain amount of meeting and networking and so on, there is a considerable portion of the work that can be accomplished from home base.

My sense of all this is that the ideal solution would be to develop a close community situation, one in which those parents who go off to work will have the resources — both formal and informal — to enable them to leave their children in good hands; and in which parents who stay at home to work can have both the fulfillment of rearing their children and the resources to have them supervised while some work is accomplished.
A PLACE TO CALL HOME

The need for a definable 'turf' is not limited to growing children. We all need to have a place to call home. This need is really a combination of two opposing tendencies: the need to stand out from the crowd, and the need to 'belong', to feel that one is a part of a group or that one has a claim to territory.

This identification with territory, with a specific patch of ground, begins with citizenship. We learn from an early age to know about flag and country. These stirrings of patriotism are useful for locating oneself in the global picture, and they are further refined by attachment to state or region. When the city or town is the object of this identification, it becomes personal and comprehensible. In its daily form, territoriality is most often applied to the home neighborhood in the guise of that 'home at last' feeling upon turning into one's own street, or of cheering on the neighborhood softball team. When asked casually where they live, people will often give their neighborhood rather than the specific address — the street name alone is not so evocative of 'place' within the urban fabric. Indeed, whether it be for racial, ethnic or economic reasons, neighborhood is one's claim to fame or shame.
Within the general classification conferred by neighborhood, the creation of personal image and the sense of 'own home' is often associated with interior decoration, with furniture styles, or with the dream kitchen or bath or whatever. There is clearly a market for furniture and drapes and such that express one's essential nature, be it 'colonial' or 'Danish modern'. But the factors that define home are not limited to the interior arrangements. Gone are the days when a citizen could expect to be identified with 'Riverbend Farm' or 'the old Jackson place'. Nowadays, an individualized façade may be an individual's or a family's sole claim to an identity within a neighborhood. And even this may be asking a lot -- many folks must rely merely on the color of their front door.

The basic human predilection for living in an identifiable dwelling has prompted much of the silliness of our suburbs. While in its milder forms this need accounts for the painting of identical 'little boxes' with a range of cute pastels or, more recently, earthtone stains, it is also responsible for the application of tudor half-timbering, z-brick, permastone and shingles to the same box.

I do not raise this issue of external appearances to pass judgement on personal tastes, but rather, as an illustration of the desire for identity in our home environment. A case could be made for the contention that extremes in the ornamentation of the home are a peculiarly American trait, prompted by our national ethic of
rugged individualism. Europeans for example, long accustomed to a more constrained urban environment, display a less exhuberant personalization of their facades. An examination of the detail of these facades gives us clues as to how we can create a sense of individuality with a limited palette of materials, as well as define personal, claimable territory in very limited space.

The other side of the coin, so to speak, is the issue of fitting in, of belonging. In some parts of the country, and in some communities, the only way to belong to a neighborhood is to fit within rather stringent limits of race, religion, income or ethnicity. Other communities are more lenient in their definition of 'same' and 'other'. There are few communities, how-
ever, that can gracefully accommodate a 'project', a development of homes or apartments that are noticeably different in scale, or massing, or occupancy. There is no reason to think that anyone would choose to live in a project if they could afford anything else. The challenge, then, is to create housing that is at the same time affordable, distinctive, and contextual. This is difficult enough for housing designed for 'regular' societally acceptable nuclear families. It is even more important for families that do not fit with the accepted norm. While they might well benefit from an enhanced sense of community, and the reinforcement of knowing that they are not alone, these families need a physical environment that blends with the neighborhood as well as matching their image of what 'home' should look like.

The original investigations for this thesis were focused on the issue of transitional housing. Housing, that is, for families or individuals who are in need of a place to reevaluate and readjust their lives, while seeking more permanent accommodations. The break-up of a nuclear family, whether due to divorce or to an abusive situation, usually entails economic as well as emotional difficulties. The mother may well have to acquire job skills and a job, while an already working parent might be obliged to cut back on working hours or find a new job that allows more time for parental duties.

My first inclination regarding this design exercise, therefore, was to develop a sort of congregate residence for single mothers and their children. This was to be a sort of manor-house with all activities centering around a 'great room'. The complex was to have included a great deal of program space — daycare, counseling rooms, job-training rooms, offices, etc.

As I looked into the issues involved, however, a problem-within-the-problem began to emerge. There are two reasons why transitional housing is needed: because adjustment is required in the transition between the happily married dependant
state (or for teenage mothers, the living at home with Mom state) and the single bread-winner state; and because there is little, if any, appropriate housing available to single parents. (Remember that suitable housing would be convenient to work and to daycare facilities, conducive to a warm home life, safe, integrated into a community, and affordable, among other things.) My attention was thus diverted from the stop-gap solution to an attempt to evolve a forward-looking response to an as yet unacknowledged need in the nation's housing supply: housing designed specifically to meet the needs of single-parent families.

The nature of these needs has been discussed. What remains is the task of de-
deciding how best to meet them. As it stands, the proposed development is intended for a mostly stable population. Keeping in mind that nowadays 'permanent' may mean only two or three years, I have nevertheless designed primarily for a group of residents who are willing and able to settle in, to personalize their home and to make friends and connections within and around the community. For some, an anticipated stay of a year or so would be sufficient to elicit this settling-in response, while others might need more time. It is the attitude rather than the absolute time-frame that is important.

A major component of the final design proposal is a carry-over from my earlier exploration of transitional models -- the notion of sharing. The exploration encompassed a range of models for this sharing, or cooperative living. Within this environment, it is reasonable to expect that a certain amount of the instability of families that are truly 'in transition' could be accommodated. A strictly transitional residential program might be included, or individual families in transition might share a unit with a 'permanent' family, either as boarders of a sort, or as full-fledged household members, depending on the needs and preferences of those concerned. For the purposes of the design exploration, I have assumed a 'transitional family' population of somewhere between six (in two triple units) and ten (with the additional families divided among the smaller clusters).
2 THE CASE FOR COOPERATIVE LIVING

For most Americans, during this century at least, the notion of sharing accommodations or facilities (such as bathrooms) with people outside the immediate family has been unthinkable. Until recently it was a sign, and reminder, of poverty. It has also been associated with 'utopians', 'hippies' and other 'un-american' types. These negative connotations aside, most people would reject it at first glance as an infringement on their privacy. In recent years shared households of various descriptions have been formed by a wide range of citizens, and by no means all of them could be called 'counter-culture'. While many of these new communalists are single — sort of grown-up roommates — sharing a house is also increasingly common amongst couples and families. Cooperative living is not, of course, right for everyone, but those who do like it have various arguments in favor of some level of inter-familial sharing. There are the advantages inherent in the extended family: a wider range of individuals for kids to relate to — an important part of their development — and the possibility of division or sharing of labor, not to mention the breaking-down of housewifely isolation. The presence of other adults to take turns at child-care allows a parent a measure of freedom to work, or to go to school, or just to get out of the house. There are also economic advantages. Having
a number of people to share the rent or mortgage payment, the utility bills, or the cost of furnishing, results in significant savings. In the case of new construction, the consolidation of several kitchens and laundry rooms could save a significant amount in plumbing costs alone.

Now, I am not suggesting that a wholly communal housing development would be either appropriate or feasible. A communal or collective living arrangement requires a great deal of commitment — either ideological or emotional — probably both. It would be unreasonable to expect that merely sharing single-parent status would be a sufficient bond to make a commune work. There are other possible scenarios, however. Any scheme, to be workable, must provide for some autonomy and privacy — both for individuals and for family units. At the same time it must facilitate, without forcing, a sense of community, of family. It seems to me that there are three basic categories or levels of commumality, stopping short of a full-fledged commune. These are the co-operative group household, the shared household and the neighborly cluster. There are grey zones between these categories, since it is necessary and appropriate that there be flexibility in interpretation of community and privacy. The proposed categories are intended more as models of unit size and layout than of operative ideology. The agreements as to hierarchies or house rules are strictly the concern of the residents involved.
The Co-operative Group Household

This is the large end of the scale — three or four family groups sharing kitchen, dining and living rooms. In order to maintain the sense of individual and of family, provisions must be made for privacy and for choice. Basic to this requirement would be family suites consisting of bedrooms, bath, and sitting room, perhaps. Other provisions might include alternate access — the possibility of getting to one’s room without passing through all the public spaces; also the choice of living spaces — having both quiet and noisy living rooms, for instance.

This model might be most appropriate for a program for transitional residents, since it is particularly appropriate for the fostering of peer-group support.

A diagram of the organization of use-spaces within the cooperative group household.
The Shared Household

Above: The typical suburban house is laid out in such a way that all of the most private spaces (bedrooms and bathrooms) open onto a common hall, making it difficult to achieve any degree of separation in a shared-living situation.

Below: There are exceptions, of course: this example, a modified courtyard house, laid out to provide a separate master bedroom wing, lends itself well to sharing by, say, a parent with an infant and another with two children.

