BEDP ENVIRONMENT DESIGN GUIDE

COHOUSING – AN INTRODUCTION TO A RESIDENTIAL ALTERNATIVE

Greg Bamford

Summary of

Actions Towards Sustainable Outcomes

Environmental Issues/Principal Impacts

- The conventional mores of neighbouring combined with the absence of usable common space in most people's immediate neighbourhoods constrains the opportunities for social interaction with neighbours, much less any collective action towards more sustainable living.

- Neighbourhood open space is typically owned and managed by a distant authority, such as a Council, and so even the simplest of local initiatives can become onerous or be thwarted.

- Cohousing emerged in the belief that a neighbourhood could be organised to develop community and improve aspects of home and family life, through greater sharing and cooperation between like-minded neighbours, without sacrificing the privacy of individual households or their dwellings.

- Environmental improvements are likely from both moving to and living in cohousing, with the latter being substantially an effect of community on individual attitudes and behaviour.

Basic Strategies

In many design situations, boundaries and constraints limit the application of cutting EDGe actions. In these circumstances, designers should at least consider the following:

- Cohousing is an alternative housing type with a limited but nonetheless diverse appeal in parts of Europe and North America in particular, demonstrating the viability of space and facilities devoted to inter-household use when those resources are initiated and managed by the residents themselves.

- Since cohousing is a grass-roots initiative, the role of architects generally is not to attempt to inject dedicated common space and facilities into housing schemes in the hope that residents will discover the virtues of cohousing, but rather to extend the dialogue with clients and communities at the feasibility or briefing stages about possible futures that can work.

- Two cohousing types with potential in Australia would seem to be, first, retrofit cohousing, in which an existing environment is progressively adapted for cohousing and so the nature and size of the community develops over time. Secondly, cohousing for older people, where the community space and facilities may be minimal but the attraction is companionship and support without surrendering privacy, and maintaining control over one's living conditions.

Cutting EDGe Strategies

- Intentional communities such as cohousing have shown that social organisation and cooperation between households can help manage and reduce environmental demands and, importantly, to substitute social engagement for material consumption in achieving quality of life.

- The latter attribute may prove to be indispensable in coping with resource scarcity, and so the search for more cooperative and enjoyable lifestyles where we live would become an "essential task" for "the future of humankind" (Coombs, 1990).

Synergies and References

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Cohousing emerged in Denmark and the Netherlands almost 40 years ago as a housing type that aimed to create neighbourhood communities that did not sacrifice the privacy of individual households. Cohousers sought community for its own sake, but also to improve the conditions of home and family life through sharing and cooperation with neighbours. Common spaces and facilities were created to support neighbourhood activity, always in addition to individual dwellings. Cohousing has shown how more sustainable domestic practices or lifestyles are achievable through the development of such neighbourhoods. Of particular significance is how social organisation and cooperation can help manage or reduce material demands and substitute for material consumption.

Note: *This paper includes a glossary at the end.*

1.0 INTRODUCTION

1.1 Rethinking Home and Neighbourhood

The problems of working families, work/life balance, childhood and adult obesity, older people dying alone, their bodies undiscovered – are concerns that have been prominent in public discussion in Australia recently. However, with the exception of obesity (Sick Cities, 2006), little discussion seems to have been focussed on what role the organisation of home and neighbourhood might play in dealing with these concerns.

However much choice we have about who we live with or what our dwellings are like, we usually have little or no choice of neighbours or how the neighbourhood is planned, designed or managed. Proximity to one's neighbours does not encourage deeper or more varied social relations under these conditions of absence of choice, as all concerned anticipate the consequences of not getting on with others who will still be there in the morning. As Lyn Richards (1990) observed in 'Greenviews', a new outer suburb of Melbourne, 'neighbour danger' was an ever-present concern. A good neighbour was merely someone you could "get along with" or who would be "there when you need them", coupled with the warning, "but not in your pocket". In Greenviews, none of the men, and few of the women wanted a neighbour as a friend (being understood as "someone you can talk to and have their confidence") (Richards, 1990). For most households, moreover, their immediate neighbourhoods allow for only limited social activity to occur. Children's movements are often restricted, with play beyond the front fence usually unsafe or thought to be so. This space is typically the province of an absentee landowner with whom residents may have to undertake protracted negotiations over the simplest of uses for the space, or its routine maintenance.

