

Domestic Space Organisation

Two Contemporary Space-codes Compared

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Abstract

Design guidelines for housing today tend to stress a purely functional view of internal space organisation and the need for a hierarchy of space between the dwelling and the street. However, it is possible to observe, in some residential streets of London two common forms of "non-architectural" domestic space organisation, *neither* of which seems internally purely functional nor externally hierarchical, in spite of the fact that the two seem not alike superficially. This paper analyses reports and observations of these two "codes" of domestic space organisation, and argues that they are based on socio-spatial principles which are, in some sense, the inverse of each other, each being a function of the culture of a different socio-economic group. More awareness of these strong socio-cultural factors in domestic space would seem to be required if guidance is not to lead to insensitive standardised design.

Résumé

Aujourd'hui, dans la planification des logements, on tend à souligner tout d'abord une vue purement fonctionnelle de l'organisation de l'espace intérieur, et ensuite le besoin d'une hiérarchie d'espaces entre l'appartement et la rue. Toutefois, on observe facilement dans certaines rues résidentielles de Londres deux formes communes d'organisation "non-architecturale" de l'espace domestique dont ni l'une ni l'autre ne semblent purement fonctionnelles à l'intérieur, ni hiérarchisées à l'extérieur, malgré le fait que les deux semblent superficiellement très différentes entre elles. Cet article analyse des données sur ces deux "codes" d'organisation de l'espace domestique; il est montré qu'ils sont fondés sur des principes socio-spatiaux qui sont dans un certain sens l'inverse l'un de l'autre, chacun étant fonction de la culture d'un groupe socio-économique spécifique. Une plus grande conscience de ces facteurs culturels semble importante si l'on veut éviter une planification standardisée sans sensibilité.

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1. Community and privacy as a paradigm for design

Current housing design guides (department of Housing and Local Government, 1974) have a tendency to stress the basic requirement for a clearly expressed hierarchy of spatial domains, ranging from public circulation spaces at one end of the spectrum, to the private interior of the dwelling at the other. This trend is supported by more formal proposals (Chermayeff and Alexander 1963; Alexander, 1978; Newman, 1972) for reconciling the imperative for individual privacy to the necessity for community life, within the context of the design of residential areas. Anyone who studies these publications might be forgiven for inferring that it is possible to isolate some set of shared conceptions about the way in which people should live: some objective principles which constitute a "right way" of designing.

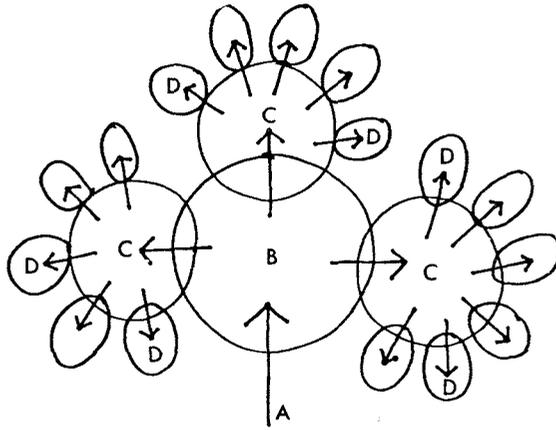


Fig. 1 Defensible space hierarchy: A, public realm of the street; B, semi-public realm; C, semi-private realm; D, private realm of the dwelling (after Newman, 1972).

Whether these principles are set out in the form of standard plans, or in more abstract checklists, this scheme of ideas is undoubtedly attractive both in its simplicity and its completeness. It seems to offer the architect clear and unambiguous solutions to the challenge of housing design. Its only serious disadvantage is that it completely fails to account for the findings of ethnographic studies of domestic space organisation, which suggest that space features in our society in surprising, and often unexpected, ways *as a means of social and cultural identification*. It is clear that there are broad principles underlying the set of manifest spatial behaviours, the origins of which are not to be sought in basic human needs, but rather in the ways in which space encodes and transmits social meaning.

This paper seeks to lay bare the principles underlying two polar types of 'space-code' which are found together in parts of Fulham, Camden Town or Islington, all areas of Inner London, where the nine-



Fig. 2 A residential street in Islington where "traditional" working-class families live. When the houses are occupied by "new" middle-class families, both the exterior and the interior of the houses are transformed.

teenth century street pattern of terraced houses has remained basically untouched (Fig. 2). The account is based on empirical observation, but draws upon novels, historical and sociological studies, research reports, design guidance, and architectural publications to fill out the detail.

Neither code is significantly hierarchical. Indeed, both may be described as *street-cultures*, in the sense that both appear to depend, in different ways, on a direct relation to the street. These polar cases, existing in our own culture, are sufficient to suggest that architects should be wary of espousing any 'natural' philosophy of basic human needs, or shared norms and values. On the contrary, it is common to find that a spatial resolution is given to fundamental differences of interest between sub-cultures and social classes.

2. The raw material

Both space-codes use, as raw material, the same standard London house. The period at which the house was first built is immaterial, varying from early Georgian to late Edwardian, since apart from decorative features, all conform to the same basic plan. Both cultures are associated with a small, narrow-frontage terraced house. Typically, such a house is

three to four storeys high, with two living rooms on each floor. There may be a basement, with steps leading down to a separate entrance in a small, railed light-well, or the house may lead directly onto the street. Both are normally entered through an entrance hall, and have a yard or small garden at the back, which may give onto a back alley running behind the terrace.