It is perhaps less uncommon nowadays for two single parents to share a household. There are benefits of economy and cooperation that can outweigh the inconveniences of sharing a house or apartment. The existing housing stock, however, does not generally accommodate this kind of arrangement. Even though there might be enough bedrooms in a given house, these are usually arranged in such a way that all the bedrooms are in one zone and the kitchen, dining and living rooms are in another. This typical grouping of the private spaces makes it difficult for two separate families to consider sharing a house, if they desire any kind of privacy.

If, however, the home were to be arranged so that there are separate private zones for each family to retreat to, sharing the
more public spaces would be less onerous. There are several possibilities as to what could be apportioned to public and to private (either individual or familial):

- each family might have only bedrooms and a bath, with kitchen dining and living areas all shared;
- the families might have an additional private room, a sitting room or study, that would make them virtually autonomous;
- the extreme case would be for each family to have its own eat-in kitchen and share only the living/play room.

The variations are numerous. A single concern applies to them all: the need for a definition of what is the private and which the public realm.
The Neighborly Cluster

A third approach to this notion of cooperation is to incorporate it at a cluster scale rather than at a unit scale. In this sort of scheme, each family would have its own unit (apartment or townhouse) with, perhaps, a small garden or a deck. All residents would share such facilities as a laundry, the garage, meeting and game rooms. This is not far different from an ordinary apartment building or townhouse cluster, but in combination with the other options, the general ambiance of neighborly sharing could be greatly enhanced.

Above: In the cooperative cluster community, each family has its own unit, but they are ranged around a common court that serves as a sort of shared outdoor living room.

Below: The bungalow court is an example of this arrangement. The overlapping use of the court for the sole means of access as well as for the units' yard space, however, raises rather serious privacy problems.
These general categories are offered more to demonstrate a range of possibilities than to point to a correct solution. For the purposes of discussion, I have focused on the idea that these households would be exclusively for single-parent families. It is quite reasonable to think that a mixture of residents would be workable — even preferable. A range of ages and situations among the housemates would more closely approximate the extended family model. Making room for a senior citizen, for instance, might meet the needs of all concerned: the need of the elderly individual for companionship and for feeling needed, of the parent for help with the kids, and of the kids for a range of adult role-models. So, while the discussions of program and design speak specifically of inhabitation by single-parent families, the possibility that the population might well be more diverse, or that it might vary over time, is taken into account.

Just as there are various possibilities as to the exact makeup of households, there are a number of plausible scenarios as to the appropriate form of tenancy. It would be possible to imagine single-parent units being offered either for rent or for sale. If rented, it could be on the open market or as part of a program, with whatever restrictions were deemed appropriate by the sponsoring agency. The sale of such units could also be negotiated on a variety of terms. If affordability and the maintenance of the units within the single-parent community were deemed important, a non-profit cooperative plan might
be set up, wherein families buy equity in the co-op with a low down payment and low monthly payments, and have certain tax advantages, but their profit on future resale is limited. This arrangement gives the family the security of home ownership, while ensuring that the units will not be transformed into market-rate housing and thus inaccessible to the clientele for which they were designed.

In summation: it is clear that both individuals' and families' needs and predilections vary, and to truly meet the housing needs of the single-parent component of our society, a range of choices both in design and in form of tenancy, would be a welcome addition to the housing market.

Note: for a more complete description of the various forms of ownership, see Appendix
5 SITE ISSUES

The site I had selected influenced, at this point, the program's outline. The topography, and the existing pattern of transverse footpaths combined with my goal of creating an intimate neighborhood to suggest a series of clusters along a path. My early explorations were along the lines of doubling the density of the site. If the site were developed with 21 single family dwellings (one per lot) and we were to assume them inhabited by 'average' families, we would be looking at a population of about 90. We could of course assume that the houses would be built for 'yuppies' (working singles or couples with few, if any, children) and arrive a population closer to 50. At any rate, I began experimenting with the idea of the 'great house' intermixed with smaller household groups, all sharing common courtyards and entries. In addition to residential units, I planned to include what I call 'flex space'. This is not a multipurpose room, but rather space that could be set up to serve a particular function. Among the possible uses for this sort of space are daycare, either for children or for seniors from the neighborhood, a hobby- or workshop, or job-training or enterprise space. A central feature of the common
space would be a laundry room which overlooks an outdoor playspace or 'tot lot'. Unlike the strictly utilitarian basement laundry room found in apartment complexes, this 'sociable' laundry room would have, in addition to a view of the goings-on outdoors, a seating area and coffee kitchen, so that laundry chores could overlap with child play supervision and general socializing.

I achieved what I thought to be a workable plan for approximately 150 residents. Upon reflection, however, it was apparent that such a concentration of single-parent families — and of kids in particular — would tend to destroy any sense of 'fitting in' that the residents might otherwise enjoy. This was, I felt, a partly site-specific problem: I can imagine another, more urban site accommodating such a density (even of kids) as long as open-space needs were attended to. But aside from the issue of neighborhood 'ambiance', there are site-specific logistical problems related to the slope and the vehicular access. Several of my early ideas — not particularly site-dependant — have survived the test of time: the concept of 'flex space', of the shared courtyard and
laundry, and of shared units. The extent of this sharing of units has, however, been somewhat modified.

My final solution was to have about the same number of units as there are lots (24 units on 21 lots, equivalent to 29 units per acre). And while many of these are shared units, they are usually only doubles rather than triples or larger. In addition to the 'flex' space provided in each cluster, there are spare rooms in many of the units: rooms that can be used for a variety of purposes, a spare bedroom, an in-home office, or whatever. The sociable laundry room idea remains unchanged. To solve the parking problem there are several garages as well as on-street parking. As a hypothetical trade with the city, the street rights-of-way that are partially utilized for cul-de-sac parking and cluster entrance terraces are also developed as public sitting and play and garden areas.
4 THE PROGRAM OUTLINED

LAND: 21 lots, each 25' x 70' (1750 sq.ft.)
total site area: 36750 sq.ft. = .84 acre
slope: varies, but generally around 20 degrees
orientation: south

RESIDENTIAL: Accommodation for 30 families, if occupied solely by single-parent families. The arrangement of rooms allows for flexibility, thus an admixture of singles (a grandparent, for example) is possible. The units vary in layout and size, but fall into three general categories.

Single units:
- 5 2-bedroom, 1 bath @ 650 sq.ft.*
- 4 2-bedroom, 1 bath + spare room ** @ 1060 sq.ft.
- 3 3-bedroom, 1 1/2 bath (2 with spare rm) @ 1090 sq.ft.

Double units:
- 5 4-bedroom, 2 bath @ 1180 sq.ft.
- 4 4/5-bedroom, 2 1/2 bath @ 1500 sq.ft.
- 1 6 bedroom, 2 1/2 bath @ 1620 sq.ft.

Triple units:
- 2 6/7-bedroom, 3 1/2 bath, + 2nd living rm @ 1900 sq.ft.

Notes:
* Square footages given are typical
** Spare rooms, where provided, account for around 280 sq.ft.
This is adequate space for in-home daycare for six children (35 sq.ft. net per child) or for a small office. They are also suitable for adaptation as a small ‘mother-in-law’ unit.
COMMON SPACE: This falls into two basic categories: space with a designated use, such as laundry or parking; and space that can be designated for a particular use at the discretion of the residents, and may change over time.

Laundry Rooms: 3 small -- several machines + sitting area @ 120 sq.ft.
2 laundry/play rooms @ 225 sq.ft.

Flex Spaces: 6 -- ranging from 400 to 760 sq.ft.* total: 3340 sq.ft.

Office/Meeting: essentially a spare room in manager's unit
(a separate unit near the center of the site) 280 sq.ft.

On-site Parking: 20 garage spaces (4 double garages, 1 4-car, and 1 8-car)
9 off-street spaces

note: 400 sq.ft. of 'flex space' is adequate for 4 work stations, if used as office space. 760 sq.ft. is enough space for a day-care center for 15 kids (at 35 sq.ft. per child plus service space, bathroom, etc.)
There is quite a range of single parent families. They vary not only in which parent heads them and how many children there are, but also in income and history and, most important perhaps, in their view of the future. Some see their position — whether self-imposed or otherwise — as temporary, a necessary evil perhaps. Others are more resigned or even quite content with their lot. In any event, there is no one prototype unit that will happily house them all. In developing this proposal, I have defined a certain set of parameters, of desirable qualities for a single-parent family dwelling that are appropriate to the conditions of the site. I have attempted to design for a range of possible ‘scenarios’. To do so, it was necessary to make certain assumptions as to what size and type of dwelling would be appropriate for each segment of the potential population.

Communality or cooperation have been presented as a possible solution to some of the time, energy, and social needs of these families. The proposed units include prototypes for the three levels of sharing that were laid out previously. Herewith, a list of the types and sizes of units, along with a brief description of
the category of client envisioned and of the specific features included for the benefit of that client. But first, an outline of the features incorporated into all plans as fundamental to the proposal.

