Undercurrents

It's funny what lingers after travel. The places we visit, the buildings we tour and the conversations we have. What remains is not always the preconceived highlights or monuments we set out of see before the trip, but often something in the undertow of our experience. Something that slowly formulates over a longer period of time to reveal an attitude, a value, or a way of thinking that we take home.

Over our time in Copenhagen, Amsterdam and Barcelona, what persisted was not a singular architectural perspective but a set of contextual responses to variegated problems with a singular undercurrent. While many of the architects we met, and many of the projects we saw, all drew on different spatial strategies, social ambitions, and material tactics to formulate new forms of architecture, the undertow of most of them was a commitment to change. This was not singular, but a multicoloured palette of proposals and ideas for how we can build, design, re-use, fund, construct, live within, power and empower architectural projects towards a response to the world's environmental, and thus social, volatility. While the undercurrent of sustainability was apparent, and remains a central ambition for all good architectural practices, what stood out in our experience was the nuanced, grounded way in which each architect and project approached this ambition. There was no need for grand declarations or claims of changing the world. Instead, the architects we met, and the buildings we visited, were engaged in quiet, incremental shifts. None claimed to be the singular answer, but each offered a small contribution—thoughtful, measured and grounded in context—that collectively builds toward a broader and more meaningful change.

The Dulux Study Tour was thus an eye to the world for how architects can move in the same direction in different locations, and it gave me the opportunity to see that firsthand, and for that I will be forever grateful to Dulux and the AIA.

Office MI—JI Pty. Ltd.

Jimmy Carter

Amsterdam: A Bathroom in a City

After six hours on a bike looking at the insurmountable number of new of housing in Amsterdam, one takes in a bathroom as the most poignant piece of architecture.

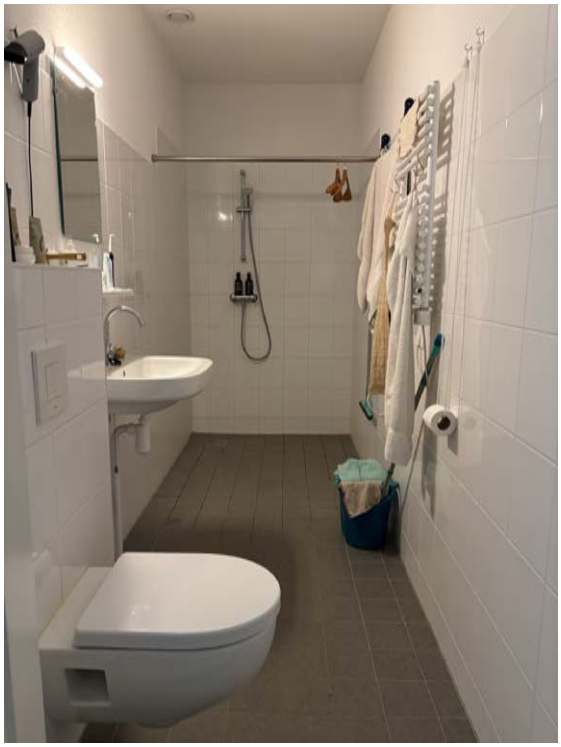
Amsterdam-Noord is not necessarily a place that houses the symbolic image of Amsterdam. The canals are few, the scale of buildings can be large, and the tightknit streets are replaced with avenues of a breadth more in line with its industrial past. But with a skill and an openness to ideas both urban and unitary, it is clear the Dutch city is achieving housing outcomes that are well beyond Australian norms, and in an impressive numeracy.

Much of this area has been developed in the last 20 years through various approaches; from floating villages, to “superlot” towers for self-built apartments, to mega-blocks with an ingrained variety of program and scale. Yet while diverse, all are part of a scheme that seeks to maintain 35% social housing in the Netherlands,[1] and most were rigorous in both quality of construction and spatial planning. There appeared little time in Amsterdam-Noord for frivolous material usage, and more time for a flexibility of spatial requirements through loose but exacting frameworks.

Inside a 50sqm studio apartment[2] by NL Architects, room dimensions and spatial planning are not for singular use. The main area was sparse but plentiful, with windows and balustrades on two sides. Given the width of space, the apartment could be rearranged in multiple ways, with only the 3m wide kitchen bench dictating a certain occupation in a certain location. It was architecture that provided generosity through spatial specifics, not specific spaces.

Yet it was in the bathroom of this apartment that seemed the most emblematic of our tour around Amsterdam-Noord.

Approximately 1.5m wide and 3m deep, the space was ample. The floor was clear of any door, toilet, vanity, structure or partition, and it was only penetrated by a lonely white sink waste. With such clear dimensions the room felt large, despite having no natural light. Everything hung from the walls, leaving the space to feel open and generous. Even the shower was a part of the room with no floor transition apparent and a curtain rail that provided water separation.



