

ARCHITECTURE AND COMMUNITY: CO-HOUSING IN THE NETHERLANDS

Dr Kim Dovey and Professor Clare Cooper Marcus discuss the development of a new kind of community housing in the Netherlands. This article is part of the 'Discourse' series of refereed academic papers to be published occasionally in 'Architecture Australia'.

CO-HOUSING IS AN INNOVATIVE FORM OF HOUSING development that incorporates the opportunity for every household to share a range of facilities and social life while maintaining a private dwelling. Such schemes have gained increasing acceptance and success throughout Scandinavia and the Netherlands over the past decade¹. This paper is a review of some such schemes in the Netherlands, where they are called *Centraal Wonen* ('common housing').

The basis for a trend for co-housing lies in demographic and lifestyle changes which have led in the direction of greater diversity of household size and type. The former dominance of the nuclear family has been replaced by a diversity of smaller households and rising proportions of single people, single-parent families, childless couples, elderly people and homeless teenagers. Co-housing schemes are perceived as an opportunity to establish new forms of community, through both housing form and process, without giving up the right to a private dwelling within that community. By 1987 there were 42 *Centraal Wonen* (CW) schemes in the Netherlands, together with a central organisation, a newsletter and a growing literature. This article is based on visits and interviews with residents at four such schemes, only one of which is presented in any detail². Our particular interest is in the manner in which communal values are translated into environmental form. While the schemes are quite different from each other, visually and socially, there are some common themes in the ways in which projects develop and space is negotiated.

First, the CW projects are both user initiated and public funded through a form of housing co-op; the ideas flow from the bottom up while the funding is top-down. While the initiators are often professionals, the projects are accessible across a broad socio-economic range with varying levels of public subsidy.

Second, social relationships are given priority over spatial forms, which are seen to grow out of the former. There is none of the environmental determinism that sees a sense of community being created by design alone. This is not to say that the design is not crucially important, only that the design is seen as one means of supporting the development of pre-existing social values.

Third, the development process of establishing contact with like-minded people, negotiating funding, finding a suitable site, hiring an architect and negotiating the design program is an important period of community development which requires a high level of commitment and involved participation. In most cases the planning, funding, design and construction phases of the project take

between three and six years, and the 'sense of community' may emerge long before the project is realised in form.

Finally, all CW projects are structured socially into levels which are reflected in the spatial arrangements which provide a range of choices with regard to cooking, eating, social life and child-care. These levels include:

- *Private dwelling units:* These may range from small units (in an inner-city location) to large row houses with private open space (in more suburban locations). All are complete dwelling units but, in some cases, private cooking facilities have been reduced to a minimum and traded against shared facilities.
- *Community facilities:* Facilities shared by the whole community vary but usually include space and facilities for meeting, cooking, eating, storage, workshop/studio, open space, vegetable garden, guest accommodation and child-care. Some projects also include a sauna, bar and teenage rooms.
- *Cluster facilities:* In most projects there is a third level of social organisation, a social 'cluster' of about eight people from various dwelling units who share a cooking/eating/living space. This facility allows one or two people to cook for the larger group on anything from one to five evenings a week, and usually comprises one large area divided into three for cooking, eating and socialising. The choice is available to stay and socialise or to retreat after a meal. Most of the cluster spaces are designed in a manner that permits them to be converted to small apartments at a later date, should the cluster system collapse. This is a requirement imposed by the housing authority to ensure that public funds are not invested in designs which may become obsolete.