The conventional mores of neighbouring combined with the meagre provision and distant regulation of this common space tends to isolate households and inhibit social interaction between neighbours. Most people do not experience this state of affairs as a loss, however, because they do not expect or especially want relations with their neighbours or the characteristics of their neighbourhood to be otherwise. But many others do, and it was in the belief that a re-organisation of home and neighbourhood could play a substantive role in developing community and addressing concerns similar to those being experienced in contemporary Australia flagged above, that cohousing emerged in the early 1970s. For example, a problem for working families at that time and for women in particular, was the choice they faced between pursuing a career and staying home to look after their children. Could domestic life and domestic space not be re-organised to offer another possibility (Jackson 2007)? The lack of physical activity, as a cause of obesity in children, was not then a concern, but the physical restrictions a conventional neighbourhood imposed on their activities certainly was. Cohousing was a response to these and other similar concerns about the lack of community and its effects (McCamant and Durrett, 1994: 137).

Cohousing is a novel kind of neighbourhood, predicated on greater sharing and cooperation between households. "We are attempting", the Cohousing Cooperative in Hobart has said, "to extend the physical and social boundaries which presently surround Australia's nuclear family homes" (Meltzer, 2005: 93). But as one young Dutch architect noted, cohousing should not be thought of as "a way of living for alternative people; it is an alternative for ordinary people" (Bamford, 2004). This paper outlines the characteristics of cohousing and briefly analyses its environmental implications. Two developments in cohousing may increase its appeal in Australia, namely, retrofit cohousing and cohousing for older people, and these are discussed with examples. The reasons for the success of cohousing, however, also indicate the limits of its appeal.

2.0 COHOUSING

2.1 To have Something that is Mine and Something that is Ours

The idea of cohousing began to take shape in Denmark in the mid-1960s and a little later in The Netherlands, among people who wanted the perceived social and practical advantages of a more communal or community-oriented life in their immediate neighbourhood, without sacrificing the privacy and autonomy of individual families or the family home (McCamant and Durrett, 1994; Dovey and Cooper-Marcus, 1990; *Vandkunsten 1969-1994*, 1994; ABC Television, 2000; Cooper, 2000; Meltzer, 2005). Could they have their cake and eat it too? A 56 year old retired farmer who co-founded Holtbjerg, a cohousing community in rural Denmark, thought so: "It is good to have something that is mine", he remarked, "and something that is ours" (Field notes).

There are now many hundreds of cohousing communities globally, principally in Denmark and The Netherlands, but also elsewhere in Europe, especially Scandinavia, and more recently in the UK, east Asia and, in particular, North America. Cohousing blossomed in the USA in the 1990s with the publication of *Cohousing: a Contemporary Approach to Housing Ourselves* (1988, 1994) by the Californian architects, Kathryn McCamant and Charles Durrett. There are now about 100 cohousing communities in the USA, and as many again in the planning or building stage (Cohousing Association of US). What is usually regarded as the first cohousing community, Sættedammen, north of Copenhagen, turned 35 last year and the first Dutch community, Hilversum, near Amsterdam, turned 30.

There are four well known communities in Australia: Cascade (1991-2001) and the Cohousing Co-operative (2000) in Hobart, Pinakarri (1999) in Fremantle and Christie Walk in Adelaide (2001-06) (Meltzer, 2005; Crabtree, 2006). Around the country, more communities are in the planning stage, for example, Merri Cohousing in Melbourne, Canberra Cohousing and Southern Cohousing in Tasmania.

As a housing type, cohousing is distinguished by effectively three characteristics (McCamant and Durrett, 1994: 38):

1   **Democratic resident management of process and outcome**: prospective cohousers come together to formulate the principles upon which the community will be based, typically formalised in a legal agreement. They manage or negotiate both the planning and procurement process and the housing in occupation, irrespective of tenure.

2   **Substantial or important common spaces and facilities:** completing the concept of 'home', in conjunction with individual dwellings that are as independent as households choose – often clustered around pedestrian streets, courtyards or squares.

3   **An 'intentional neighbourhood'**: a neighbourhood by design, typically coextensive with the community, as Figure 1 (Ottrupgård cohousing) and Figure 2 (Cohousing Cooperative, Hobart) illustrate.