The perfect bathroom, Overhoeks B1 and B2, NL Architects, 2019

[1] In Victoria, public and community housing make up 2.8% of the households

[2] Overhoeks B1 and B2, NL Architects, 2019

There was a small ledge above the basin for toothbrushes and pastes, while a different tiled ledge above the in-wall cistern provided a deeper shelf for bigger products and necessities. The occupant had ingenuously begun to hang objects (toilet paper, toilet brush, mop, hand towels, clothes rack) from hooks attached to rails on the wall, and any large storage was left for a closet at the entrance of the apartment.

The bathroom and larger apartment provided all the necessary requirements of life in a manner that was generous and sizable, but also left space for the occupant to inhabit unhindered. There was a priority on spatial outcomes and a diversity within them, not necessarily a diverse number of spaces.

It is this attitude to housing, both individual and multi-residential, that appears so successful here. Provide space for people that is adequate in size to ensure a possibility of something not necessarily already envisaged. This is not new, or even special. But when it is done, housing and our idea of it becomes so much more.

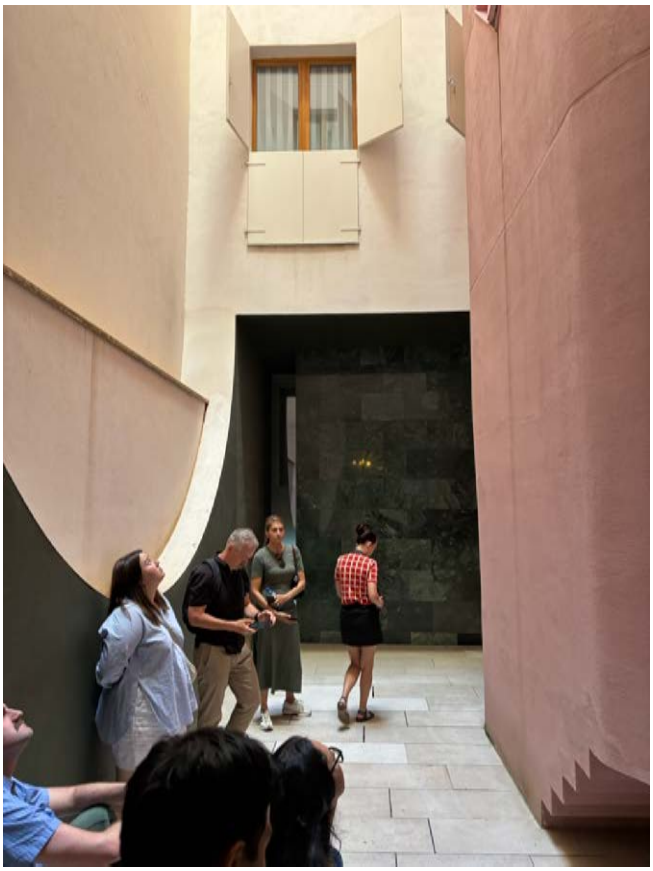
Barcelona: Historical Passivity

In Barcelona, there appears an engrained consideration of the past, whether that be formal, symbolic or environmental. This could be through the display of history's complexity with structural composition, or through the elemental reutilisation of the past's physical materials (tiles, bricks, doors, etc) to continue the complex history of an individual building. The past is thus something that produces the now into the future.

But for apartment design, in which a clear regularity and repetition is best, Barcelona has begun to prioritise the simple environmental controls of its hot history. With a large push for more social housing in a city with little history of it, cross-ventilation is now seen as preferable over air-conditioning, and architectural initiatives are driving it.

Peris y Toral's The Greenh@use is an example of social housing in which three distinct groups are afforded homes. Refugees, social housing renters and age care residents are contained across 140 apartments on nine levels. Each apartment is double fronted with large windows facing the street and ventilated entryways facing the interior atrium. This enclosed atrium is then controlled through solar shades and louvres to regulate the temperature of the apartments themselves and the atrium. This simple public void then provides the basis of social spaces across the whole building.

Future Use, The Greenh@use, Peris y Toral, 2024



Passive excess at the bottom of an atrium, 110 Rooms, MAIO, 2016

Most people would be concerned for aged care residents without air-conditioning, but the simple stack system was clearly effective from our visit. For extreme weather conditions, residents on each level have a public area nominated as a climatic safe space that is air-conditioned, minimising the operational carbon of the building, yet ensuring comfort in rare occasions. These public areas are then provided with facilities in normal times—a gym, a classroom and a computer room—which ensures further social amenities for the groups to share. This is a system of environmental addressment based on sociality and an idea of comfort that isn't one temperature.