“The smallest types of houses have no basement and are only two storeys high. Small houses from about 1820 (...) had sometimes even four storeys, including the basement, and on each floor there were only two rooms. When later during the Victorian era a lavatory was required, and also an easier access to the kitchen, than up and down stairs, a new type of house was created where a still narrower side-building projecting into the courtyard was added, so that each of the two storeys now consisted of three rooms

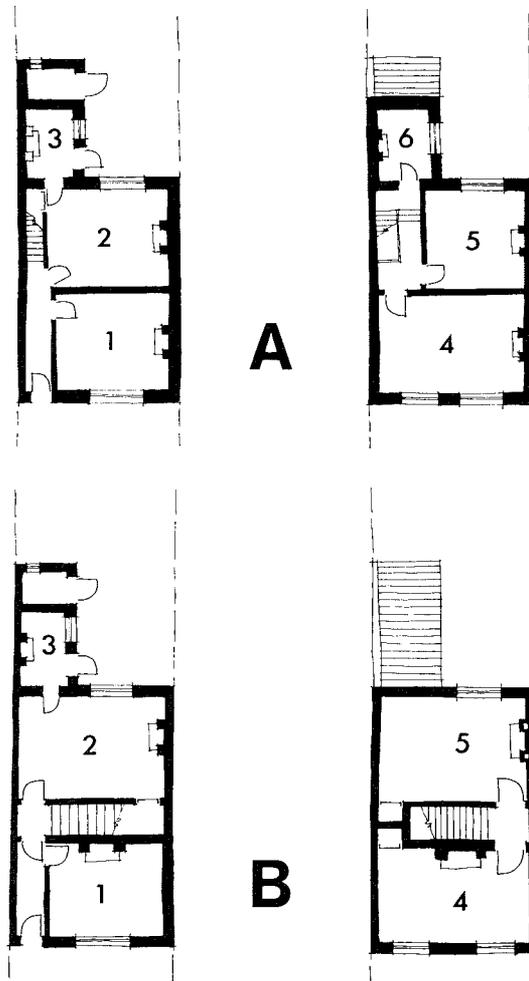


Fig. 3 Typical examples of “traditional” working class terraced housing. Type A has staircase on party wall, Type B has central staircase. Ground floor: 1, parlour; 2, living room; 3, scullery. First floor: 4, main bedroom; 5, second bedroom; 6, box room.

and “a half”. From railroads intersecting the suburbs of London we see interminable rows of these swarthy little houses, with all their protruding little kitchen wings. It is the most compact type imaginable for a street house”.

(Rasmussen, 1934, 220)

A description of an untransformed example is found in *Family and Kinship in East London* :

“Mr. and Mrs. Barton and their two young children live at present in a four-roomed house in Minton Street in the middle of the borough. The other houses (but not the two pubs, obviously newer) were all built in the 1870’s of brick which has become a uniform, smoke-eaten grey. They are nearly all alike in plan; on the first floor two bedrooms, and on the ground floor a living room, a kitchen, and a small scullery opening onto a yard which has a lavatory at the end of it and a patch of earth down one side. Many of the yards are packed with clothes hanging on the line, prams, sheds, boxes of geraniums and pansies, hutches for rabbits and guinea-pigs, lofts for pigeons, and pens for fowl. The only difference between the houses is the colour of the curtains and the door steps which the wives redden or whiten when they wash down the pavement in front of their doors in the morning”.

(Willmott and Young, 1957, 37-38)

This house, as are many of the untransformed examples, is inhabited by a “traditional” working-class family; perhaps the family of a skilled or better paid artisan, and indeed precisely the sort of people for whom the houses were first built, by small speculative builders throughout the nineteenth century. Many of these aggregations of working class dwellings were originally occupied by porters, market workers, building tradesmen, dock hands, tailors, jewellers and the casually employed. At that time the majority were first generation town dwellers, migrant rural workers. Nonetheless, it is clear from contemporary reports that the sort of lifestyle described over a century later by Willmott and Young quickly established itself amongst a certain section of the working class (the “respectable poor” rather than the “degenerate classes” — a distinction still reflected in today’s social studies) for whom this sort of house afforded “the desired separation between washing in the scullery, eating and living in the kitchen (often referred to as the living room or sitting room), and display in the parlour” (Burnett, 1978, 158).

However, this sort of house is not only occupied by members of the “traditional” working classes. Nowadays, when a house of this sort is sold, it is frequently purchased by a member of the “new” middle class, who deals in the symbolic and representational aspects of culture.

“their professions are vaguely, entrepreneurially ‘cultural’; academics, journalists of a literary turn, television directors and producers, actors, copywriters, publishers’ agents, with a few lawyers, accountants and business executives. For them the purchase of a house has become an act of conscience; and they have left the old strongholds of their class behind (believing that their education and judiciously left politics have declasssed them anyway) and searched out ‘unspoiled’ areas in the city where they can live conspicuously cheek-by-jowl with the polyglot poor”

(Raban, 1974, 85)

In the two polar types of domestic space-code, which form the subject of this paper, the variable of built-form is held steady, and its organisation by a “traditional” working class family, on the one hand,

and by a member of the “new” middle classes, on the other, are contrasted. It is clear, however, that these codes do not exhaust the possibilities for the spatial embodiment of sub-cultural and class identities.

3. Domestic Space Transformed

Once the member of the “new” middle classes – Raban terms him a “frontiersman” – moves into his newly-acquired terraced house, he begins to make alterations to the place. He will undoubtedly paint both the exterior and the interior of the house, and make technical improvements, inserting a damp-proof course, rewiring, replumbing and replacing cracked panes of glass and broken sashcords, and perhaps insulating the roofspace. These alterations are, however, insignificant compared with the “improvements” in internal organisation which are also made, for...