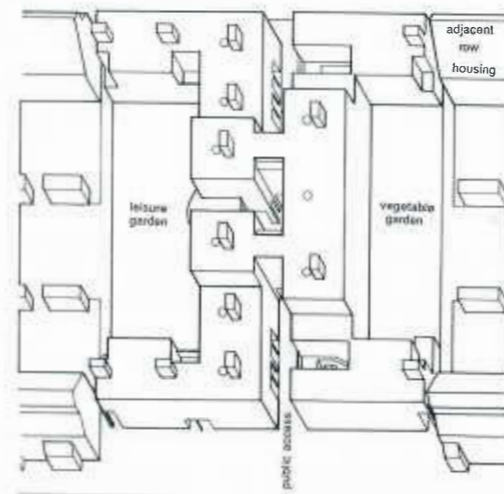
Centraal Wonen Hilversum

CW Hilversum, opened in 1978, was the first *Centraal Wonen* in the Netherlands. The design by architects Leo De Jonge and Pieter Weeda is in the form of two- and three-storey row houses with barrel-vaulted roofs and stucco facades painted red and ochre. It comprises 50 households and is well integrated into a suburban neighbourhood of two-storey row houses. Unit sizes vary from one to four bedrooms for a range of family sizes, and there are 16 different layout combinations. The project houses 116 people, one third of whom are children.

There is some flexibility to cope with changing demand and social structure. For instance, in one apartment a large third-floor bedroom (which can be divided into two rooms) has its own bath-



Above: Hilversum, pedestrian street. Right: Hilversum site plan. Below left: At Banier, co-housing integrates with private housing behind. Below right: Amersfoort community room and bar. Bottom: Amersfoort, general view.



room and exterior stairway and can be rented or used by a teenager who needs privacy. In the case of one family, when the parents divorced, the father took this top room and bathroom, with the children on the floor below and the mother on the ground floor.

CW Hilversum is divided socially and spatially into ten clusters, each comprising four or five families. The households that share a cluster kitchen are located around it. Other spaces shared by each cluster include a roof terrace (not highly used), a storage shed and a small laundry. The outdoor space behind each cluster is a garden of approximately 200 square metres for both group and private use.

Cluster groups vary in the degree of social interaction that takes place. An evaluation of the Hilversum project found both practical and social motivations for forming a cluster: to relieve the burden of cooking and child-care, and to alleviate the relative isolation of families and people living alone³. Over time, the clusters have developed different rhythms of social life — some eat together every night but have little contact except for eating; some eat less often but have developed patterns of sharing child-care and social support. Although the cluster is considered supplementary to private space, some people have given up use of their own kitchen and use the cluster kitchen, even for private purposes. Others have found the intensity of social contact in the cluster too much and have reduced their frequency of eating communally. There are several dwelling units on the edge of the project for households who choose to remain independent of any cluster.

A very successful aspect of CW Hilversum is the site plan, with houses arranged along one long pedestrian street with a shorter street crossing it at right angles. Front doors of units face this street with small front gardens. Private gardens are at the rear and these in turn open onto parking areas which are shared with the surrounding neighbourhood. Cluster kitchens all project out into the pedestrian street so that the view down the street is punctuated by the kitchens and social interaction between neighbours is facilitated. The projecting kitchens also create an eddy space just off the main walk, often furnished with picnic tables and flower planters. The central street is also a pathway for neighbours from outside the community and an ideal play area for children, within view of all kitchens. At the point where the shorter street crosses the main space at right angles are located most of the facilities shared by the whole community: a bar/cafe, meeting room, youth room and art studio. In other locations are a sauna and a workshop with shared power tools. Members of different clusters meet in various committees, in the bar/cafe, and at community dinners for special celebrations several times a year.

Centraal Wonen Banier

This is a medium/high-density urban scheme of 51 dwelling units, housing 89 people, in Rotterdam. The architect was Flip Krabendam. The development is four-storey and surrounds a courtyard on three sides. Socially, the development is divided into 8 'clusters' of about 8 people each. The residents decided that they should be able to choose a cluster regardless of dwelling location (or choose not to join a cluster at all). As a result, the group rooms are scattered throughout the four-storey building, accessible to all apartments via internal corridors and stairs. Common spaces were also designed to be visible from the corridors to all passers-by, not only cluster members.