- All units have a centrally located, open-plan kitchen.
- All units have some private outdoor space. Though small — and occasionally merely a large deck — this space is so located as to be readily supervisable: small children can play outside while their parent attends to other matters.
- All units have a discrete entry with some sort of claimable territory — a place to put a bench or a pot of geraniums.

-Shared units are arranged with private bed- and sitting-room suites for each family, generally separated from each other by a change of level or by a common area.
- Some units have a spare room. Intended as a potential workroom or in-home office or perhaps an in-home daycare playroom, these are located adjacent to the entrance, are (generally) convenient to the street, and somewhat separate from the rest of the living spaces. With minor remodelling, they can either be opened up or entirely closed off from the rest of the house.
THE SINGLE UNIT:
This is the most 'normal' of the unit types — either two or three bedroom, with a smallish 'great room'. The kitchen is designed to function as the hub of the living spaces, and there is usually a spare room. I see this unit as being appropriate for a relatively stable & secure single parent who prefers working at home to trading-off daycare responsibilities and chores with a housemate.

Note: the various possibilities for inhabitation of these unit types is explored further in section IV.5 'Patterns of Inhabitation'.

A representative single unit with a spare room. Note that the kitchen is centrally located and open to the living/dining area, to the large vestibule, and to the terrace (both potential place spaces which are also supervisable from the spare room).
THE SHARED UNIT (double): This unit is designed for two single-parent families (though other configurations could be imagined). It has two bed-and sitting-room suites, each with either two or three bedrooms. The same general arrangement of kitchen and living spaces prevails, except for the addition of more common space — usually in the form of a separate playroom or study. This type could be inhabited either by friends, presumably on a rather permanent basis (until someone's situations changed) or it could be less equal — perhaps a more 'permanent' single parent who chose to rent the spare suite to a more transitional family.
THE SHARED UNIT (triple or?):

This is an expanded version of the double unit, following the same layout precepts. However, this is more likely to be a more transitional arrangement than either of the others: while it is possible that a group of single parent families would be sufficiently close and motivated to work it out over the years, it seems more likely as a setting for a transitional, rehabilitative program. With this in mind, the suites are arranged somewhat more flexibly — to allow easier adjustment according to the space and privacy requirements of specific residents.

The multiple household has many of the same features as the other unit types, with the addition of a ground-floor suite of rooms that can be used as a second living room, a playroom, an office, or even as a semi-independent apartment.
View of the eastern end of the site, with the bay in the distance.
For the purposes of my design exploration, I have chosen a hillside site in Bernal Heights, a neighborhood in San Francisco. Bernal Heights is in the southern part of the city, a part of the Mission District, which is known for its predominantly Latino population as well as for being the city's 'sun belt'. Originally the site of goat pastures and truck farms, Bernal Heights is now an area of one and two family houses, most of them built after the earthquake of 1906. Until recently, the hill was predominantly working class. The influx of Spanish-speaking immigrants into the flatland portions of the Mission did not extend significantly to the hill.

Map of San Francisco: shaded area is the Bernal Heights neighborhood.
It remains a heterogeneous neighborhood: predominantly Anglo with a liberal admixture of Asians, Blacks, Latinos and other ethnic groups. The north and west slopes of the hill, with their vistas of downtown and the bay and the sunset, have been bought up and upgraded, mostly by young middle-class professionals or white-collar workers. This process is proceeding at a slower pace on the south and east slopes — probably because the views are not so spectacular (they do not include Alcatraz or the Golden Gate). Also, in a quirk of the micro-climate, the western point of the hill diverts the oncoming fog to the south, so that the southern slope is sometimes blanketed in fog while the summit and northern slope are basking in sunlight.
For my site, I have chosen a series of 21 lots that stretch across 5 blocks at the top of the south slope. These lots, in groups of two and three, form the northern boundary of a somewhat shabby neighborhood of single family detached houses. The immediate neighborhood is one of scattered houses and narrow discontinuous roads — occasionally referred to as 'dogpatch'. A few blocks downhill the close-packed grid of an urban residential neighborhood begins. Uphill, there are only a round-the-hill boulevard and the bare hilltop, which as a result of community action has been designated as a city park. To date it is, for the most part, 'unimproved'. It is chiefly used, as are many bare hilltops, as a place to fly...
kites or to picnic or to take in the view. Bernal Heights Boulevard is a popular jogging track, since it is just a mile in circumference and has gentle gradients and good views. The joggers share the road with sporadic but occasionally reckless traffic. The shoulders of the boulevard are also a popular spot for 'parking'. The western end of the loop has recently been closed to traffic, thus diverting all traffic around the south end of the hill, and past the site. The houses surrounding the site vary in age from pre-earthquake to modern. They
are of fairly uniform size (small) and with few exceptions range from unremarkable to unattractive. The lots are all 25' x 70' and are laid out on a regular grid. While this grid is an extension of the streets below, the hierarchy of streets is reversed. The streets lying parallel to the slope, though less 'improved' than their counterparts further down the slope, are here used as the through streets, while the uphill streets dwindle to mere footpaths or single-lane drives. Although these streets are platted, it is unlikely that they will ever be connected to the boulevard: for one thing, they are too steep, and for another, the traffic thus admitted to the neighborhood would wreak havoc. Due to the slope of the hill and the age of the

Above: View of Powhattan Street, looking West. Though is is platted as a 40' street, Powhattan is, at present, a rudimentary single lane. The encroachment of grading for drives, of plantings, and so on intensify the impression of informality in the placement of houses.

Facing page: The view from the hilltop, looking southeast across the boulevard and the eastern end of the site, towards the bay.
above: Looking South, down Prentiss Street from Bernal Heights Boulevard. The street here dwindles to a driveway and then to a mere footpath as it ascends the hill.

Facing page: map of the site for the design exploration, showing existing buildings, formal and informal streets and paths.

buildings, relatively few houses in the neighborhood have garages. On-street parking is, therefore, the norm, and the usable street width is reduced to little more than a single lane. The immediate neighborhood, then, is something of a backwater, and likely to remain so. The siting of the houses on their lots is somewhat less regular than that of houses just a few blocks below, where most facades are right at the sidewalk, or set back just far enough for a front porch. The houses at the top of the hill tend to be set back a little further, and the fact that residents have encroached in various ways on the street right-of-way intensifies the sense of informality and haphazardness.
The principal reasons for selecting this site were its size (21 lots, more or less continuous) and its relationship to an existing neighborhood. Of particular interest was the prospect of working with a site that was large enough to accommodate exploration of various-sized clusters. Early on, I developed the notion of working with clusters or groupings of units: it seemed that a major component of a solution to this problem of single parent housing would be the formation of mini-neighborhoods of a sort. The advantage to this particular site is that the arrangement of lots in groups of two, three, or six (plus one single lot) allows for a whole range of groupings. Since one of the goals of this investigation is to propose viable prototypes, and since large blocks of land are not often available in appropriate neighborhoods, I welcomed the opportunity to experiment with a variety of parcel sizes within the larger design. The fact that the site is essentially linear suggests that, if properly designed, the development could be knit together casually on the neighborhood level, and more intimately on the cluster level. The analogy here is a string of beads: a series of separate entities — the unit-clusters on each parcel — whose common bond unites them into a whole greater than the sum of the parts.
The second reason for favoring the site was that, while being a part of an existing neighborhood, the site is distinct enough to lend it a sense of place. Fitting a new development of this scale (albeit small by developers' standards) into a single family residential neighborhood is a challenge. There are issues of density, of access, and of zoning to be dealt with, as well as the often neglected issue of blending in with the surroundings. All too often these days infill construction takes the form of plywood 'shoeboxes'. It is understandably difficult for the speculative builder, trying to turn a profit on a single-lot infill job, to exert himself financially for mere aesthetics. This site is particularly vulnerable to the depredations of speculative building. Were it not for the success of an active community in obtaining a moratorium on such projects, the site
A more organic response to the slope: the infill units are graduated in height to take advantage of views and sunshine and to shield the development from boulevard traffic. Nonetheless, they do not usurp the public's view from the park.

would be a prime target for a bank of condos, towering over the neighborhood and accessed from the boulevard.