“decoration is the least important part of the style, and it is done with caution and embarrassment. Its dominant features are bare rectangles and circles, natural materials, a colour scheme in white paint and unstained wood surfaces, a lust for light and air and a horror of fuss, embellishment and chi-chi. A house converted on these principles has an atmosphere of passionate neutrality”.

(Raban, 1974, 85)

So much so, that it is likely that within the space of a few months even if it were dark so that a passer-by could not see the new paintwork, it would be possible to walk down the street and state, without doubt, which house had been moved into by the representative of the ‘new’ middle classes.

The most obvious improvement to the internal organisation of the house is that well-known phenomenon “knocking-through”.

“Destruction is its whole point. The first stage of conversion is ‘knocking-through’; tearing down internal walls so that each room is turned into an extended patio, hardly a room at all, except as it is protected (by double-glazed picture windows) from the weather. Out come staircases and balustrades; in go feathery key-hole steps in wrought iron”.

(Raban, 1974, 87)

Conran offers a list of the possible ways of combining rooms within the scope of the new regime; hall and living room and dining room, kitchen and dining room, lavatory and bathroom or utility room, living room and “morning room”, kitchen and scullery (Conran, 1976, 50). Whatever their proposed uses, it is inevitable that the result will eliminate the wall between the two ground-floor rooms, and also possibly between the two rooms in the basement. This may entail major structural alterations, or alternatively, the pair of doors separating the two rooms will be removed, and put in a shed at the bottom of the garden.

It is also likely that the wall between the hall and one of the major living rooms on the ground floor will be removed. This will have the effect of bringing the stairs into the living room. At the same time a new flight of external wrought iron stairs may be added, to link the ground floor rooms to the back-garden. Here the pigeon coops and old sheds are

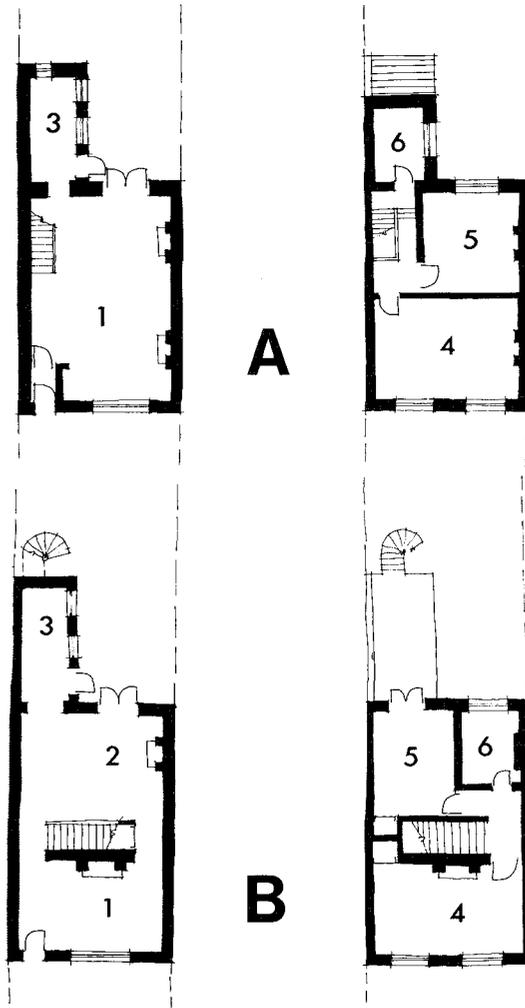


Fig. 4 Actual conversions of types A and B by 'new' middle class owners. Ground floor: 1, 1/2, living-dining room with staircase incorporated into room and garden entrance; 3, kitchen. First floor: 4, main bedroom; 5, second bedroom, type B has roof terrace and stairs to garden; 6, bathroom.

cleared away, and the garden is commonly reorganised as a series of outdoor rooms an extension of the children's playroom, the kitchen or the indoor living rooms.

A new kitchen will almost certainly form a part of the improvement scheme, possibility in a place where eating did not occur before. The old back scullery, where the chores were formerly done, will be pulled down, or converted into an utility area, and the new kitchen may be moved into the basement front room, or onto the ground floor living area, where it can be seen from the street outside. This is not all that will happen. Part of the kitchen improvement scheme will entail removing cupboards, and

removing existing fittings, which are replaced by shelves full of glass jars with bright labels.

Concurrent with these transformations in the physical appearance of the house are new forms of behaviour, affecting the relationship of the house to the street, the degree of control over the door, the placing of objects within the interior, the relationship of specific activities to rooms, and eating behaviour; all of which casts doubt on the conceptual separation which is normally made between people and buildings: in this case they seem to be aspects of the same phenomenon.

3.1. *The relation of the house to the street*

In a "traditional" working-class house the interior of the house is usually concealed from the street by net curtains, which remain closed even at mid-day. The interior is often further screened from the outside by symbolic objects, a specimen plant or a prized piece of china. This trait clearly predates modern net curtains (Fig. 5). It is described, by Victorian observers, as typical of "respectable" or "superior" homes, that the parlour window facing onto the street was covered by a lace or muslin blind. Even in some of the poorest hovels, the window was covered with a calico blind (Rubenstein, 1974, 118).