The larger group facilities at CW Banier include a child-care space, workshop, meeting room, bar and a landscaped courtyard which is overlooked by about half the apartments from balconies. The population includes about 20 children, who serve a significant role in the social network, seeking out new residents and helping to integrate the larger community. Formally, the scheme is integrated into a larger housing development which is similar in height and style. The social distinction has not been translated into a formal distinction.

Centraal Wonen Amersfoort

CW Amersfoort is a suburban scheme, near Utrecht, of 31 dwelling units housing 45 people. Socially, it is divided into six clusters of about 8 people each. Demographically, this project has become primarily one of female single parents and children. There are only two nuclear families and four male adults, and the child population is about 30%. The cluster spaces are generous, since they have been traded against cooking facilities in the private apartments, which are often minimal. One design innovation at Amersfoort is the provision of a children's domain, a cluster of bedrooms around a play/hobby space. If they wish, children can move here to sleep and remain in contact with parents through an intercom. A number of other rooms have been designed for flexible uses, such as for teenagers, guests or a shop.

CW Amersfoort is in the form of a three-storey complex, bridging a local pathway and with an area of common open space to the rear on either side. The buildings are white brick with flat roofs, in contrast to the darker brick and pitched roofs of the surrounding suburban row housing. The lack of visual integration was a source of conflict between the local council and the architect, Dolf Floors, who argued for the aesthetic distinction. However, the visual separation is balanced by the functional integration with the local pathway which residents claim helps to avoid neighbourhood suspicions. In the centre of the development is a large group room which is used for a variety of purposes including a bar, eating, parties, choir practice and meetings of neighbourhood organisations. The shared outdoor space on one side is a garden and play area, while that on the other side is a vegetable garden.

Centraal Wonen Wageningen

CW Wageningen is a development of 56 dwelling units (124 people) in a medium-density suburban context in Wageningen. The project is socially mixed with 37% nuclear families, 28% single parents and 36% children. There are high proportions of both university-educated and welfare recipients. The design consists of three- and four-storey row housing on three sides of a communal courtyard, with a centrally located three-storey communal building. The development is well-integrated into the neighbourhood in terms of materials, forms and scale. The highly participatory process of organisation, funding, finding a site, designing (with architect A. Hellinga) and construction took six years. It is a highly successful project and we shall describe it in greater detail.

Housing types

There are four kinds of housing at CW Wageningen, providing for a range of household types. The first comprises 18 apartments in

three clusters of six. These clusters are physical as well as social clusters and are referred to as 'stair houses' since they share an entrance and stairway. Each cluster has a 'group room' with cooking, eating and living space on the ground floor, as well as an outside patio area. This design limits cluster members to those who inhabit the 'stair house'. There is little flexibility to choose or change clusters. One result is that clusters have not specialised, as is the case elsewhere (CW Banier for instance), and all clusters have children.

The second housing type involves 22 'independent' houses, which are not attached to any cluster and which may or may not have private open space. While there is no obligation for these residents to eat communally, many have joined a number of 'eat groups', informal clusters of a few families who agree to cook and eat together in the common house on a regular basis. The third kind of housing comprises three 'group houses', each of which has a shared kitchen and five bed-sitting rooms (of about 18 square metres). The 'groups' are principally single young people. Finally, in the top floor of the common house there are a number of rooms which are rented to homeless teenagers for periods of up to a year. These rooms are publicly funded for this purpose and the teenagers are encouraged but not obliged to participate in community life. All other residents — regardless of eating arrangements — are obliged to participate in maintenance and committee work for the whole project.

Flexibility

A particular set of design innovations at Wageningen are concerned with the capacity of the housing to cope with changing household structures and needs over time. Most of the dwelling units are designed for maximum flexibility with minimal expenditure. For instance, the entrance to some units is designed in such a way that the front door can be located at three different positions along an entry corridor. The choice of location will either include or exclude an extra bathroom as well as an extra room (or two rooms) which may become community guest rooms, rented space or work space, with or without the bathroom. Furthermore, certain walls within the apartment can be added or removed, depending on spatial and behavioral requirements of the occupants. These options allow the occupants to expand or contract the size of the apartment from three to six rooms and to change the internal arrangements with ease and little cost. When the options are multiplied together they yield 22 different possible apartment designs. The need for flexibility is vital, since the community produced 18 babies in its first three years and no one wanted to leave the project.