The orientation and aspect of the site are favorable indeed. The south facing slope is ideal for passive solar applications, and render the task of providing every unit with direct access to a 'patch of sun' quite simple. The views to east, south and west are quite good, overlooking the southern portion of the city and the San Bruno hills, as well as affording a view of the sunset. The access to the amenities of the park are a plus, but whether the advantage of this proximity is outweighed by the danger and disruption of the traffic on the boulevard remains to be seen. Also on the negative side of the balance is the fact that the park and boulevard overlook the site, creating the potential for privacy problems.
The site also has situational amenities that make it a likely candidate for family housing. It is convenient to public transportation, as two bus routes pass within 2 blocks, on Nevada Street and Cortland Avenue. Also, Cortland is a neighborhood commercial street, boasting a variety of stores, two laundromats, a bank, and a branch library. There are several schools in the vicinity, though since San Francisco busses school children, this factor is less relevant. Besides the hilltop park, there is a mini-park (a 2-lot playground) just one block down Prentiss Street, and three larger playgrounds within a ten-block radius.
In a broad-brush description, the design proposed for this single-parent housing is an enclave of 24 units, arranged in five clusters of varying sizes, plus a single house and office. They are organized along a path that traverses the site, which in turn traverses the south slope of the hill. Each cluster comprises units of various plan-types, as well as common space in the form of entry terraces, a central courtyard, a laundry room, and 'flex space' for use as daycare, recreational or work space.

This design, like the program, evolved as I pursued several lines of investigation. It is an attempt to bring together many factors and diverse issues. A linear description of the issues and of the design process cannot take them all into account. I will therefore separate the development of the design into three main sequences.

The first of these begins at the site scale: both site and context served as important determinants regarding the overall layout and image of the final design.
The second sequence begins with an exploration of the relationship of public to private space and an investigation of the importance of both types of space in the design of a living environment. Lastly, there are the issues of use, of usability, and of change to be considered.

The basic parameters of the site have been laid out in the foregoing chapter. I have mentioned that the selection of the site was not done independently of the development of the program in its final form. While the objective of developing an urban prototype for single-parent housing dictated, to an extent, the site's size, location, and so on, the site parameters did, in turn, affect the development of the program and of the design.

The Bernal Heights site presents a number of design opportunities and challenges. The distribution of available lots in groups of various size affords the potential of exploring a range of unit groupings. This allows a diversity of experience in the proposed community. It also permits the exploration of several prototypes under the umbrella of a single design. While it is challenging to explore single-parent housing issues at a development scale, it is difficult to ignore the fact that parcels of land large enough for the proposed development are not easily come by in an urban/residential setting — barring such stigmatized parcels as redevelopment land. It would seem an advantage, then, to be able to propose
a prototype that can work on many different levels of site size and of density, from single or double infill lots to larger parcels. The specific solution offered here is not intended as a whole-block proposal. I have endeavored to create a housing complex that blends into its surroundings — creating a sense of place without setting that place apart as a 'project' inflicted on an otherwise homelike neighborhood. Indeed, the existence of a viable neighborhood is fundamental to the success of the design.

This issue of maintaining the character of the neighborhood is a touchy one: the local homeowners have been fighting development for years. It was only in the last decade that the hilltop was finally set aside as a park — older maps still show the proposed street grid continuing on over the hill, much to the dismay of the occasional lost trucker trying to take a shortcut to the freeway. The residents' concerns are not entirely 'dog in the manger-ism'. There are bonafide problems with parking (if we admit that every proper household must have a car) and with emergency access (due in part to the disparity between official maps and reality). Perhaps the most incontrovertible of their objections to further development is the inappropriateness of the typical infill structure: a plywood or stucco maximum-envelope triple-shoebox, which would tower over the existing homes, usurp the view and so on.

In point of fact the lots in question belong to various individuals. If the
City were to approve piecemeal development of the land, code restrictions would mandate the widening and straightening of the streets, and every house would be perched over a single or double garage. The same zoning law would permit the construction of units measuring 35' in height at the sidewalk and 40' at a point ten feet back, with a 40% openspace requirement. The required street 'improvements' along with the imposition of such out-of-scale houses would certainly destroy the neighborhood as it exists.

The west side of Nevada Street. The building envelope permitted by current zoning (shown dotted) would clearly overwhelm the existing houses.
While these site-related issues influenced the macro-scale — the overall layout, the circulation plan, the massing and so on — it was the relationship of public to private territory that generated the layout of individual units and of the inter-relationship of units. The ideas regarding the transition from public to private space — first evolved in regard to unit plans — expanded to inform the thinking on the whole site. And there were other significant issues to integrate into the overall scheme, issues such as flexibility and patterns of inhabitation, as well as the investigation of the potential uses of communal and private outdoor space.

The following account of the design process and of my conclusions will, then, be separated into accounts of each train of thought and of the resulting conclusions. This presentation is, of course, a simplification of the actual design process. None of the lines of investigation described were pursued unilaterally — each shed light on the others, and solutions to a problem at one scale often proved to have some validity at another scale.
Among the first considerations in the evaluation of a given site, in relation to the design of what is to be built upon it, are context and topography. These give us a clue as to what is appropriate and what is possible.

The evolution of this design depended on the pursuit of several parallel trains of thought regarding the parameters of the site as well as the satisfaction of the requirements of the program and considerations of ‘image’. Under the general heading of ‘site considerations’ there are issues related to the context, both the image and the logic of the existing fabric, to ‘path’ and ‘place’ and what they mean to the community, as well as to situational issues such as solar access, the buildability of slopes, views, and vehicular and pedestrian access.

It was the interface of two of these issues, the apparent conflict between the logical orthogonal street grid and the system of paths generated by the topography that provided a starting-point for one line of investigation. As it is now, the fabric of houses and streets disintegrates from the strict regularity which prevails lower on the hill. At Powhattan Street the edge becomes ragged as houses...
become more random -- within the unseen limits of their regular lot lines -- and streets dwindle into mere lanes and footpaths. Though only a roughly-paved lane, Powhattan is in effect the last element in the grid, serving as a collector and connector for the uphill streets. Above this, local access is effected by a route which, within the constraints of the platted grid, works its way across the slope: up the last vestige of Folsom Street, across Chapman, up the last block of Nevada and thence along an informal lane to the boulevard. The segment of Chapman which was intended to connect Nevada with Rosencranz is used only as a footpath and for parking. This diagonal route is echoed by several drives and footpaths. It is, in fact, the natural response to the slope.

Now, this change of direction from orthogonal to topographic provides a rare opportunity to create a special sense of place. One premise of this exploration is that it is important for a family to have 'roots' in the place they call home, to be able to identify with their home.

As much as people identify with their house, the identification with the street on which it is located is probably stronger. This is partly due to such civic logistics as the delivery of mail, but it is also related to the definition of 'turf' and of neighborhood. The typical orientation of houses towards the street, with back yards totally enclosed...
within the block and fenced, reinforces the tendency to consider the households up and down and across the street as neighbors, while the houses directly behind belong to 'others'.

One of the principal goals of this work is to identify ways in which neighborly cooperation can be encouraged. And the purpose of this cooperation is chiefly related to childcare. The age groups most in need of supervision are toddlers and pre-schoolers (18 months to 5 or 6 years, roughly). The natural realm for these kids is the backyard. The conventional backyard is somewhat too private, however. For the parent watching a toddler at play it can be lonely, and for the five year old it lacks challenge. The overall challenge of the site, then, was twofold: to find a way to dissolve the barriers to cooperation within the block structure, so as to allow neighborly alliances to form where fences and laundry lines are the norm; and to maintain the usual ties across streets and down them to the community at large.
The relationship of the clusters to the path. Shared outdoor space is related directly to the path, while private gardens and terraces are more remote from it.

The response to the first was to create the cluster system. The clusters, as designed, are partially derived from the traditional courtyard house, in that the usual separation of frontyard and backyard activities is replaced by courtyard activities. They differ from the one-family courtyard or atrium house in that the internal space is arranged with a hierarchy of privacy, and individual units' access to outdoor space is not always limited to the courtyard. Also, the overall attempt was to treat them as places along a path — nodes — rather than as cul-de-sacs.
In response to the second challenge, the maintenance of street-frontage alliances, the device used was a system of cross-slope footpaths. The main element of this system is a path that connects all the clusters, running through or past them. This path is reinforced by parallel and tangential paths which provide a more public way as well as serving as feeder routes and shortcuts to the various possible destinations in and around the neighborhood. This path system is in effect an overlay on the somewhat imaginary official street-grid. The units are sited in such a way as to respect this grid: since the streets do not and cannot go through to
Chapman Street looking west from the intersection of Banks Street. Laid out within the width of one lot (25') there is minimal space for sidewalks or parking.

the boulevard, the major clue to the structure of the blocks is the alignment of facades. Maintaining the appearance of the grid is a statement to the effect that these clusters 'belong'. Meanwhile, the street rights-of-way themselves defer to the topography. Conventional streets and sidewalks are replaced to varying degrees by sloping walks, stairs, seating areas, planters and garden plots, and play areas.

This network of paths will serve as a focus of neighborhood interaction. Paths are a popular locus of children's play, a place for running or riding. Narrow footpaths evoke jungle trails, wider walks lend themselves to races and games, while a secluded nook might become club headquarters. For parents, places along a
Path are potentially places to chat with neighbors while supervising small children. The places that are created at the intersections are an integral part of any path. An intersection connotes a choice, whether of which path to follow or of remaining still for a time to decide. Intersections are also places of encounter, of chance meetings or assignations.