On his arrival, the member of the "new" middle classes will take down the net curtains at the windows of the house and replace them by shutters or blinds. These will only be shut late at night. Instead, the interior of the room will be arranged so that a casual passer-by can look into the room, to see what a wonderful place it is (Fig. 6):

"Waiting for a taxi on the pavement one night, I saw a bow-windowed room full of humming birds. Lit from low down, they hovered brilliantly among the potted ferns and rubber plants, and I heard a Monteverdi record on the gramophone inside. In another house nearby, I saw a whole room converted into an aluminium cage for a monkey (and this in an area where human beings claw for a few square feet, enough to unroll a sleeping-bag in). The monkey's only companion was a huge stuffed ape in a glass case outside its cage".

(Raban, 1974, 109)

Walking down the street is like visiting an exhibition of interiors, each wonderfully different from the others. Lights are left on for effect even when the room is not in use. Spotlights highlight the arrays of objects, gleaming white paintwork and walls, pine furniture and glass and paper accessories, rockinghorses, harps and antique spinning wheels and the bookshelves lined with impressive displays of books. Even the people inside become a part of the display. Instead of being *concealed*, the interior of the house is *manifested* bodily to the street. From the point of view of visual contact with the street, the old code is entirely reversed.

3.2. *Control of the entrance*

At the same time as this change occurs, the "new" middle class occupants will polish the door furniture which will probably be of brass

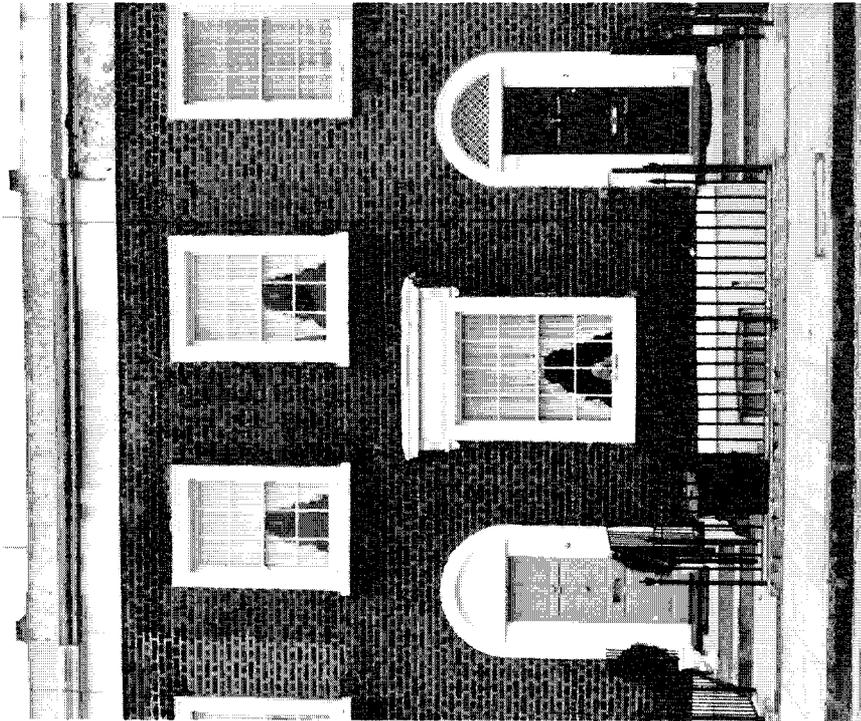


Fig. 5 Street elevation of an "untransformed" house with its elaborately draped net curtains.



Fig. 6 Street elevation of a "transformed" house with an access to the front door displaying the interior of the house.

or bronze. If it is painted over, or wood-grained, as it often was in the old culture, many hours will be spent scraping off the old paints. Burglar alarms may be installed, knockers and bells added, and the number of the house proclaimed on a crisp French enamelled plate (Fig. 7). Everyone enters the house formally by the main door, indeed, the back entrance may well be blocked off, and the plot at the bottom of the garden sold as a site for a 'mews house', in order to finance the transformation.



Fig. 7 Main entrance to a "transformed" house, showing the new "stable-door" and brass number plate. Entry is directly into the new "manifested" kitchen.

In the untransformed order, however, control over the door, especially the back door, is light. Members of the family and close neighbours, especially women, "pop round the back". The front door is frequently left slightly ajar, closed but on the latch, or even wide open, especially in the mornings. A key may even be attached by a string to the inside of the letter box so that relatives are able to let themselves into the house if the family is out. Clearly, the concept of the closed door does not fit into the "traditional" working class culture in quite the same way as in the transformed order, for

"on the warm summer evening of the interview, children were playing hop-scotch or 'he' in the roadway, while their parents, when not watching the television, were at their open window. Some of the older people were sitting in upright chairs on the pavement, just in front of their doors, or in the passages leading through to the sculleries, chatting with each other and watching the children at play".

(Willmott and Young, 1957, 38)

This easygoing and informal relation between the door and the street is not found in the transformed house where, on the whole, the new door furniture sits firmly upon a well-closed door. Once again, the relation of the inside to the outside is reversed; this time not for visual contact, but for real physical contact.

It is clear from these observations that the relationships of the house to the street, and the degree of control over the entrance are direct in both cases. Both codes are predicated upon this relation. However, the relation is made in different ways (see also figs. 8, 9).

It is a puzzle to see how an alleged "basic need" for privacy would feature in this scheme of ideas. Is it to do with seeing into the interior of the dwelling, or controlling access to that interior? There are clearly cultural differences but these are not arbitrary. On the contrary, one set of spatial behaviours appears to be a curious inversion of the other. Some sort of order is present, but it has nothing to do with a clearly expressed hierarchy of spatial domains controlled by 'barriers and locks' (Chermayeff and Alexander, 1963, 167).

3.3. The placing of objects within the interior

Inside the transformed house of the "new" middle class family, it is usual to find that a great deal of the apparatus of day to day living is manifested in the space.