Cross-ventilation is something Australian's have always considered in our landscapes. The control of air and wind is something that defines much of our design thinking in buildings and landscapes outside of urban developments. When we are hot, the flow of air reduces the degree of temperature that we feel. As a rule of thumb, when the air flow changes .5m per second, we feel a single degree less of the temperature. However, when it comes to apartments, our consideration of air flow is often unitary. Rooms must be ventilated, but whole apartments do not have to be cross-ventilated between rooms. There is a difference here which is not simply thermodynamic, but also social.

MAIO's 110 Rooms completed in 2016, and a more recent project in Sant Feliu de Llobregat completed this year, are examples of this passive preference. Here MAIO focuses concomitantly on the design of non-binary spatial planning and ventilation afforded through five rooms of the same dimensions and the same ventilation capacity between them. This type of typological consideration ensures both apartment ventilation and spatial openness with doors between each room being 1.6m wide. In this design a bedroom can be placed on the west in winter and moved to the east in summer, or a bedroom can be a second living room depending on the number and diversity of inhabitants.

While some of Australia's discussion around living standards has centred around heating and cooling for rental properties,[3] the understanding of the past and its preference for passive in Barcelona cannot be lost on those of us living in a similar climatic zone. The opportunity here is the embedment of environmental considerations and social dynamics, something that can engrain a new way of perceiving comfort and how we connect with those within our own homes and those homes around us.

[3] The Victorian Government will mandate air-conditioning into existing rental properties in the coming years. While this is no doubt a good thing for renter's living conditions, new apartment buildings clearly have the opportunity to still address these requirements but through different and more effective forms of heating and cooling.

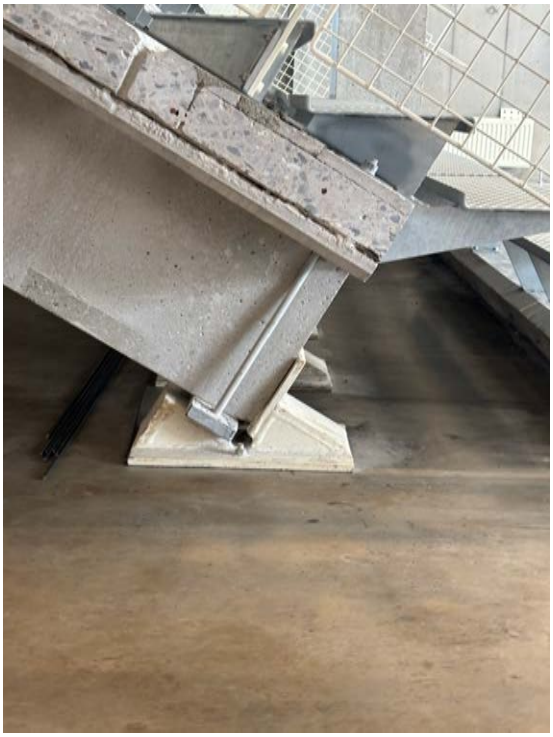
Copenhagen: Material Scales

If Amsterdam presented spatial clarity, and Barcelona embedded climate knowledge in typology, then Copenhagen's contribution lay in material thoughtfulness and institutional support for architectural risk.

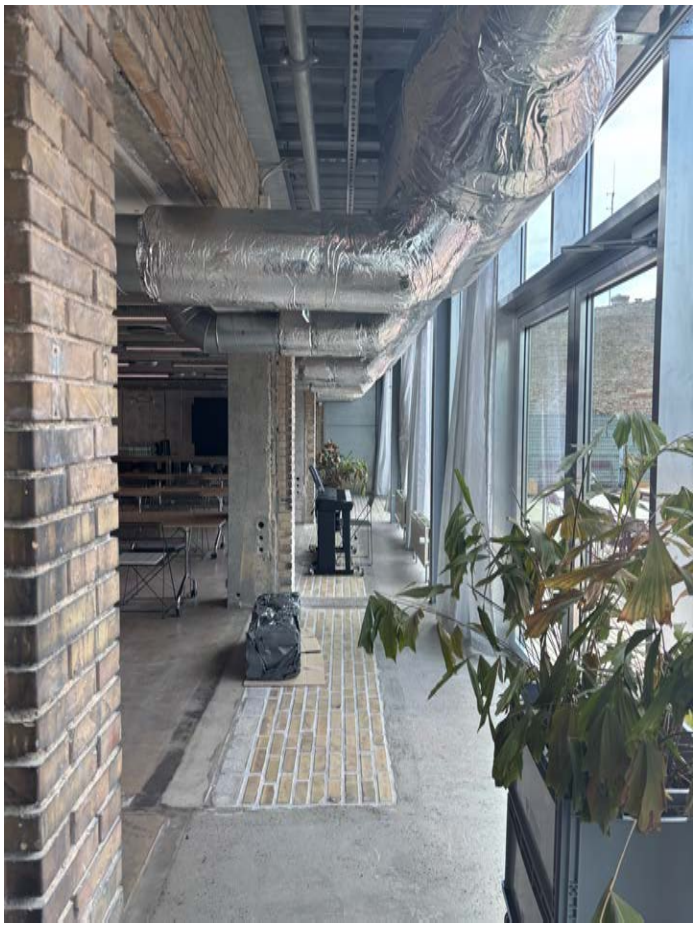
Here, sustainability was not simply operational or technical—it was deeply tied to the physical presence of architecture and the landscape around it. Architects were looking into what the physical make up of the built environment can be and the impacts a building's material composition can have. In conversation with practices like Johansen Skovsted, Philman Architects, and MAST, a pattern emerged: a willingness to explore alternate methods and materials, supported by governmental frameworks that reward research, not just delivery.