Cohousing works for locations from urban to rural, for a wide range of housing types and densities, income levels and age groups, and tenures such as:

*   owner occupied – Cascade in Hobart, Christie Walk in Adelaide

*   owners and private renters – Holtbjerg in Denmark, N Street in California

*   owners and public renters – Pinakarri in Fremantle and

*   public renters – Cohousing Cooperative in Hobart.

2.2 Shared Space and Facilities

Interiors

A Common house, or flat, with a kitchen and dining area is almost universal, and typically includes some or many of the following as well:

*   laundry
*   socialising area
*   children's room
*   workshop
*   guest room
*   office, library
*   recreational facilities
*   bulk storage, freezer
*   heating plant, and
*   recycling facilities

Exteriors

Individual dwellings usually have small private outdoor gardens, terraces or balconies but common space predominates. These spaces are designed for the pedestrian, and cater for gatherings, children's play, adult recreation, and domestic production, such as vegetable gardens, orchards, chickens, alternative energy production, composting and recycling, as well as environmental preservation. Vehicles are typically corralled at the perimeter of the site. Since the publication in 1970 of *Ideas for Australian Cities*, Hugh Stretton (1989, 1999) has argued that, ideology aside, a major attraction of the detached house and garden has been the scope, continuity and flexibility it provides for the domestic economy or domestic production. That is, for goods and services including entertainment produced *outside* the market economy, from chooks, cucumbers, citrus fruit and Cooper's home brew to car maintenance, clothes drying, cricket and child care. Cohousing provides the setting for this domestic economy to flourish at the neighbourhood level, and here it can do so largely without regard to housing type or tenure, because of the presence of community (Kesler, 1992).

Variations on a Theme

The Dutch often favour levels of community in cohousing (Dovey and Cooper-Marcus, 1990). Hilversum's fifty households for example, are divided into ten clusters of four to five households. Each cluster shares a kitchen, dining area and laundry. At the level of the whole community, Hilversum enjoys a bar/coffee lounge, library and meeting room in a small Common house, with other common facilities sprinkled around the site. Cohousing communities differ in the nature and intensity of their inter-household life. A community may have common meals most nights of the week for example, and everyone old enough to contribute to their preparation would normally be expected to do so, usually by rotation in small cooking groups; in others, the common meal may be optional so that whoever feels like cooking and eating together does so, as in *Sættedammen* and Cascade (Field Notes, Meltzer 2005: 103). In Hilversum, a cluster may not eat together often enough for the liking of one of its members, and that person may join another cluster to cook and eat with them in addition to their own. As important as the regularities of the common meal, morning coffee or an annual summer camp may be, cohousers continually emphasise the value of the many impromptu or celebratory occasions that happen easily and often, given the social and physical framework of cohousing (McCamant and Durrett, 1994; Meltzer, 2005). By contrast, to hold a simple street party in suburban Australia may require several weeks notice to Council and a variety of submissions, consultations and approvals, as well as the hiring of traffic control equipment and staff on the day (Street Functions, 2008).

Reasons and Preferences for Sharing

Boarding or rooming houses, 'homes' of every kind, hostels, dormitories, wards, double bunked cells and shared bedrooms are all indicative of the inferior status of sharing. Even when sharing is neither obligatory nor an economic necessity, it may be considered appropriate only for a particular life stage, as in a student share household. In cohousing, on the other hand, sharing is accorded status. What is shared is not an inferior substitute for what households would otherwise prefer to be private. Common space and facilities extend or

Figure 1. Common house in use for a summer solstice party at Ottrupgård, in Skørping, Denmark
(Source: Author's photos, 1995)

complement and rationalise the private realm. So a common kitchen, designed and equipped to prepare meals for sixty people, enables regular (and impromptu) common eating to occur, with a little planning and cooperation, as easily as the kitchen at home does for six, thus extending the range of what people can do 'at home'. A laundry or workshop in the Common house rationalises laundering or home repairs and hobbies, removing or reducing the need for individual households to provide such facilities for themselves, as well as offering further opportunities for social contact and activity. Likewise, cohousers find themselves asking: how many scanners or printers do our twenty or thirty households need to own? How many large flat-screen television sets do we need to see Denmark lose to Australia in the quarter-final?