Common facilities

The common house includes a child-care space, kitchen, dining room and meeting area, all opening south onto outdoor areas. The landscaped courtyard at Wageningen includes vegetable gardens and play areas around a large circular lawn. There were two opposing ideas in relation to the landscape design. One argued that the landscape was a symbol of the unity of the group and that pathways should radiate from the centre. The other argued that the landscape, like the housing, should be about the provision of choice through a less orderly network of paths which reflect a free social network. The result is something of a compromise between the two and is

well integrated into the local neighbourhood. As at Amersfoort, a neighbourhood pathway, which passes through the project and the courtyard space, flows directly into local neighbourhood open space with only a low wall as a boundary. This is a barrier-free environment for the 50 children, who have easy access to each other from an early age. A row of giraffes painted on the pavement marks the boundary beyond which they must not wander. All common facilities at CW Wageningen are managed by committees which include finance, child-care, admissions, social solidarity and garden committees.

Why co-housing?

Why are co-housing schemes such as these significant, and what, if anything, might we learn from them? In our view, the co-housing projects are significant because they address a cluster of current social issues simultaneously.

Rebirth of community

Much of the market for schemes such as these comes from those who experience a fragmentation of community life within an individualistic society. When one spends time at the more successful co-housing schemes, the sense of community is quite palpable — children greet a variety of adult friends, neighbours share coffee at a picnic table, friends share the day's news in the cluster and community spaces. It is interesting that the size of the eating clusters seems to be constant at about eight people. This can be argued to stem from the economies of cooking and as the upper limit to a successful dinner-table conversation. However, it can also be interpreted as an effective size for a surrogate extended family.

The nature of the participatory design process is itself a strong foundation for future community. Conflict and compromise, as well as shared good times, all contribute. Residents at Wageningen recall wryly the many heated meetings in which they had said, with exasperation "But that's just the point . . .". They aptly named their new community house *Het Punt* ("The Point"), a theme that was reified by the architect in a small sculpture near the entrance.

Changing household size and type

The co-housing projects offer one kind of resolution to the growing problem of housing stock being grossly mismatched to the social reality of declining household size and increasing diversity of household types. These social changes have already occurred and nuclear family households are now in the minority in many Western nations, including Australia. A wide range of household types, including nuclear families, is attracted to the co-housing projects. The fastest-growing household types are the single-parent family (usually female-headed) and the retired single person or couple. The projects we have discussed have tended to attract the former and not the latter, but this may shift as the advantages available to retired people are recognised. The clear advantage that the best co-housing schemes offer is simply a wider set of housing options and flexibility over time. There is the choice of both individual privacy and community life in varying doses. Furthermore, with flexible design, changes of household size over time (marriage, divorce, death, birth, children leaving home) do not necessarily entail spatial and social dislocation. There will, no doubt, be many adaptations to our housing stock as a result of household diversification,

but the co-housing projects offer one kind of spatial form matched to the dynamism of late 20th century demography.

Feminism

The co-housing projects offer particular advantages to single parents (primarily female) — those who suffer most from the isolation of individual dwellings and the problems of child-care. However, the success of such schemes relies on a broader demographic mix. Individual child-care may be more acute for single parents but, in the nuclear family, the problem is simply obscured by its reliance on a sexist social structure. The growing feminist critique of gender bias in the built environment has focused on the role of spatial structure in reproducing social isolation for those left at home with individual child-care and housework responsibilities. Many of the co-housing projects are entirely compatible with the vision that Hayden and others⁴ have argued for in relation to a non-sexist environment. Men and women alike generally participate in the shared cooking schedules, community work days, committee work and so on. Although co-housing arrangements will not create a non-sexist society, they make it much more possible.