If the spatial implications of the activities that take place along a path are considered in the design, a system of paths can become more than merely paths — the network can become a viable part of community life.

An entry along the footpath up Banks 'street'. Even though it is technically in the public domain, this shaded walk appears to be private. There is another path on the sunny side of the tree which is used by passers-by.
Of course, there is a hierarchy of space in such a network just as there is a one of path 'volume'. On a narrow path a small widening to permit passing or a low wall that one or two people can sit on are sufficient. The amount of 'slack' required increases with the consequence of the paths that are intersecting. Where the vehicular access interfaces with the pedestrian, yet more space is required — space for cars to be parked and unloaded, space for kids to wait for a safe crossing. In this design, the points at which the cluster-system path intersects with the uphill thoroughfares assume a special importance: they are front stoops and crossroads at the same time. Within the context of the conventional street grid, it is clear enough what is correct. The roadway and sidewalks are public, anyone, in theory, can walk there. Front yards and porches are private: the homeowner has a right to shoo people away. The owner of a large corner lawn, however, knows how difficult it is to dissuade short-cutters.
The overlaying of a path system on a street grid creates quite a number of possible routes, and an equal number of potential misunderstandings. On paper it is easy to define rules for how various rights-of-way are to be treated. The average citizen, however, requires some sort of clue. It is not necessary to post signs — people don’t pay much attention to them anyway — there is a whole range of tacitly understood indicators. A fence with a gate is clear enough, but clarity does not engender richness, so we must look further. A change of direction alone can signal the entrance to another domain, particularly if it is an abrupt one. The increase in level of privacy will ‘read’ more clearly, however, if it is accompanied by other differences. Among the attributes commonly understood as ‘more private’ are a decrease in width, a change of materials (usually, to more complex or to smaller scale) or a change in light level, with darker being equated with privacy or seclusion. Coupled with a level change, an abrupt change of direction creates the familiar front stoop — a universally understood demarcation of the formal beginning of the private realm. Just as the curb of the sidewalk signals the limit of the car’s territory, changes in level along a pedestrian way can signal a difference in use or in ownership. A single step might be effectively used to delineate a seating area, for instance.
While all of these options can be used to state 'private', their indiscriminate use would be apt to create confusion. Throughout the clusters proposed here there is a certain unity of signals as to what is more private.

The basic vocabulary of the public/private interface along the public path or street: a right-angle direction change is combined with a narrowing of the path — though it opens out again into a terrace. This is accompanied by a small level change (as dictated by the slope) and by a change in materials (from concrete to unit masonry, perhaps).

The site-scale design challenge might be described as finding a place for a new community within an existing fabric. It is the slip in the regularity of this grid that affords a niche for a new interpretation of the grid — turning the block inside out, as it were. This is accomplished by piercing the usually inviolate facade with a semi-public access path, and grouping unit entries along this new street. On the smaller parcels the inversion is partial, a mere intrusion of the path culminating in a shared courtyard area. The six-lot parcels, however, have a through path which connects the internal public-to-the-cluster courtyard space with external entrance terraces on both street frontages. In all cases, this path is clearly demarcated as separate from the
truly public way by means of level and direction changes, as well as by a refinement of materials, and the use of a front stoop scale. Cluster entry terraces are delineated by a change in direction, sometimes a small level change, and a change in materials. The passage of the path between the units (usually intensified by the overhang of the second story) creates a gateway, which is even more commonly associated with private territory. Once through this gateway, the path opens up again to create a new public realm with its own set of hierarchies. Within the clusters, individual entrances are identified with the same set of markers, though on a smaller scale. Each unit has its own 'stoop', clearly separate from the public way, that leads to the unit's door.
The relationship of unit entries to the path echoes that of the clusters' entries to the street.

This creation of an internal 'street' complete with individual entries and common gathering and play areas was an attempt to enliven a sector of the block that is normally under-utilized and asocial. The connection of individual clusters' 'streets' was a device for giving the community a sense of continuity across four cross streets. Insofar as possible, this community path follows the contour of the hill. It is paralleled by a more public path up-slope. This provides passers-by and residents alike with a number of shortcut options. Seating and play areas are also provided in the public realm at key intersections of the path system. There is ample room in the fringe of city land along the boulevard for more community gardens. Such public amenities would help create a local pedestrian street life, and the sort of neighborly interaction — whether over gardening or kidwatching — that would tend to knit the clusters into the community.

Facing page: plan of the proposed infill clusters, shown at the level of the internal street, which follows the topography of the site -- dropping from west to east.
There are difficulties inherent in the task of fitting a 'special use' infill development into an existing neighborhood, no matter how heterogeneous it might be. The designer is faced with a dilemma: while families need to have a sense of individuality, it is equally important that they not feel isolated or be stigmatized by being different. The conventional housing project carries with it just such a stigmatization. To merely mimic the existing housing stock, however, will not meet either programmatic or economic requirements.

Without flying in the face of the local norms of size and set-back, the infill unit-clusters can, nevertheless, have an identity as a neighborhood. To do this, the fabric of the existing neighborhood must be examined and evaluated. Once an understanding of how and why it works has been distilled, the designer can choose which elements to retain for continuity of image or ambiance, and which can safely be changed for programmatic reasons. The virtual disintegration of the prevailing grid structure has been mentioned. In this proposed design, the maintenance and...
the continuation of the existing fabric is an important gesture of 'belonging'. The buildings' facades, therefore, follow the local norm rather closely, both in alignment and in appearance. This might be construed as overly rigorous, but I felt that it was justified, in that this obedience to the fabric allows a certain latitude regarding other image-related issues.

In the interest of 'fitting in', the organization of the facades themselves also obeys a set of rules that is based on the existing house fronts. In respect to the arrangement of their street facade, there are two basic categories of houses. The older houses (pre-WWII, more or less) follow a traditional style: stairs lead up to a front stoop or porch, generally centered on the facade; depending on the size of the house, there may be bay windows on one or both sides of this entry; and there may be a small garage on the downhill side of the entry stairs, though this is often too small for modern cars.

Chapman Street was probably just an informal lane when these older houses were built: grading & paving has placed the road surface well above the level of the garages, which are now accessed by stairs. This roof configuration, somewhat atypical for SF, occurs frequently in the immediate neighborhood.
Most of these have a gable roof, though there are a number of 'mission style' bungalows. These older houses range in size from one to two and a half storeys, the typical example being one and a half storeys of living space raised up over a crawl space, a partially excavated basement or a garage, depending on the slope. Though some of these are placed right at the sidewalk, most are set back to allow for the entry stair, and thus may have a small front garden.

The second type of house is the more modern infill unit. These are usually simple 'shoebox' type structures, though they are often adorned with a variety of applied finishes (stucco, 'fieldstone', etc.). This second group tends to be rather insular: the street-level facade is comprised of a double-width garage door and an entry door which is usually recessed behind a wrought-iron gate. The stair up to the living level is internal. They are either two or three storeys in height, and never have living space at street level on the front of the house. As a rule they

These recent infill units are typical: most of the street frontage is taken up by a double garage door and the houses are built close to the front lot line, leaving little space for a front stoop.
are built as close as possible to the front lot line.
All in all, there is enough diversity within these parameters that the more modern houses, though rather stark and unengaging by themselves, fit into the preexisting fabric to create the neighborhood's haphazard ambiance.
The attempt here was to achieve an image for the clusters that conveys a sense of community at the same time that it expresses the existence of individual units. A wild variety of finish materials was avoided: the design emphasis was, rather, on articulation of the 'house dimension', the 'entry dimension', and the 'garage dimension'. Thus even though the individual units do not adhere to the prevailing one-per-lot layout, there is still a comprehensible 'three lots, three units' external appearance.
This appearance belies the reality of a single entrance for each cluster, but this ambiguity is ameliorated by the topography of the site: the sequence of stairs and of paths leaves little doubt as to how each cluster is to be accessed. And the clusters' facades, in turn, create a sort of broken wall that frames and organizes the path structure.