In a share house or flat, sharing is usually voluntary and may be desired for its own sake, but a share house differs from cohousing in that the distinction between what is private and what is shared occurs within the dwelling. The primary purpose of a share household is shelter, so when a student flat breaks up after graduation, for example, the members may regret its passing but they would not ordinarily feel hurt or betrayed. In cohousing, the function of the common realm is to facilitate and sustain inter-household relations and activities, a function for which there have been several aims or motivations. Three aims have been prominent:

1   **Domestic work**: redressing the unfair burden on women in the paid work force, by finding better ways to manage or distribute household work and child care through sharing and cooperation (Jackson, 2007). For example, in addition to the common
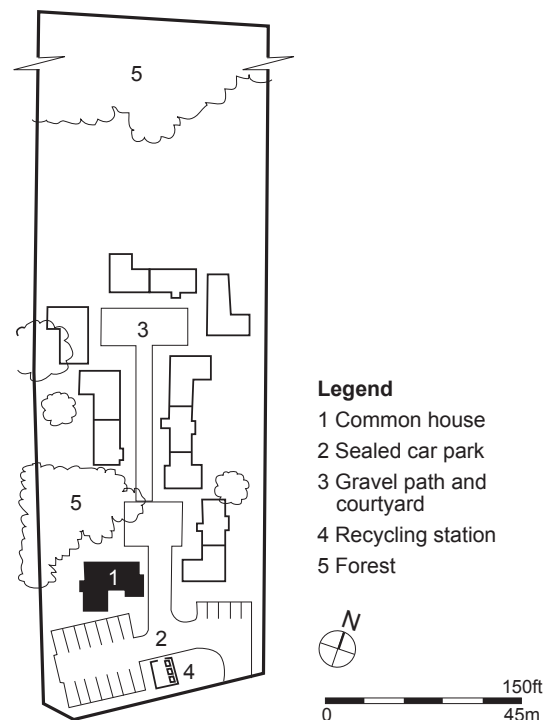

Legend
1 Common house
2 Sealed car park
3 Gravel path and courtyard
4 Recycling station
5 Forest

150ft
0   45m

Figure 2. Cohousing Cooperative, Hobart
(Source: Meltzer, 2005: 93)

meal, a community may organise bulk purchasing, formal or informal after-school care, school drop offs/pick ups, sporting rosters, and various other ways to help negotiate a better work/life balance.

2 **Children's freedom**: providing a neighbourhood that children can freely and safely explore, where the adults are known to them and care about their welfare.

3 **Reducing the environmental footprint** of habitation, principally through the advantages of sharing and cooperation.

Home in the Neighbourhood

The Cohousing Cooperative's statement that cohousing aims to extend the boundaries of 'home' is evident in how the children who grow up in cohousing conceive of home. For example, one boy remarked: "I get really mad with those of my friends who don't treat the Common house as my home, and who behave there in ways they wouldn't in my living room, like, feet on the furniture." A teenage girl expressed her amusement at a question from a visiting friend: "And when are we going to eat in the restaurant [Common house]?" (Field notes). Figure 3 reproduces drawings each with the title, 'Where I live', by children in cohousing.

Karen's drawing – Karen's drawing might look like a drawing of the kind any child would do of where they live, namely, the family home, except that she drew only the yellow common house in her community, Over-drevet, Denmark. The letter 'Y' is the house number where outsiders would say she lives.

Anders' drawing – is a section through the four row houses which make up his side of a courtyard in Overdrevet, a drawing which pays as much attention to the detail of his neighbour's houses as to his own, his house being the second from the right.

**Figure 3. Children's drawings in cohousing –
'Where I live'**
(Source: Field notes; Bamford, 1998)

3.0 RETROFIT COHOUSING

The cohousing schemes discussed in this section and the next represent two types of cohousing we are yet to see in Australia and which may better suit our circumstances.

Street frontage of housing showing 'back' doors

The converted common house with the gate being the 'front door' to the complex

Combined rear common garden

**Figure 4. *Jerngården*, Aarhus, Denmark,
bulit in 1978**
(Source: Author's photos, 1992)

3.1 Jerngården, Denmark

Jerngården (Figure 4) is a small cohousing scheme in Aarhus, Denmark, with eight households and 28 people (in 1992) (Field Notes, McCamant and Durrett, 1994). The householders were active in the 1970s in the local community on urban environmental issues. When a scrap-metal yard closed they purchased the site for cohousing. The site is on a corner and included eight small adjoining terrace houses, six in one street and two in the other. Over the next two years the group refurbished the

houses and converted the scrap yard office to a (tiny) common house, retaining an adjoining shed for bicycles and garden equipment. The scrap yard was remediated and used as a big common back yard, which is also a community asset, for example, for activities associated with their local kindergarten.