"Flora's living room is long and dark with a white Indian rug and a few scattered furnishings. In her white blouse and black skirt, she goes around, switching on table lamps and spotlights. The lights reveal the straight lines of plain modern furniture, and the texture of unpatterned fabric. Flora's room is a room of shapes and colours, rather than of things, though there are a few things that, carefully chosen, do stand out: a blue Aalto chair by the bookcase, a Hockney print on the wall, an Epstein bust on the teak coffee table. The gallery kitchen is a construct in oiled wood at the end of the room, and looks straight out into it".

(Bradbury, 1975, 183-184)

This is in contrast to the untransformed working-class code, where (with one notable exception which will be referred to later) things are normally put away in cupboards, sideboards or drawers.

Collections of objects frequently, although not invariably do feature largely in the "new" middle class scheme of things. Books, pictures, bottles and boxes, plants, kitchen equipment and toys are the standard raw material of such object arrays. Curiously, however, collections often consist of objects which are not, in themselves valuable, either in monetary or sentimental terms, or even useful — "toast racks, the white china sort, keys from long-forgotten doors, wood blocks that were used in Edwardian printing works, all good on their own, but infinitely better in an organised mass" (Conran, 1976, 334). The order within the array tends to be subtle, rather than obvious, in some instances, designed to make a purely intellectual point — a visual pun — "a real birdcage closely associated with a picture of another makes a telling unit on the wall" (Conran, 1976, 338).

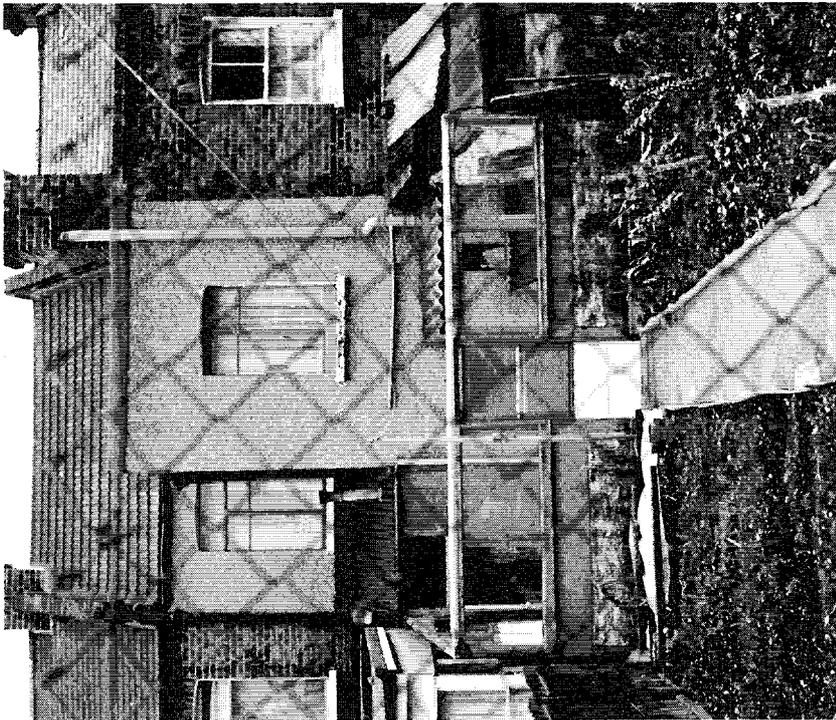


Fig. 8 Rear elevation of an "untransformed" house with its outbuildings and vegetable plot.



Fig. 9 Rear elevation of a "transformed" house. Two additional wall openings have been made from rooms into a terrace where there is a table for eating outdoors.

Collections of this type are not to be kept, but to be rearranged or thrown away, as Bernstein observes,

“The Hampstead room is likely to contain a small array which would indicate strong classification (strong rules of exclusion) but the objects are likely to enter into a variety of relationships with each other; this would indicate weak framing. Furthermore it is possible that the array would be changed across time according to fashion”.

(Bernstein, 1975, 141)

Nonetheless, there is order in the most apparently motley of arrays – the principles on which the collection is based are capable of being violated. Generally speaking, collections in working class interiors, where they do exist, are more directly related to everyday life – photographs of the family, mementoes of holidays, prizes – and remain stable in composition over relatively long periods of time.

3.4. *The relationship of specific activities to rooms*

Where collections of objects are displayed in the interior of a working-class house, it is more than likely that they will be associated with a specific room – the front parlour. This is, perhaps, an indication of an even more fundamental difference between the two space codes than those already mentioned, indeed, one which was used by Victorian writers to *define* the “respectable artisan” as opposed to the “degenerate idler”. (Rubenstein, 1974, 115).

Many of these older houses are used for multiple occupancy. Quite often a daughter and her husband live for a period of time after their marriage, with the older parents:

“Their houses hardly ever contain more than two or three bedrooms, and are sometimes so small that, as one woman put it, ‘when one breathes out the other has to breathe in’. The parents clearly have not got room, in houses of this kind, for four married children as well as for their husbands and wives. One married child is, as a rule, the most they can accommodate”.