Childhood development

Children's spatial range in modern cities is severely limited by cars and other real and imagined dangers. Childhood development is enhanced when children live in a safe domain where they have access to a range of people, places and learning opportunities. While the battle to tranquillise vehicular traffic and fight crime will continue, the co-housing projects offer children a safe environment with access to other children without crossing a street. This, in turn, eases child-care problems and helps to address the feminist issue of sole responsibility for child-care.

Low-impact lifestyles

We live in a world where there is a growing need to develop lifestyles which are both high quality and low-impact in terms of long-term resource consumption. This can include everything from higher density housing to reduced reliance on motor vehicles, to sharing of appliances and facilities, to a mix of housing and work environments, to growing one's own vegetables. While co-housing projects may not ensure a low-impact lifestyle, they certainly enable it. Although few have attempted to mix dwellings and employment, most are built at densities that will minimise local use of vehicles. The sharing of appliances, meals and open space all serve to generate a low-impact (yet high quality) lifestyle compatible with a sustainable urban system.

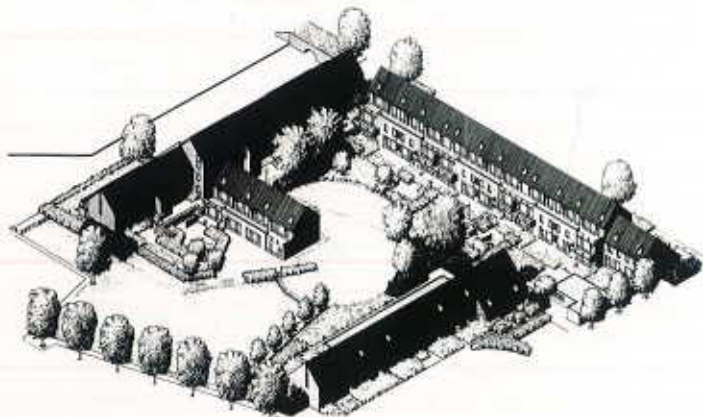
Social justice

The co-housing projects both require and engender in their members a high level of social commitment, and some embody a philosophy of social justice in their constitution. The co-housing community is generally seen as one which protects its members and, in some cases, takes an active role in relation to larger social problems such as teenage homelessness. In one case, a solidarity committee was formed for the allocation of funds to residents in temporary financial difficulty. The Netherlands projects, being public funded but initiated and managed by the dwellers, are good examples of an enlightened social democracy at work in the housing process. It is important, however, to be clear that co-housing





Top: Wageningen, common facilities above, temporary housing for the homeless below. Above: Wageningen, entrance to common house. Below: Wageningen, aerial view.



projects are neither communal nor Utopian. The maintenance of the private realm is as important as the development of the more public realm. And to live in such a project, as in any residential setting, is to live with a certain level of compromise.

Conclusion

The shared facilities described in these examples are not unique or new features. Many housing schemes provide shared laundries; some have space for child-care or meetings; townhouse projects have landscaped courtyards; and elderly housing often has shared meals. However, the co-housing schemes differ in both the range of shared facilities and in the participatory process of developing them. The success of the project and of its architectural form hinges around the social relationships for which the form becomes a metaphor. It follows that co-housing is a form of community architecture and that speculative housing of a similar form is unlikely to work in the same way.

The co-housing projects are not all successful and none are successful in every way. Some good evaluation research will make this clearer. Yet their proliferation over the past decade makes them a very promising and innovative experiment. As the learning process continues, they may well become the most significant new form of housing in the 1990s. We are not suggesting that similar projects will necessarily work in Australia. Yet the conditions from which they stem are widespread — declining household size, social isolation, changing gender roles, problems of social justice and resource consumption. None of these conditions are passing phases and, while the ideology of detached single-family housing will persist, here is a high quality and highly sustainable alternative.