Recalling the Cohousing Cooperative's remark that cohousing extends the concept of home, Jerngården's residents refer to the front doors of their houses as their back doors; their 'front door' is the gate where trucks once entered the yard and which now opens onto the space in front of the common house (Figure 4, Field notes).

3.2 'N' Street, California

In 1979, five students shared a house in N Street, Davis, California, in an area of cheap post-war suburban housing (Meltzer, 2005). In 1984, one of them purchased this house. Two years later another purchased an adjoining property in the street, and took down the dividing fence. The two houses continued as shared houses but a community had begun to grow, centred on the common meals that had always been a prominent part of life in the original house. One of them read McCamant and Durrett's *Cohousing* soon after it was published in 1988 and realised that they were nascent cohousers. Interest in the idea grew, more house purchases followed and by 1991 the original share house had been partially converted to a common house – though not without dissent. By 1999, there were 17 households, the last two of which (top of Figure 5) were the product of a zoning change that allowed for the effective conversion of a house to a duplex, because of relaxations on 'granny flats' in the re-zoning (Meltzer, 2005, p 64). Recently

the building accommodating the common house has been demolished and replaced with a new common house and two apartments (N Street Cohousing). Most owners in N Street start as renters so they have a good induction to life in the community and there is, perhaps surprisingly, both a regular turnover of renters and more renters than owners.

N Street underlines how cohousing may be approached incrementally, socially and economically. In this kind of retrofit cohousing, residents can decide the nature and extent of community activity and facilities as they go, as well as the size of the community, depending, of course, on the availability of neighbouring houses.

4.0 SIMPLE COHOUSING

4.1 A Cohousing Scheme for Older People

In the 1980s, cohousing specifically for older people emerged in the Netherlands and Denmark. Faced with the possibility of institutionalised housing futures on the one hand and the prospect of isolation or loneliness on the other, discussion groups of older people in each country gravitated towards cohousing. Cohousing for older people has naturally come to reflect the differences in outlook and interests of an exclusively older group of residents, and so can entail simpler community facilities or less frequent community-wide social activity, but cohousing for older people is otherwise remarkably similar to age-unrestricted cohousing. In these two countries, over the shorter period of its development, cohousing schemes for older people have become as common as age-unrestricted schemes (Bamford, 2004, 2005; Brenton, 1998).

Locality plan

Figure 5. N Street, Davis, California, built 1986-99
(Source: after Meltzer, 2005: 62)
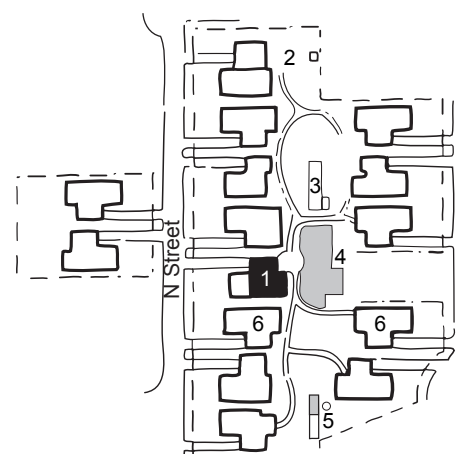
Site plan

Legend
1 Common house
2 Sauna
3 Chickens
4 Vegetable garden
5 Hot tub
6 Laundry

Garden block with screened verandahs for extra shelter

The verandah design incorporates benches for returned belongings or other community interaction

Figure 6. De Vonk, Nijmegen, the Netherlands, built 1994
(Source: Author's photos, 1995)

4.2 De Vonk, the Netherlands

De Vonk is social housing scheme in the form of cohousing for older people in the Netherlands, consisting of a 'street block' of 9 flats and a 'garden block' of 18 flats (Figure 6). On occupation, de Vonk had 29 residents, of whom 22 were women, with only three couples. The Common flat is simply an open plan, ground floor flat in the Garden block, adjacent to the entry, with vertical circulation and mail boxes wedged between the two blocks. The space for the Common flat was achieved by households 'sacrificing' a few square metres from each of their flats. The site diagram and built form of cohousing is often expressive, but *de Vonk* illustrates how new built cohousing can take the form of conventional housing. If *de Vonk* were to fold as cohousing, it would be a simple matter, if need be, to convert the common flat back into an ordinary unit and for the scheme to revert to conventional social housing.