(Willmott and Young, 1957, 33)

Frequently, the working-class families live in severely overcrowded conditions, but are likely to be replaced by one middle class family, with fewer children. About the same amount of space is used in the transformed house, to accommodate fewer people. Nonetheless, in the untransformed home there is likely to be one special room, the front room on the ground floor facing the street, which does not form part of the everyday living accommodation. Although the parents “have not got room” for married children, they still reserve a separate space for all the symbolic equipment of the household. Here is kept the best furniture, piano, family photographs, plaster ducks and company clock. This room is hardly ever used. It is only opened on formal and ceremonial occasions, to entertain the vicar or to lay out the dead. In other words, the parlour is *categorically important*, almost amounting to a sacred space for formal and ceremonial occasions, which contrasts sharply with the more profane use of the remainder of the accommodation, which is the domain of family and

close friends – if “kith” are met in the street, and “kin” are found in the living room, then “strangers and outsiders” are received into the parlour.

Of all the spaces in the Victorian working class home, the parlour is, perhaps, that for which the most historical material is available, simply because the ethnographer was shown into the best room, and rarely gained access to the remainder of the accommodation. The sort of possessions which Willmott and Young noted a century later in Bethnal Green feature largely in these early accounts; the walls occasionally were papered, there was a carpet, linoleum, or at least a hearthrug on the floor, the mantleshelf over the black-leaded grate was adorned with brass ornaments, tumblers, glasses, commemorative plates, the best tea service or a looking-glass, and there were engravings, lithographs, prints or samples of needlework on the walls. The furniture was solid, if old fashioned, “indicative of taste, elegance and commendable self-respect”. In other words, it was a “state room ... used only occasionally for entertaining or ritual purposes ... not the focus of family life, but the ideal, which proclaimed to the world through its lace curtained window and revealed objects, (then, as now, a plant in a china pot), the cult of respectability” (Burnett, 1978, 77). In the latter half of the nineteenth century, seven out of ten dwellings possessed such a space.

Members of the new middle class do not have a “state” room. In fact, no space is supposed to be particularly significant in their scheme of things. The house is, in some sense, homogenised and neutralised :

“After a while, Howard leaves the kitchen and begins to go around the house. He is a solemn party-giver, the creator of a serious social theatre. Now he goes about, putting out ashtrays and dishes, cushions and chairs. He moves furniture, to produce good conversation areas, open significant action spaces, create barriers of privacy... Now he goes upstairs. to pull beds against the walls, adjust lights, shade shades, pull blinds, open doors. It is an important rule to have as little forbidden ground as possible, to make the house itself a total stage. And so he designs it, retaining only a few tiny areas of sanctity; he blocks with chairs the short corridor that leads to the children’s room, and the steps that lead down to their basement study. Everywhere else the code is one of possibility, not denial. Chairs and cushions and beds suggest multiple forms of companionship. Thresholds are abolished; room leads into room... the aim is to let the party happen rather than to make it happen, so that what takes place occurs apparently without any hostile intervention, or rather with the intervention of that higher sociological host who governs the transactions of human encounter”.

(Bradbury, 1975, 71)

One of the basic assumptions of the decategorising of space in the ‘new’ middle-class house is that activities are unlinked from spaces, or even positions in the house – “if there’s a better view from the upstairs window, why not live up there and enjoy it, and sleep downstairs?”. (Conran, 1976, 44). Bedrooms double as a study, den, workshop or play-room, to be used during the day, and not just at night, for sleeping. The garden is treated in the transformed house, as part of the homogenised space, an outdoor version of the flexible living-space, to be taken advantage of in good weather.

In the working-class household, space is more carefully mapped onto the social events which can take place there. Bedrooms are upstairs,

and used only at night or in cases of dire illness; everyday living is limited to the back, downstairs room – children battle against the noise of the television to do the homework – whilst the parlour is used only on social occasions and perhaps on Sunday. The relative position of rooms is an important variable in the “traditional” working-class code.

Along with the strong imposition of categories and relationships in a working-class house, there is strong insulation of rooms from each other. Doors are kept shut most of the time, particularly the parlour door, cupboards and the staircase frequently isolate the parlour even more firmly from the back room. It is not even possible to see into the interior of the front room from the street. Those objects which are most highly prized are precisely those which are least seen. (Yet it would be quite possible to manifest the interior of the parlour to the street). On the other hand, the “new” middle-class do not manifest special objects, but rather their everyday lifestyle is put on display. It is possible to look into the house and see them eating breakfast, playing with the children, or watching television.

In the “traditional” working-class example there appears to be a great deal of order in space: order which is, nonetheless, hidden away. In the case of the “new” middle-class house, there is very little order present, but this lack of order is put on view. It is indeed paradoxical that one subculture should show off their untidy lives, whilst the other should precisely reproduce the same spatial and social relationships, but at the same time hide their conformity from others.

3.5 *Eating behaviour*

Members of the “traditional” working-class rarely invite people, kin excepted, into their houses. Willmott and Young stress that their study of social encounters refers mainly to what happens outside the home.

“Most people meet their acquaintances in the street, at the market, at the pub, or at work. They do not usually invite them into their own houses... This attitude of exclusiveness in the home runs alongside an attitude of friendliness to people living in the same street”.

(Willmott and Young, 1957, 108)

More specifically, people do not visit each other at mealtimes. This is a family occasion – “people live together and eat together – they are considered part of the same household” (Willmott and Young, 1957, 47).

However, for members of a “traditional” working-class household, the term “family” takes on a different significance to the more usual meaning of “nuclear family”. A person’s family, especially if that person is a woman, will include female relatives living in the nearby streets, and a few close women friends who are treated as kin. During the day women visit each other’s houses, and take a cup of tea and maybe eat lunch together – the households are temporarily “merged”. Children eat with female relatives in the same way, sometimes returning home only to sleep.

Non-kin are excluded from this easy going informality. Entertainment especially by men is done outside the home, at the local pub.