1. See McCamant, K. & Durrett, C. *Co-Housing Berkeley*: Habitat Press, 1989, and Franck, K. & Ahrentzen, S. (eds) *New Households, New Housing* New York: Van Nostrand Reinhold, 1989.

2. The material in this paper has been collected from a range of interviews at each of the projects conducted by the authors during 1988, and from the following sources: Kesler, B. 'Dwelling Communities as a New Life Style', paper presented at IAPS Congress, Arc et Senans, 1987; *Samen Wonen* Landbouwhogeschool, Wageningen, 1978; Kesler, B. 'Communal Household Conditions: A Way Towards a New Lifestyle' in *Household Science and its Political and Social Relevance* Wageningen Agricultural University, 1985 p. 91-101.

3. Kesler, B. 'Dwelling Communities as a New Life Style', paper presented at IAPS Symposium, Arc et Senans, 1987.

4. Hayden, D. *Redesigning the American Dream* New York: Norton, 1986; Franck, K. A. 'Feminist Approach to Architecture' in Berkeley, E. & McQuaid, M. (eds) *Architecture: A Place for Women* Washington: Smithsonian, 1989 p. 201-215; Matrix, *Making Space* London: Pluto Press, 1984.

Dr Kim Dovey is a senior lecturer and Associate Dean (Research) in the Department of Architecture and Building at the University of Melbourne. Clare Cooper Marcus is Professor of Architecture and Landscape Architecture at the University of California, Berkeley.



DECEMBER 1990

Architecture Australia

Managing Editor and Publisher
Ian Close

Editor
Ian McDougall FRAIA

Production Editor
Mary Neighbour

Journalist
Anna Smeaton

Interiors Editor
Suzanne Bristow

RAIA Advisory Committee
Peter Johnson LFRAIA
Ron Bodycoat LFRAIA
Richard Francis-Jones ARAIA

Design
Greg Oakley

Advertising Manager
Carolyn Rivers

Advertising Enquiries
VIC Carolyn Rivers 03 646 4760
NSW David Strike 02 922 2977
SA Kent Humphrys 08 79 9522
WA Helen Glasson 09 381 7766
QLD Geoff Robinson 07 831 9266

Architecture Media Australia Pty Ltd
10A Beach Street
Port Melbourne 3207
Telephone 03 646 4760
Facsimile 03 646 4918

Member
Circulations Audit Board

Typesetting and Colour Separations
Intraset Pty Ltd, Brisbane

Printing
Prestige Litho Pty Ltd, Brisbane

Subscriptions
Subscriptions form on page 70.
Annual subscriptions:
\$84 in Australia.
Overseas \$120 surface mail; \$193
air mail (Australian currency) from
Architecture Media Australia Pty Ltd
10A Beach Street
Port Melbourne 3207
ISSN-0003-8 725



Architecture Australia is the official journal of the Royal Australian Institute of Architects. The RAIA is not responsible for statements or opinions expressed in Architecture Australia nor do such statements necessarily express the views of the RAIA or its committees unless expressly stated.

Architecture Media Australia is a subsidiary of the Royal Australian Institute of Architects, 2A Mugga Way, Red Hill ACT 2603.

APPROACHES TO DESIGN 1980-2000

Theory and design in the nineties Introduction	34
The city: A fragile tension Peter Elliott Pty Ltd	36
Form and counter form Lawrence Nield & Partners Australia	40
Architecture and heritage Phillip Cox Richardson Taylor & Partners	44
Photography and debate John Gollings	48

DISCOURSE

Architecture and community: Co-housing in the Netherlands by Kim Dovey and Clare Cooper Marcus	52
---	----