De Vonk may be formally a simple scheme, but the development process was neither simple nor short – it took six years, by which time the oldest member was in her eighties. Shorter development periods are now more common however, but *de Vonk*'s lengthy process ensured that those who made it through, "really wanted to be here" (Field Notes, Bamford 2004, 2005). The flats are 6.5m x 11.5m, which allows for two narrow, single bedrooms or one larger bedroom with a spare room, laundry or larger living space. The considerable plan variations are a testament to the extensive and supportive development process. Very

early on, because of disagreements, the cohousers reduced the common meal to just one a month to accompany the community meetings. But there remained one or two other community get-togethers each month in the common flat and morning coffee daily for those interested. Smaller eating groups sprang up, in the common flat or in each other's flats, and other informal social liaisons flourished (Field notes).

5.0 THREE CHEERS FOR COMPOSTING

5.1 Environmental Praxis and Social Benefit

Environmental improvements can result from the application of technology alone, though of course the incorrigible water user may respond to the installation of a shower timer by showering more frequently. When a cohouser remarks: "I compost because someone else maintains the compost pile" we see that even when individuals are largely indifferent to outcomes their behaviour can be virtuous if the circumstance is appropriate (Meltzer, 2005, p. 124). This half-hearted or 'two cheers' attitude to composting can even be widespread, provided that *someone* is prepared to do more and maintain the pile. But does living in cohousing have a more profound effect on residents, shifting their environmental attitudes and thus their behaviour further, as it clearly shifts the way the children conceive of where they live?
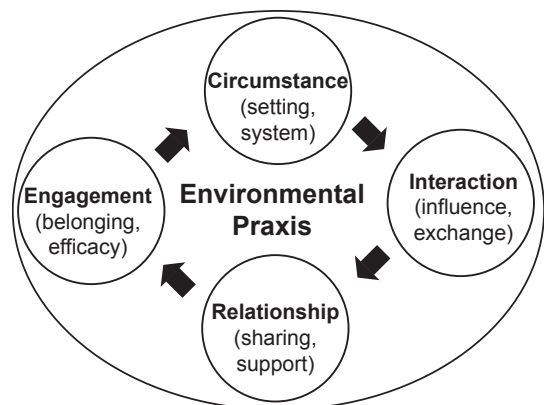

Figure 7. A virtuous circle of environmental praxis in cohousing
(Source: after Meltzer, 2005: 155)

Based on a sample of eighteen North American cohousing communities, Graham Meltzer (2000b, 2005) modelled the environmental praxis of cohousers and found a general deepening in attitudes and accompanying shifts in behaviour, beyond that of our luke-warm composter above (Figure 7). Beginning the circle in this Figure, cohousers reported the *influence* on their actions of others with greater environmental awareness, "because of daily contact" with them (Meltzer, 2005, p. 129), or residents found they "spent more time" *exchanging* "ecological ideas and tips" (p. 132). Relationships with other cohousers strengthened through *close sharing*: "instead of buying a new car … we rent half

of a neighbour's" (p. 137). (In one Dutch community, fourteen households owned one car.) Another cohouser noted: "cohousing supports my efforts to live closer to what I believe is right" (p. 141). Some communities have a 'solidarity fund' to which all households contribute and to which any can apply in times of financial stress (Field Notes). To close the circle, Meltzer found a developing sense of *belonging*: "A community mindset is developing which expresses ecological values" (p. 147). Cohousers spoke of the *efficacy* of their actions as a group: "It is empowering to do composting and water conservation as a group because it is easier to see that we make a difference" (p. 149). So, *three* cheers now for composting.

5.2 Benefiting the Broader Community

The engagement Meltzer identifies above typically extends to the wider community, deliberately so, in large part to avoid any association with a gated or otherwise exclusive community. Cohousing Cooperative in Hobart, for example, encourages neighbours to walk through their site, the Common house is used for some local community meetings and they share their housing expertise with other groups (Meltzer, 2005, p.97). The small Danish community, *Holtbjerg*, is a retrofitted boarding school with an expansive, though not universally shared, view of such engagement. They have hosted an annual art exhibition in their under-utilised gymnasium, provided accommodation for a travelling circus and comfortably housed rotations of residents from a local aged person's home that was undergoing renovations (Field Notes).