In the “new” middle-class house, eating takes on a different significance. It is the one occasion when friends are invited into the house. People are asked to dinner, and at such an occasion it is considered important to put on a show. Entertaining and party-giving are one of the primary means of social integration. In the transformed house space or spaces are assigned to eating areas – whether room is found in the kitchen, in a living room or work area, at a “bar” or on the floor, in a formal dining room, indoors or in the garden or in any combination of these possibilities, is largely an individual choice, but the new middle-class code invariably includes at least one “relaxed place where good food and conversation can be enjoyed by guests and host alike” (Conran, 1976, 213). Part of the ritual of the meal may involve moving from space to space as the evening progresses.

4. “Potential” and “effective” environments

People make these houses their own in systematically different ways – they convert the “potential” environment into an “effective” environment, or habitat, (Gans, 1968, 4-11). All these kinds of individual behaviour are not the product of universal organising principles – they cannot be, because there appear to be fundamentally different ways of organising the same basic house, and rules for transforming one set of spatial behaviour into the other. So far these organising principles have been described in terms of the properties of the evidence. It is possible to order this evidence, at a rather more abstract level – halfway between pure description and fully abstract thought – to show the dimensions underlying the two sets of manifested behaviours. Whilst this diagrammatic way of presenting the evidence is rudimentary, it is perhaps, a more convenient way of thinking about the properties of space than that offered by the appeal to basic needs. The diagrams below are made for the two sub-cultural groups, the “new” middle-class (NMC) and the “traditional” working-class (TWC), out of three pairs of variables;

- (i) visibility/permeability,
- (ii) insulation/sequencing,
- (iii) categoric differentiation/relative position,

and of two relations – within the interior, and from the interior to the exterior.

4.1. *Visibility – permeability*

Visibility refers to whether or not the interior of the dwelling can be seen from the street. A plus score means that it is possible to see into the interior, and a minus score that the interior is concealed. This variable is set against *permeability*, which refers to the amount of control exer-

cised over the way in which it is possible to move from one space to another. If doors are locked, then permeability is minus. For *interior* relation, the “new” middle-class code scores plus on both permeability and visibility. Rooms are combined by “knocking-through” so that the interior becomes a continuum of space in which it is possible to observe everything that is going on. It is possible to “flow” freely from one space to the next, since spaces are knit together into sets, often between floors. For the *interior-exterior* relation, the “new” middle-class code scores plus on visibility, the interior is boldly manifested to the street, but minus on permeability, it is necessary to pass through an elaborate door which is kept locked. Conversely, for the *interior* relation, the “traditional” working-class code scores minus on both visibility and permeability; both are strongly controlled. The interior is made up of separate rooms, the doors of which are kept closed, and in order to pass from one space to another, it is necessary to go out of one room, into a transition space, the hallway, and then into the adjacent room. Rooms are knit together not by *spaces* but by *passages*. However, for the *interior-exterior* relation, the “traditional” working-class code scores plus on permeability; the door is left on the latch or ajar, but minus on visibility; net curtains shield the interior from the street.

	INTERIOR	INTERIOR/ EXTERIOR
+	NMC	TWC
PERMEABILITY	INTERIOR/ EXTERIOR	INTERIOR
-	NMC	TWC
	+	-
	VISIBILITY	

Fig. 10 Visibility-permeability. Note how interior organisation crosses from top left (NMC) to bottom right (TWC) as interior-exterior relation crosses from bottom left (NMC) to top right (TWC).

4.2. Insulation – sequencing

The second pair of variables sets insulation against sequencing. By *insulation* is meant the degree of discontinuity, that is, the strength of the boundary between rooms. Where insulation is plus, rooms may be separated by a partition, or perhaps face each other across an intervening space. Where insulation is minus, spaces are adjacent, perhaps without any intervening barriers. *Sequencing* refers to the way in which spaces are connected together into chains frequently into rings, but also into

dead ends, so that it is not possible to go out at the far end, and the only course of action is to retrace the route back to its starting point. Where sequencing is plus, it is always necessary to go through one space to reach another, and minus sequencing means that spaces are all one cell deep from a central circulation space.

For the “new” middle-class, both insulation and sequencing are high for the *interior-exterior relation*. The house is frequently insulated from the street by a well at the front, set about with railings, and connected only by a narrow path and a flight of front steps – the change in level increases insulation. (Paradoxically, strong insulation is still accompanied by strong visibility). Sequencing is likewise plus. It is necessary to go through a series of barriers, and transition spaces, to pass from the exterior of the house to the interior – there is no “popping round the back” in this code.

For the *interior* relation, the “new” middle-class code is minus on insulation, no barriers at all, but plus on *sequencing*. When the partition between the two major living spaces is taken out, it is normal to lock one of the doors, and turn the pair of linked spaces into a unipermeable sequence. Frequently spaces are connected together into deep rings made within and between floors. But these are not *trivial* rings. Many key spaces participate in several rings each of which leads round a large sequence of spaces before returning to the point of origin.

In the “traditional” working-class example, however, the *interior relation* is minus on sequencing, the spaces are not knit together into deep internal rings or dead ends, but plus on insulation. Walls, boundaries, halls and passages are preserved, and the doors leading off them are kept closed. On the *interior-exterior relation*, the “traditional” working-class code is minus on insulation and sequencing. The front door normally opens directly onto the street without intervening spaces; where these occur, the wall at the front may be broken down. Likewise, the back door opens directly into a (sometimes shared) yard.