Following pages: representative elevations of the proposed infill and existing houses.

p.85 -- Banks Street, east elevation: here the infill consists of two single units.
p.87 -- Prentiss Street, west elevation: here a duplex unit and off-street parking occupy two lots.
p.89 -- Prentiss Street, east elevation: a six lot, seven-unit cluster. The units have a relatively low facade since the lots fall away to the east, permitting a garden level one floor below the entry.
p.91 -- Nevada Street, west elevation: other side of the same cluster.
Another aspect of the existing fabric is the massing of the houses. Actually, the prevailing scale is such that the houses might be said to be deployed rather than massed. To achieve a totally contextual design response, the infill units would likewise be tiny and detached. This is not either economically or programmatically feasible. In laying out the various cluster arrangements, a balance was struck between, on one hand, minimizing building height and, on the other, maximizing outdoor space. The precise point of compromise varies somewhat from cluster to cluster, since the street set-backs and the height and style of neighboring houses varies from block to block. Generally, the median set-back for the clusters conforms to the average for the specific block and street. The buildings themselves are, however, larger than their abutters. A number of devices were employed to lessen the impression that these new units are out of scale. The use of similar dimensions for facade elements has been mentioned. Another important ploy was the maintaining of the one and a half storey scale at the facade. Thus porches and bays have roofs or other trim elements at the one-storey level. Upper floors rise above these lower roofs, but the set-back from the facade makes these upper floors less readable from street level.
A second aspect of the massing of the clusters was a response to a more internal concern: maximizing the possibilities for a pleasant ambiance within the units. One of the essential parameters in the layout of units was the provision of a 'patch of sun' for every unit -- and preferably every room. The location on a south-facing slope is ideal for the orientation of units to take advantage of both sunshine and views. The natural design response was to have the clusters' courtyards open out to the south, and to have the buildings rise somewhat higher on the north (uphill) side. This maximizes both the number of windows with sun and a view and the potential for sunny roof decks.
In my earlier discussion of the pros and cons of shared living, I defined three general levels of communality or cooperation: the cooperative group household, the shared household, and the cluster community. The success of each of these depends, to an extent, on the attitude of the participants. But there are ways in which the viability of all them can be enhanced through thoughtful design. The lowest common denominator here is the relationship between the public and private realm. This distinction between public and private can be made on every level from the most private (the interface between a bedroom and the hall for instance) to the most public (the front stoop or even the point at which a resident turns the corner into her own street).

This dynamic of interface between private and public can be expressed in terms of a private space, a public space, and a zone of transition — be it doorway, vestibule or front yard. When private meets public without a transition zone (or, worse, overlaps) a potential for conflict exists. The encroachment of spaces — or of the uses of spaces — that engenders tension. Of course it would be foolish to state that lack of privacy is the root of all...
domestic evil, but surely everyone can call to mind instances of discord caused by the TV interfering with someone’s studying or of kids’ play disturbing a nap. On the other hand one hears the complaint that ‘families don’t do things together anymore’. There is a fundamental conflict here between the need for a space large enough to accommodate family or group activity, and for space conducive to the pursuit of individual interests. It is possible to design the spaces within a house in such a way that they support both private and communal activity. Some houses meet the space and activity needs of their residents perfectly, others, not at all. Most houses and families fall somewhere in between. The fit, whether good or bad, might be either a result of careful design or of chance. The key to a design resolution of the inherent conflict lies in an understanding of the nature of the public and private realms within a household, and the relationship of these spaces to one another. One way of looking at a household is as an aggregation of private spaces or nodes, ranged around and held together by the shared space, just as a family is a collection of individuals whose relationship gives them an encompassing identity. Perhaps the clearest way to approach this problem is to begin with the ‘basic unit’ — in this case the individual and the bedroom — and study the ways in which spaces and uses aggregate.
The basic premise in this exploration is that every individual, adult or child, needs their own space. Though it has not been long since the most a body could lay claim to, as personal space, was their bed, nowadays a bedroom of one's own is generally considered the norm (unless one is a spouse — or poor). At any rate, I will start with the sleeping-place as the minimal personal territory.
If this personal territory is a whole room, it can accommodate a range of private activities — reading or working, being alone together or just being alone. If the territory is only a sleeping alcove, possibilities for private activities are more limited, making the definition of the alcove as 'private' all the more important.

Top: The individual in her private space

Bottom: The individual in her private space, with another — either guest or family member. The 'transition zone' provides a buffer for privacy.

Key to diagrams on following pages:
♀ - the individual (adult)
♂ - the individual (child)
♂♀ - the family (parent and one or more children)
♀♂♂ - the household (several families)
♀♀♂ - visitor or occasional occupant
The second level of personal control of space is the possession of a place to share with someone, whether a family member or a friend. For kids, it is usually their bedroom. For parents the choice is somewhat larger, since they 'control' the whole house — though this does not mean they will not be interrupted.

The next step in the transition from private to public realm is shared space that is controlled or used more or less equally by all members of the household — the living room for example. This space might be used by an individual family member, by several, as a place for the family to engage in familial pursuits, or a place for the family (in whole or in part) to entertain guests.
Between each of these spaces, including those that are not room-sized, and whatever is 'outside' there is a zone of transition. This zone might be real or it might be inferred. It serves as a demarcation and as a buffer. A doorway is a narrow but very real and clear demarcation. As small as it is, the doorway can serve as a distinct 'social space', a place where would-be visitors can be intercepted, or where 'outsiders' can be engaged in conversation without the integrity of the private space being invaded. Naturally, a larger zone provides more separation between 'private' and 'public'. The functions that are served on the room scale by a door, are generally afforded more space on the house scale — a vestibule or front hall. At the front door we
actually have a bipartite zone: the vestibule, inside, is more private; the front porch, more public.

The inferred zone of transition is a demarcation within a room. In a shared bedroom, private space might be associated with the furniture, with a bed and bureau defining 'my side' and 'your side'. In the living spaces, furniture arrangements are often relied on to delineate living from dining areas or to create a work area. Clearly, an inferred transition requires more space than a doorway, but it can be as effective in defining the use of space. Inferred zones are not much use in creating either visual or accoustic privacy, however.

Since the issue here is housing single parent families, there are clear potential advantages in developing some form of shared living arrangements ('many hands make light work'). The question is how to minimize potential for conflict while maximizing the potential for sharing or cooperation. There is merit, perhaps, in the old saw 'good fences make good neighbors', but fences do not belong in the living room.

While there are obvious differences of scale and intensity, parallels can be seen between the space and privacy needs of the individual within the family and the family group within a shared household. So, using the foregoing concepts of 'private', 'public' and 'transition', as outlined at the individual level, I
arrived at a prototype for a family unit that can function as a 'cell' within a larger structure, while maintaining some of the attributes of 'household' within itself. It is a bed- and sitting-room cluster intended as living quarters for a parent and a child (though it could accommodate a second child). There is a private space for each as well as a small sitting room where they can be together in private. They have their own bath. For more active 'living' — cooking, eating, and so on — there are more public rooms, shared with the household. To accommodate larger families, a third bedroom can be added to this arrangement, and the sitting room enlarged accordingly. Alternatively one of the bedrooms might be somewhat larger, so as to be shareable. In the

Above: The basic bed-sitting room cluster: the storage closet and adjacent entry hall space create a buffer zone which separates the family cluster from the shared spaces. There is a door at the point of entry which can be closed for greater privacy. The family sitting room provides an area which, though small, can be used in a number of ways -- as a study, a sewing room, a TV room, or whatever meets the needs of the family in question.

Below: A 3 bedroom variation, with a somewhat more sitting room space. In either variation, really exhuberant activities would be expected to take place in the larger shared living areas.
event that two children must share a bedroom, the same principals can be applied to subdividing the room. This would most effectively be accomplished with the use of a device such as a bunk-bed divider to create bed-alcove privacies and a shared play space.

Now, by taking this entire cluster and its resident family as a 'room' and an 'individual', and juxtaposing it with another 'room' and 'individual' following the same rules of public and private and transition, we can create a larger cluster — the household. Since the bond between the individual family units is more fragile than that between family members, more care must be taken to delineate territories and to provide visual and acoustic barriers. This might be accomplished in a number of ways: by locating family clusters on separate floors, for instance, or by arranging them on opposite sides of the shared space. Whatever its relationship to the shared space, each family realm must be insular — with its own entry zone, and no through traffic.
There are clear arguments for separation of general household circulation from the private domains, both in light of noise and disruption potentials, and as a privacy issue. Likewise, an avoidance of through circulation in major living or work areas is in order. But a balance must be achieved between autonomy of access and the requirement for a certain amount of parental supervision of comings and goings.

Further, the common space must be large enough to accommodate all members of the household, and diverse enough that several activities can take place without conflicting. The extent of the shared space is, of course, dependent upon the size of the proposed household. Clearly, two parents with one child each could be accommodated in far less space than a household with six children, but a careful delineation of the space to be shared is required in either instance.

Before going into the articulation of the shared spaces, an inventory of the common realm is in order. Earlier, a range of levels of household communality was outlined. This design prototype focuses on an intermediate form, with 'most private' — bedrooms and bathrooms — contained within the family realm; and the social spaces — kitchen, dining and living rooms — shared by the household. This seemed to be a natural division, since on the one hand the singularity of the privacies is maintained, minimizing conflict over personal habits and schedules; while on the other, cooperation is
encouraged by the sharing of inherently social activities such as cooking. The common spaces of the shared household, then, comprise the kitchen and dining areas and the living room, in addition to necessary entry and circulation area. In a large household, the addition of a playroom or study or formal parlor might be required to provide adequate diversity of activity space.