5.3 Smaller Environmental Footprint

Improvements in pro-environmental behaviours result from both moving to and living in cohousing, though Meltzer (2005, p136) found a sample of the latter behaviours tended to plateau after three to four years. Table 1 below provides evidence of reductions in consumption following the move to cohousing in his North American communities. Meltzer (2000b, 2005) found a slight reduction in average dwelling size, after allowing for a share of the common space. Cohousers were previously living in relatively small dwellings by North American standards, however, and many had growing families, typical of the first blush of cohousing. In a sample of twelve Pacific-rim cohousing communities, which includes the two Hobart schemes and one each from Japan and New Zealand, the average dwelling size was just 100m² (Meltzer, 2005, p. 141). The move to cohousing increased the percentage of households living in suburban

or rural locations from 40 percent to 60 percent, so the reported improvement in driving moderation is probably better than it may appear. The reduction in household consumer durables in Table 1 would likely be much greater in European cohousing.

5.4 Resilience and Adversity

In addition to whatever *actual* improvements in environmental performance cohousing communities achieve, the dispositions and capacities cohousers naturally develop are such as to stand them in good stead *if*, or presumably when, *future* improvements are needed. If petrol were to double or treble in price, for example, the social framework and inter-personal relations needed to facilitate extensive car pooling already exist in cohousing, even if in any particular community little may be done at present in this regard. If you became aware how badly various older people in the street had fared in a recent prolonged heat wave – missing medical appointments or social occasions, shopping less, eating poorly – what could you do by yourself, practically or easily, next time such an event occurred?

5.5 Quality of Life and Consumption

Much of the quality of life in affluent societies is underpinned by resource consumption, so how well would we cope if we did have to make do with much less? Kenneth Mulder et al (2005) compared the quality of life of a sample of residents from the town of Burlington, Vermont, with residents in a range of nearby intentional communities such as cohousing, eco-villages and the like. The Burlington residents had a relatively high quality of life but the latter turned out to do even better, which the researchers associated with the larger stock of social capital they measured in these communities coupled with their reduced reliance on 'built capital'. This suggests that the transition to a sustainable society need not entail a reduction in quality of life, and that unintentional communities such as ordinary neighbourhoods, suburbs or towns, have much to learn from their intentional counterparts (Mulder et al, 2005, p. 13, 20; Meltzer, 2005).

It is instructive that in the two retrofit cohousing schemes above, Jerngården and N Street, minimal resources were deployed to provide the setting for their community life in the first place, and in de Vonk no resources were employed to realise the common space over and above what would otherwise have been required for a conventional housing scheme.

Description	Before	After
Average Floor Area of Dwellings	140m² approximately	118m² (+ 15m² share of common space)
Households in detached houses	69%	16%
Driving moderation	–	20% improvement
Composting and Recycling Practices	–	25% improvement
Freezers, Washers and Dryers	–	25% reduction (approx. average)
Lawnmowers	–	75% reduction

Table 1. Reductions in consumption of North American cohousers
(Source: Meltzer, 2000b and 2005)

6.0 CONCLUSION – A SOCIAL BASIS FOR ENVIRONMENTAL IMPROVEMENT

Figure 8. Circus School in the Common house, *Wageningen,* the Netherlands
(Source: Author's photos, 1995)

In *The Return of Scarcity*, the late H. C. (Nugget) Coombs (1990, p. 165), former governor of the Reserve Bank of Australia, remarked:

> *There are conceivable lifestyles more modest in their material demands, less destructive of the physical environment – lifestyles which are simpler, whose excitements are found primarily in the human relationships they provide scope for. The search for those lifestyles is the essential task of the rising generation. Upon their success in that search will depend the future of humankind.*

Coombs (1990, p.19) thought that this 'essential task' would entail the remaking of both neighbourhoods and cities as "locations for living which enabled human activities to be conducted simply, with minimum expensive capital equipment and, economically, especially in relation to energy". If so, they would add much to the "real income" of residents, irrespective of their monetary income. Coombs was referring here to the substantial contribution the domestic or non-market economy can make to our quality of life (Stretton, 1989, 1999).