4.3. *Categoric differentiation – relative position*

The final pair of variables deal with categoric differentiation and relative position, aspects of spatial organisation which are not so much *morphological* – to do with the internal logic of the physical arrangement – as “*microcosm effects*” – to do with the way in which spaces acquire particular social identities. *Categoric differentiation* refers to the extent to which particular functions are assigned to specific spaces; plus means spaces are associated with particular activities, minus means that space is homogenised and seen as a neutral container for any and every activity. *Relative position* deals with the way in which spaces are related to each other and to the outside world. A plus score means that great emphasis is placed upon aspect and orientation of the dwelling and the way in which rooms fit together within the dwelling, whilst a minus

SEQUENCING	+	INTERIOR/ EXTERIOR NMC	INTERIOR NMC
	-	INTERIOR TWC	INTERIOR/ EXTERIOR TWC
		+	-
		INSULATION	

Fig. 11 Insulation – sequencing. Note how interior-exterior relation crosses from top left (NMC) to bottom right (TWC) as interior organisation crosses from bottom left (TWC) to top right (NMC).

score meant that no specific relations are required to hold within room arrangements.

For the “traditional” working-class code, categoric differentiation and relative positions are both plus in the *interior* of the dwelling. The positions up/down, front/back are important, and linked to the categories night/day sacred/profane, respectively. There is a tendency for interiors to resemble each other closely, with little individual deviation. The order which exists in any particular house in *exogenous*, imposed from outside, by tradition of custom and useage rather than arising out of the preferences of the particular occupants.

Conversely, both variables are of low importance in the “new” middle-class *interior*. All spaces are homogenised, and position is relatively unimportant. The result of this lowered intensity of space categories is to turn the inside living area into an individual expression of preferences in life-style – the order is *endogenous*, and arises from what particular occupants do. On the *interior/exterior relation* however, the “new” middle-class code is plus on relative position and minus on categoric differentiation. Whilst the space outside is not used formally, but appropriated in the same way as the indoor living spaces, relative position in the form of aspect and orientation are seen to be of importance. The house is oriented to the street, on the one hand, and the garden, on the other (an east-west position is preferable), and the “ideal” house has a panoramic view over some section of its neighbourhood. In the “new” middle-class code, “place” is all important. Conversely, relative position is minus in the case of the *interior-exterior relation* in “traditional” working-class culture. (It is important for internal relations only). What goes on outside the dwelling is all profane everyday activity. It is of no significance whether the car is repaired in the street in front of the house, or in the back yard. ‘Prospect’ and ‘area’ are not important. What is valued is the maintenance of close kinship and friendship ties and it is these considerations which feature

	INTERIOR	INTERIOR/ EXTERIOR
+	TWC	NMC
	INTERIOR/ EXTERIOR	INTERIOR
-	TWC	NMC
	+	-
	CATEGORIC DIFFERENTIATION	

Fig. 12 Categorical differentiation-relative position. Note how interior organisation crosses from top left (TWC) to bottom right (NMC) as interior exterior relation crosses from bottom left (TWC) to top right (NMC).

largely in choosing a house. Nevertheless, categorical differentiation is plus with respect to the relation of the house to the street – the interior is reserved for private family activity, and the street for public social encounter.

4.4. Collection and integration codes

The two codes appear to operate by means of symmetries and inversions on some basic field of possibilities. However, they are not *equivalent* ways of ordering space, since they appear to fit into the underlying model in different ways. In the “traditional” working-class code, spaces are *collected* together, but each participant in the collection retains a strong identity, which is clearly distinguished from all others. The order which exists in the collection is exogenous – the “traditional” working-class code appears to be a form of *collection code* (Bernstein, 1973, 233). In the “new” middle-class example, spaces are not simply collected together, but are subordinated to a new *relational* idea, “style”, which depends largely on an individual’s conception of what the good spatial life should be. There is no “right way” of doing things – “the one most important thing about your house is that it should be yours, and not a kit picked put lock, stock and barrel from a book, magazine or designer” (Conran, 1976, 9). In this sense, the code is analogous to what Bernstein calls an *integrated code* (Bernstein, 1973, 235). If Bernstein is correct in his view that collection codes tend to transmit the existing social order, whilst integrated codes *transform* existing knowledge into new knowledge, it is surely no accident that the main protagonists of the “new” middle-class code are those very people who are engaged in capturing, externalising and representing society to itself.

5. Conclusion

If an analysis of domestic space organisation takes as its starting point some concept of "basic human needs", it is likely that these needs will prove to be so basic and generalised — like the need for shelter from a hostile environment — so as not to yield useful information. An analogy may be made here with eating. Of course man needs to eat, in order to ensure his *biological* survival, but this is not what makes the study of human eating habits interesting. What is of significance is how eating behaviour is made part of that knowledge necessary to being a member of a *society*, through rules restricting diet, governing the preparation and timing of meals, and prescribing the customary forms of etiquette and "table manners". All this information is shared and taken for granted, by the members of a society or sub-culture.

This analogy suggests that it is society, and social behaviour, which is reproduced in everyday life, and not the case that society is made up of an aggregate of individual behaviours. The same may be seen to be true of space. The order which exists in the interior of a dwelling, and the way in which that interior is related to the exterior, are predominantly related to social relations. Furthermore, there are fundamental differences *within* as well as *between* societies, in the way this is done.

This paper has examined the order which exists in two polar sub-cultures, that is the "traditional" working-classes, and of the "new" middle-classes. These polar types do not exhaust the possibilities although they perhaps indicate the nature of the "game". More awareness of these strong cultural factors in domestic space would seem to be required if design guidance is not, unwittingly, to obliterate the richness and diversity of "social" practice in favour of a spurious "biological" uniformity.

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