For the most part, all of these living areas were treated as a 'great room', since an open plan is generally more conducive to the supervision of small children. They are not, however, large undifferentiated spaces. Rather, each activity has its own area, and circulation is separated from 'places' as much as possible. There are also nooks and window seats where individuals can retreat to study or read or play a quiet game. Some of these are adjacent to the larger living areas, so that their occupants can participate in household activities at will, while others are crannies in the stairwell.
or entrance hall. In all of this, the notions of public and private were a generative factor, and much attention was paid to transitions. While in one sense the entire common realm serves the same function in the household that the small sitting room serves in the family cluster—simply a place for getting together—in another sense it is a realm unto itself, with a wide range of possible uses and users. The articulation of the common realm, then, must allow for both clarity ("I've got this windowseat and I'm studying, so go away") and for flexibility ("Push the furniture aside and let's boogie!"). Ideally, it should be equally well suited to the separate pursuit of a variety of activities or to household functions. In a very large household, this is too much to ask of any space, hence the second living room (or play room or parlor or study).
Building further on the private/public interface, we come to the relationship of the individual households to the clusters. Again we have the analogy of individual and room in relationship to group and common ground, only here the 'individual' is the household. The same spatial rules apply: each unit is a private realm, there are transition zones and buffers, and the courtyard, the laundry and adjacent play area, and the entryways are shared territory. As the number of aggregated 'cells' increases, all of the buffers are expanded, so here we have the bipartite transitions -- the front stoop to reinforce the entry vestibule, and patios and plantings to add a spatial dimension to the mere walls and windows.
Closure and views. Except for windows at unit entries there is little visibility of the path from units' interiors. Units below the through path have windows opening only to their own patios.

The 'internal street' connects all the stoops, serving as a cohesive element. Just as the units' kitchens supervise internal living areas, they also overlook their own outdoor play and living areas. At this scale privacy becomes an important issue. The building envelope will take care of most of the accoustic problems, as long as the kid population of the courtyard remains at a reasonable level (and since older and more rambunctious kids will generally prefer to play in the street or park, this is a reasonable expectation). Visual privacy is more complex, since visibility from inside to outdoor space is desireable for practical as well as aesthetic reasons. Window orientation, level changes, and screens
(both built and planted) can be used to minimize intrusions on units' privacy. The shared entry terrace, path and courtyard are intended as enhancements of community life, not as an enducement for busybodies. Therefore, while all entries are oriented to the internal street, they are not overlooked by the various units' primary living spaces, so that an individual can come and go in relative privacy. Further, most units have both front and back doors, and all but the smallest clusters have two entrances.
Taking the private/transition/public formula one step further — stretching it a bit, perhaps — we arrive at the relationship of the aggregation of clusters to the neighborhood. At this level the entry terraces serve as the transition zone for each cluster, while the landscaped street rights-of-way are common ground. In this case, the general citizenry becomes a part of the participating group, with a theoretically equal right to the space and its amenities. The unspoken rules of 'turf' will however play a part here, creating a hierarchy of users. Ideally, this would have the effect of generating pride in and consequent care for the areas in question, rather than counterproductive possessiveness. There would also be a natural gradation of this shared public space. The area between clusters would be that most likely to be associated with and controlled by the clusters' residents. Uphill, the fringe of city land below the boulevard — developed into community gardens, perhaps — would be a buffer zone. Downhill, the clusters' parking cul-de-sacs or driveways would segue with the driveways and gardens of the neighbors to create a natural transition to the city street grid.
Facing page: The transition from public to private at the site scale.
5 FLEXIBILITY

One of the most basic privileges of the homeowner is that of making physical changes, whether for aesthetic or practical reasons. Being able to transform a space is fundamental to owning it. Conversely, it is the inability to change an apartment beyond furnishings and possibly paint color that makes a rented unit seem transitional even if one lives there for years.

It is the nature of families to change over time: to grow larger, to grow up, and then to disperse. Consequently, the ideal family housing would allow a certain amount of flexibility, either in the amount of available space or in the use of it. While the one-parent family may not change in size or in absolute space requirements any faster than the two-parent family, the existence of spatial options would expand the potential for flexibility in coping with problems. Also, flexibility can be seen as a prerequisite for shared living situations, if we assume that the participating families and individuals would naturally be on different time-tracks. Within the proposed family bedsitting cluster system, changes might be made rather rapidly if the household is a relatively transitional one. But even in a
long-term shared household there is apt to be some rearrangement. When young, the kids would most likely share quarters with their respective parents: an infant in its mother's room, an older child nearby. As the children grow up, they become more independant, and more distance is in order. Teenagers might well prefer to have one cluster to themselves, with the parents sharing the other. Depending on the age and sex of the household members, many variations are imaginable.

In the detached single-family dwelling it is relatively easy, though not inexpensive, to expand outward or upward. This is not as feasible in the more densely-packed cluster, rowhouse or townhouse configuration, particularly with condominium or co-op ownership. So if we are to maintain some possibility of change in a tightly planned housing cluster, we must provide for internal flexibility. There are several possible approaches to this:

- flexibility of room use — turning the dining room into a study, for example, or a bedroom into a sitting room. This is hardly a novel approach. It is, rather, the normal pattern of change in most houses.

- interstitial rooms within the unit: in a scheme where private rooms are clustered — according either to generation or to family, for instance — an additional room or rooms could be placed in such a way that they might be annexed to either bed/sitting cluster, or be used either as common space or as a separate private space.
-interstitial rooms on the cluster scale.

The foregoing principal could also be used between units so that, with some negotiation, rooms could be ceded to or annexed from the neighboring unit.

These two plans demonstrate the possibility of redefining a group of four rooms by means of minor remodelling.

Above: three of the rooms in question are used as a family suite of two bedrooms and a sitting room (with a private bath), while the fourth room adjoins the common area -- a TV room, perhaps.

Below: breaking through the closet, closing one door and moving another results in two bed/sitting rooms that share a bath.
Alternate layouts for a bed-sitting cluster: as two conventional bedrooms and a sitting room; or as a study and bedroom for the mother and a crib alcove for an infant.

In the design solution proposed here, all of these options were considered and incorporated to varying degrees. The notion of flexibility of room use was applied in two rather distinct realms: the private and the public. Within the bed/sitting clusters there are a number of options as to the apportionment of space for sleeping, private work space, or family leisure activities. In the household’s public realm, the extent of 'choicefulness' is directly proportional to the size of the household, since it is larger aggregations of people that present more likelihood for conflict of use or activity. For example, while the single
Alternate layouts for a 'spare room': as an office and foyer, and as a semi-independent studio apartment.

Family units' living space is modeled on the 'great room' idea, in the larger shared units there is a second living room. This might be variously used as a noisy play room, a formal parlor, or as a study or work room.

With some interior remodelling, further variations are possible. The 'spare rooms', where they exist, were planned in such a way that they might be redefined with relatively minor structural alterations. They can be opened up further to the rest of the unit (for a daycare room, perhaps) or partitioned off completely (for an office) or even plumbed and equipped as a small semi-independent 'granny' or 'mother-in-law' unit.
Though they are rather sparingly represented here, I have also experimented with the notion of interstitial rooms, both within and between units. They are used between bed/sitting clusters in the larger units, where it seemed that more intra-household options are in order. In some cases there are interstitial rooms or clusters located in one of two adjacent smaller units, so that with some structural modifications, the room(s) can belong to either one. This proved to be most practical where there are three contiguous lots. As an example, it is possible to remodel either a single bedroom or the entire middle bed/sitting cluster in a five bedroom unit so as to annex it to the adjacent single family unit (see diagram). While it is unlikely that this option to
annex or relinquish space will be used frequently, the additional flexibility that it represents adds a dimension of adaptability to the overall project that will allow response to fluctuating housing demands.

Flexibility can also be addressed on the furnishing level. While this may not satisfy the desire to really control the home environment, it does have its place. Particularly in housing intended for more transitional residents, modular furniture or partitions can be used to easily rearrange space within a room. This sort of definition of space does not meet the requirements for privacy between family territories, but can be used to create a reading nook in a large living room, or to divide a bedroom.