As suggested earlier, cohousing re-organises and develops this domestic economy, *extending* it to the level of the neighbourhood. One example to conclude: on Sunday mornings in the common house in *Wageningen*, a cohousing community in The Netherlands, a retired circus performer ran free classes on circus skills for the children – unicycling, balancing on large balls or drums,

learning how to appear to pull other kids up by their hair, and knife juggling (Figure 8). In summer, the kids go on a camping holiday and perform in the campground, covering some of the costs of the trip (Field Notes). In another neighbourhood, the parents may spend much of their weekend driving their various children to various parts of the city and paying for ballet lessons or tennis coaching. If they lived in cohousing a parent's roster would soon be drawn up. The parents would all drive less and have some weekends off; the kids would walk to at least one recreational venue and the cost would be minimal.

Cohousing is a rich and instructive example of how to remake a neighbourhood with aims such as Coombs had in mind, but there are other ways. The companion paper mentioned in the Introduction will discuss the constraints and obstacles to cohousing in Australia as well as consider other similar ideas for neighbourhoods and local communities.

GLOSSARY

Cohousing: a housing type that aims for community in a neighbourhood, supported by common space and facilities, but without sacrificing the privacy of individual households or their dwellings. It is a common mistake to say that the individual dwellings in cohousing are autonomous or independent. Households routinely give up a laundry or workshop at home, for example, because they prefer a common facility. In so doing they signal that clothes washing or chair repairs are not activities that need to be private to preserve household integrity. Regardless of tenure, cohousers control or negotiate the planning and management of the housing themselves.

Cohousing for older people: A housing type with no essential difference from cohousing except the restriction on age of entry, usually 55 years. Differences between a cohousing scheme for older people and age-unrestricted cohousing are the product of the differences in the respective interests, abilities or preferences of the cohousers. These communities of older people tend to make further rules of entry, for example, no children or siblings living with you and new members to be under a certain age, such as 65 years.

Domestic economy: The domestic economy or domestic production refers to all the goods and services households (including neighbourhoods) produce for exchange or consumption outside the market economy. Grandparents provide regular care for more children under two in Australia, for example, than does the formal child care sector (Goodfellow and Laverty, 2003). Much production is mixed: a taxi ride is travel the market provides; driving oneself is mixed; walking counts as domestic production. Sustainability concerns have given renewed prominence to this mode of production because its environmental footprint is typically low – walk to the mandarin tree in the back yard, pick and eat a mandarin, dispose of the peel in the compost heap (Stretton, 1999).

Eco-village: Robert Gilman (1995, pp. 7, 11-13) defines eco-villages as "human scale, fully featured communities, both urban and rural, that are integrated

harmlessly into the natural environment and can successfully continue into the indefinite future". The Global Eco-village Network says that an eco-village aims to "integrate a supportive social environment with a low-impact way of life".

Intentional community: minimally, a community intentionally formed by its members with some common purposes and values underpinning its formation, their own governance structure and usually living in the one place (Meltzer, 2000a, pp. 54-81). By contrast, an ordinary neighbourhood or suburb is an unintentional or circumstantial community. Cohousing is usually considered as a form of intentional community as are eco-villages. Opinion varies about the definition, however, and thus about what communities fall under it. The Cohousing Association of the US, for example, prefers 'intentional neighbourhood' for cohousing, see: http://www.cohousing.org/node/10By.

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BIOGRAPHY

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APPENDIX

Cohousing Web Resources

Australia	
Canberra Cohousing	http://www.canberracohousing.com/index.html
Cascade Cohousing	http://www.cascadecohousing.com
Cohousing Cooperative	http://www.cohousingcoop.org
Merri Cohousing	http://members.optusnet.com.au/~cohousing/merri/HOME.html
Pinakarri	http://www.pinakarri.org.au
Southern Cohousing	http://www.southerncohousing.com
Canada	
Canada Cohousing	http://www.cohousing.ca
Denmark	
Munksøgård Eco-village	http://www.munksoegaard.dk
Vandkunsten Architects	http://www.vandkunsten.com
New Zealand	
New Zealand	http://www.converge.org.nz/evcnz
The Netherlands	
Hilversum	http://www.wandelmeent.nl/default.htm
LVCW [Cohousing for Older People Association]	http://www.lvcw.nl
United Kingdom	
UK Co-housing Network	http://www.cohousing.org.uk
United States	
Cohousing Association of the United States	http://www.cohousing.org
Elder Cohousing	http://www.cohousing.org/elder_cohousing
Global Ecovillage Network	http://gen.ecovillage.org
N Street Cohousing	http://www.nstreetcohousing.org