FEATURE

Kitchens and bathrooms by Davina Jackson	58
---	----

DEPARTMENTS

News	9
Letters	21
Obituaries	31
Product news	67
Index to advertisers	70

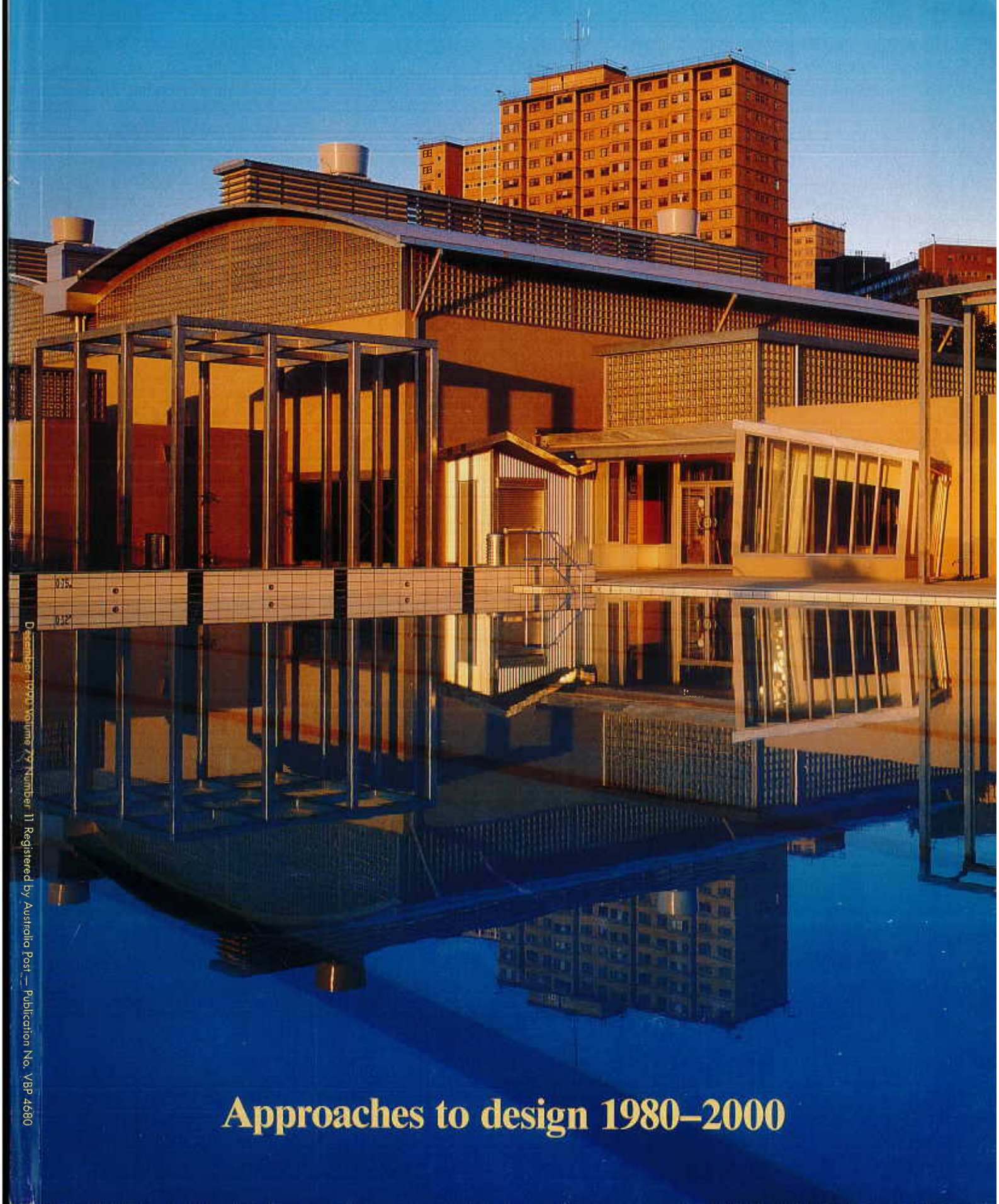


Cover: Carlton Baths and Community Centre, by Peter Elliott Pty Ltd. Photo: John Gollings.

Left: John Gollings photograph, of Jennings Southgate project model (see p 48).

Architecture Australia

December 1990



Approaches to design 1980–2000