The notion of private, transitional, and shared space applied to a bedroom for two children. In this instance, a bunkbed-armoire unit is used to define and to separate the two sleeping alcoves, while the open area adjacent to the entry serves as a common play area.
Another possible device is a system of demountable screens or partitions. These are most appropriate for visual privacy or for demarcation of territories. As an adjunct to careful placement of rooms and doorways, they can enhance the privacy of the individual family zone so that, for instance, access from bedroom to bathroom can be shielded without dependence on closed doors. Insofar as flexibility is concerned, these screen elements would be useful for alterations to the basic cluster scheme or for redefinition of an 'interstitial' room. A two bedroom cluster could be subdivided, or the third room of a three room cluster might be partitioned off for either individual or household use. A word of caution: such screening devices should be accepted for what they are. They are not an adequate substitute for solid walls if acoustic privacy is needed. In all provisions for physical flexibility, the convenience and cost factors must be weighed against privacy issues. Some families or households may be willing and able to 'make do' with simple rearrangements, where others would prefer more drastic and definitive measures. Ultimately, the decision as to how best to respond to changing needs rests with the members of the household in question. The designer's role is to make such a choice possible.
By now, much has been said regarding the range of single-parent families, of the variety of their needs and preferences, and of the advantages inherent in flexible or adaptable accommodations. The notion of shared housing is fundamental to the proposed design. Further, the reintegration of work into the home and the incorporation of daycare facilities have been posited as appropriate measures in the redefinition of 'ideal' family life. It is likely that some will find this proposal strange or radical. In an effort to illuminate the thought processes that led to the specific design solution, I will here elaborate somewhat on the hypothetical living scenarios that formed the basis of design decisions. These fall into two categories: the generic household, a 'most likely' combination of individuals or families for each unit type; and the variations, which cover a lot of ground.
The single unit family

This would most probably be a working parent with one or two children. Some of these units have a spare room which can be used as an in-home office. For the parent without a job or job skills, there is the option of running a small in-home daycare operation or using the space for a home-based enterprise. Another alternative is to remodel this space to provide space for a live-in babysitter or for a grandparent who can watch the kid(s) during the day.

The single units without a 'spare room' are appropriate for parents for whom the communal resources at the cluster scale are sufficient — a conventionally employed mother with an older child, perhaps, or a parent with part-time custody of the child.
Hypothetical inhabitation of a single unit -- by a mother with two small children. The spare room is set up as an office.
The two family household

These vary in size and arrangement. The smaller units (4 bedroom, 2 bath) are for two parents with one or possibly two kids each. The larger units would fit two somewhat larger families. Again, some of these units have spare rooms, with the same range of potential uses and adaptations. These spare rooms are about the same size as those in the single unit, since it seems unlikely that all of the parents in question will be willing or able to work at home, and there is ample flexibility for other internal arrangements.

It is also possible for these units to be shared by an assortment of individuals and families. A four bedroom unit might be shared by two singles in one bed/sitting suite, a parent and child in the other, and a grandparent in the spare room, appropriately remodeled. A part-time parent might find a two-bedroom cluster just right for a bedroom, a study, and an alcove for the child's visits.

Note: See sketch, p.122.
The spare room is primarily used as a formal parlor; it has a desk area used by one parent as an occasional in-home office.

While many meals are taken informally by the various members of the household, the dining room serves as a locus for household gatherings and evening meals.

On the second floor:
- One bed sitting cluster is shared by the two single parents - each has a bedroom; they share the sitting room and bath.
- The second cluster is shared by the younger children (who might need somewhat more supervision). The sitting room serves as a shared playroom.

In the kitchen, the counter-return can be used as a breakfast or snack counter or as a desk for homework or household accounts.

Here, the "dining" portion of the room is set up as an informal family living room.

The upper bed/sitting room is occupied by two teenagers (same sex) as an open plan sleeping/study/activity room.

Hypothetical inhabitation of a five bedroom shared unit by two single parents with older children.
Hypothetical inhabitation of another shared unit by a parent with one child, another parent with shared custody of two children, and a grandparent.
The multiple household

This is merely an expansion of the double household format. With the additional bedrooms the range of possibilities for resident mix increases. In general, I see it as a more transitional model. With six to eight bedrooms it would be a workable house for a transitional program. On the other hand, it can work well for a group of families that have sufficient commitment to a shared lifestyle. Over the long run it might work best for a mix of housemates — singles, parents, kids — since it could evolve into a very workable extended family, and the somewhat reduced kid-population implied by this situation would certainly have less likelihood of overwhelming the resident adults. This unit type has several spare rooms. They might be used for a secondary living room as well as for any of the uses outlined above. In addition, interstitial rooms on the upper floors might be used as common study or playrooms or be annexed to a suite as a third bedroom for a larger family.
Hypothetical inhabitation of a multiple shared unit as a transitional housing program for mothers with one or two children.
ENTRY LEVEL ROOMS HAVE BEEN CONVERTED INTO A BED ROOM/OFFICE SUITE FOR A WORK-AT-HOME SINGLE PARENT WITH AN OLDER CHILD THAT SHARES A ROOM ON THE THIRD FLOOR.

Here, too, the deck provides an outdoor living & play space.

Hypothetical inhabitation of the same unit by a mixed household: a couple with one child, a single adult, and two single parents with one child each -- one with part-time custody.

THE TWO-ROOM SUITE AT THE REAR OF THE 3RD FLOOR IS APPROPRIATE FOR USE AS A "KIDS' WING": A BEDROOM & PLAY ROOM FOR 2 OR 3 KIDS. IN THIS CASE, IT IS SHARED BY TWO KIDS -- ONE "FULL-TIME" & ONE "PART-TIME" -- BOTH OLD ENOUGH TO APPRECIATE A LITTLE DISTANCE FROM THEIR RESPECTIVE PARENTS.

The front suite is shared by two adults -- one a parent with shared custody, the other single.

IN THIS 2ND FLOOR CLUSTER: A COUPLE WITH A SMALL CHILD.
While the needs of single parent families are many and varied, they are not entirely distinguishable from those of 'normal' families. The translation of everyday problems into the narrower constraints of the single-parent situation requires some examination. I will confine myself here to those that, as I see it, pertain to the housing issue. Access to childcare is of primary importance. So, too, is the problem of work: the location of the workplace, hours and wages. Efficiency within the home -- the potential for getting housework done with a minimum of fuss and bother -- is important, in that a parent should be able to emphasize 'quality time' with her children, rather than having all her (and their) waking hours occupied with chores. There should be time left in the day for the undistracted pursuit of such activities as play, storytelling, and so on. Communality, or neighborliness, or cooperation are all ways of expressing the notion of having someone there to share whatever burdens or duties that come along: and single parents often have fewer resources for self-reliance. Along with this need for neighborly resources goes the need for a sense of belonging. Having a home and community can do a lot towards...
validating the single-parent family as a real family, rather than some sort of societal cripple. And of course feeling safe and secure and part of a neighborhood is important to children -- particularly those without the full quota of role models. Flexibility in the arrangement of the home is an issue that should be addressed. The way in which various rooms are used is inextricably tied up with how the dwelling is inhabited, and by whom. The ability to redefine this would be conducive to accommodating a shifting population, without creating a patched up or temporary ambiance.

Now, these concerns are not unique to the single-parent family, but building a case for an ideal housing type for this heretofore neglected family type cannot but have a beneficial 'trickle-down' effect on other family housing.

The foregoing discussion of the family has cited historical models, most notably the extended family and the home workplace, be it farm or sweatshop. This is not mere nostalgia. While it may be true that these models were justifiably shunted aside by the march of progress -- that they were obstacles to bonafide improvements in the quality of life in this country -- we may have a situation of the baby being thrown out with the bathwater. The 'ideal' American family has been redefined over the course of our history. We have come a long way from the egalitarian communal vision of our founding fathers. This reevaluation has been prompted by factors too diverse to delve into here --
suffice it to say that among these reasons, the salutary effects of suburb-building on the national economy and on the stability of the workforce were not insignificant. For the greater part of this century, it has been considered right and proper for kids to be raised in the healthful atmosphere of the suburbs, while dad commutes to work. Now, with commuting becoming ever more expensive and time consuming, we begin to hear it said that the job of the future will be located in the home and conducted with the aid of computers. The ideology of the Family has not yet caught up with this futurism: it still supposes the nuclear family, without taking into account the havoc that a two-year-old can wreak on a home xerox machine. One might argue that the home office is more appropriate to the married individual who does not rely on office contacts for dates, who would, rather, welcome the additional time to spend with his family. But there remain the issues of separation of activities, of isolation, or of the need for privacy. The present-day adult is so accustomed to having his or her 'own space' that the very idea of not being able to get away from it all (either the from the job or from household chores) would be appalling to many. The notion of moving the workplace back into the home does, however, have some points to recommend it. The savings in both time and money that would be effected are not inconsiderable. Then, too, the separation of work and living have been blamed for the sense of alienation so
Of course, working at home is not a solution that is applicable to all people or to all jobs. But to an ever increasing degree, people are seeking new job definitions, new services that can be marketed. A number of occupations traditionally associated with the home are natural candidates: in-home childcare, tailoring, catering, crafts and so on. A growing segment of the nation's retail sales are being conducted through various network marketing schemes, most of which are immanently well suited to the work-at-home entrepreneur. Also, nowadays, most clerical tasks can be transported to the home office, since so many of them are now accomplished with computers. A growing number of single parents are career women who have decided to have a child alone rather than take a chance on 'missing the boat'. While most careers involve a certain amount of meeting and networking and so on, there is a considerable portion of the work that can be accomplished from home base.

My sense of all this is that the ideal solution would be to develop a close community situation, one in which those parents who go off to work will have the resources -- both formal and informal -- to enable them to leave their children in good hands; and in which parents who stay at home to work can have both the fulfillment of rearing their children and the resources to have them supervised while some work is accomplished.
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