At Johansen Skovsted, buildings operate somewhere between infrastructure and artefact in the landscape. We discussed their work with co-director Søren Johansen over coffee and cake, and his take on the Denmark's new material attitude. Materials are handled with a precision and modesty that foregrounds longevity. Galvanised steel is selected for the climatic response to the acidic North Sea air, and steel rods become tensile structure, selected with direct steel fabricator knowledge and resolved with care. For Johansen Stovsted, architecture that directly addresses a proper climatic response to the Denmark's changing environment is one that grows from material experimentation within the existing structural frameworks of mass production, for it is here where impact can be made.

At Thoravej 29 by Philman Architects, the reuse of an industrial shell becomes a project of representational sustainability. A collaborative workspace and community centre emerge from the perpetual re-use of everything that previously existed within the old factory. Holes are cut into pre-stressed concrete slabs to create staircases, brick walls are dismantled and laid before their previous location as flooring (a one to one symbolic act of reuse), and tiles are left on walls to misalign with new layouts of enlarged bathrooms. This isn't efficient sustainable addressment, but an attitude to the building as a signpost. Surprisingly reminiscent of Venturi, the material composition of a building becomes an advertisement for it ethical position. The building, while able to operate as a warehouse for anything, shines brightest as an image of a new material attitude in which sustainable choices is not concealed, but publicised through the skin of the building.



How to save a post-tensioned concrete slab, Thorvej 29, Philman Architects 2025



Brick walls as floor (a symbolic advertisement for reuse), Thorvej 29, Philman Architects 2025

MAST Architects, working across land and water, grow from different foundations. The groundworks are of water, and their approach to a simple architecture to take to the sea instead of land. Denmark, a country of vast islands, bodies of water and very little native land habitat left, proves the perfect testing ground for floating architecture. Their work with modular floating structures and marine infrastructure suggests a future temporary urbanism.

While these three practices may differ in term of direction of change, all had made use of Denmark's governmental or private research funding. Grants, partnerships, and funding schemes appeared to be the norm of practice, not the exception as in Australia, and many of the young practices that we met had profited from them in order to experiment and innovate. In Copenhagen, material consciousness is not only encouraged but institutionally enabled. What stood out was not a singular architectural attitude made from macro scale contextual factors, but a multiplicity of processes and resolutions no matter the size of architecture practice or project. Funding, and the ability of young firms to make use of it, allowed the architectural scene here to work outside the normal trajectory of renovation, house, public work and up, and start to innovate while small.

Summary

Across Amsterdam, Barcelona, and Copenhagen, what we witnessed was not the imposition of one grand sustainable solution, but a careful, often quiet, embedding of spatial, environmental, and material intelligence into architectural practice. These cities each offered different scales of intervention—spatial clarity in Amsterdam, climatic responsiveness in Barcelona, and material experimentation in Copenhagen—but they shared a deeper resonance in their approach. In each place, what we saw was architecture operating beyond the immediate, positioning itself as an active participant in something that speaks to the future, and not necessarily simply the present.

For myself and my practice, we are often searching for ways to act meaningfully within structures that resist experimentation and grow instead from longevity and practicality in some form. The practices we visited showed us that innovation does not always require a revolution, but it does require support. If there was an undertow to this tour, it was a lesson in the value of subtlety and the power of systems that enable small, steady architectural change. The Dulux Study Tour was a great signpost that architecture does not always need to be louder, but clearer. Not necessarily more ambitious, but more direct. And perhaps this is the real call to action: to design with care, to advocate for structures that support, and to understand that change can be both local and collective—small, specific, and, with time, transformative.

As a final note, I would like to thank everyone on tour for the conversations we had and the meals we shared. While the experience of the Dulux Study Tour is, in some way, project and architect specific, it was the conversations we had at the end of a day that brought these projects and architectural ideas into new light. Thank you to the group of nine for such an amazing opportunity to share and engage, and I look forward to the next group of architects who get to partake in this truly incredible endeavour.