

Living Smart Competition: Big Ideas Small Lots

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The goal of the Living Smart Competition was to create a catalogue of ambitious, innovative, yet reasonable designs for narrow lot construction in Portland, Oregon. Much of the existing housing in the city's suburban areas was exceedingly similar in appearance and made no real connection between the residents and the street. As a result, the residential streets of Portland started to look more like car channels faced with garages, than livable neighbourhoods where social interaction and activity on the streets was wished and welcome. The call for submissions by the City of Portland was very explicit in stating that the major aim of the Competition was to make a stronger connection between the Portland habitant and the street, push the garage out of the focal point, and create modern, comfortable, beautiful and exemplary living spaces.

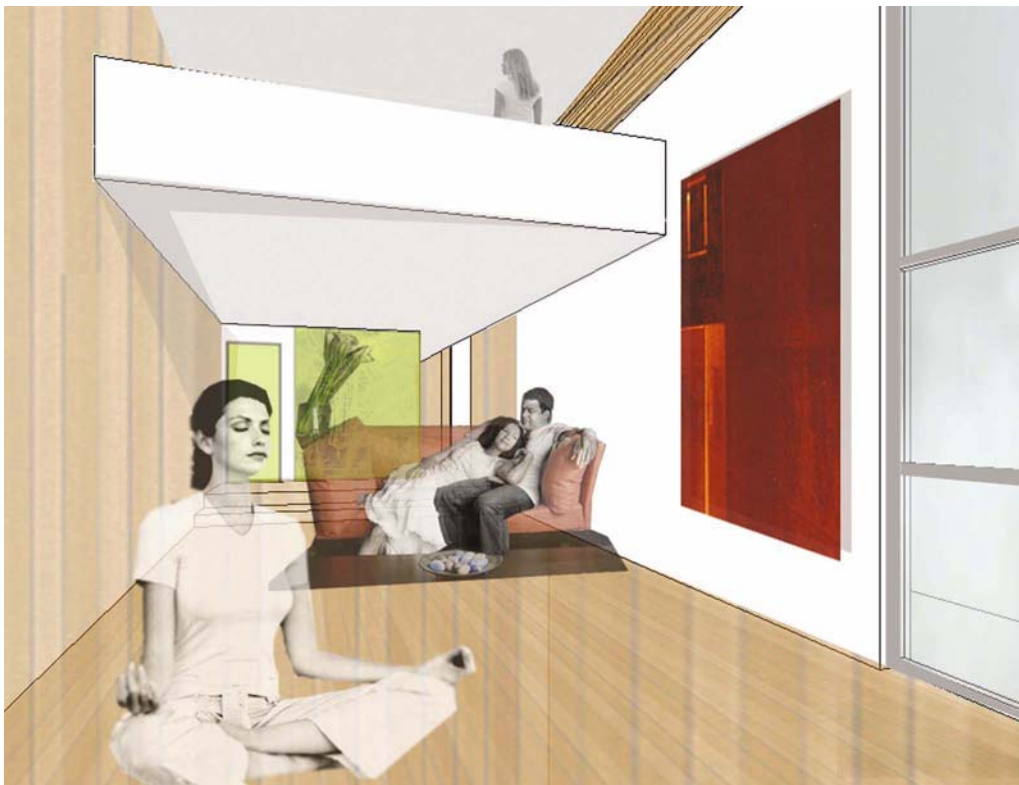


Image 1: Interior Perspective

Our final submission was geared towards the creation of a simple, economic dwelling that, through the planning of its spatial volumes and the use of different materials, attained a sort of luxurious quality in its living spaces. We were basically trying to communicate that living in a small house, with a lack of spatial excess, can be reasonable and even highly desirable (as it is cost effective) if the proper architectural moves are undertaken in its initial design. There were two major moves that drove our final proposition: the separation of the house design into three distinctive units and the creation of a flexible, free building plan.

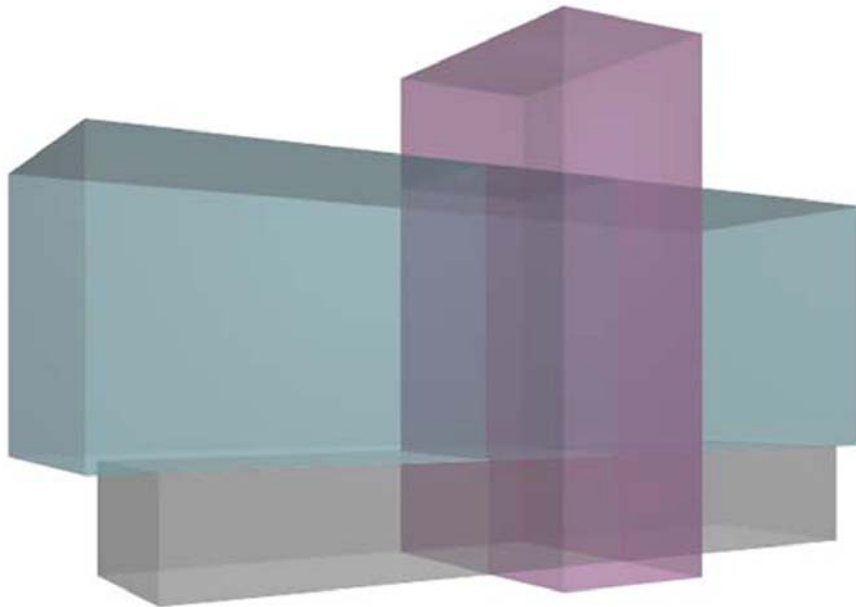


Image 2: Three Volumes

The ultimate iteration of our house submission was made up of three individual volumes: the *concrete base*, the *wooden box*, and the *plastic shaft*. We were driven to this move as a result of being highly influenced by the spatial and

sculptural qualities of **Emery House** by Denton Corker Marshall Architects from Victoria, Australia. **Emery House** makes a dramatic move in the landscape as a result of its highly accentuated, cantilevered “living box”. The box looks like it is reaching out to and trying to absorb the nature around it through its large glass window in the front. We wanted our creation to be able to do just this with the streetscape of Portland, Oregon. We wanted it to reach out and visually connect with the kids playing on the street, and people walking on the sidewalks.



Image 3: Emery House

In our design, the *concrete base* was meant to be very rough and sturdy looking – that is where the garage and most of the services were located (kitchen, boiler room, laundry room, storage...). It was the literal and the symbolic root of the dwelling – it held up the rest of the building structurally, and it provided it with its basic living and mechanical amenities.

The *wooden box* was the warm living area that perched over the concrete base and extended closer to the street. It made a very physical move of pulling out over the garage in order to literally push it to the back and out of the passer-by’s sight and focus. It was conceived of as a steel-framed construction clad in wooden slats which covered the walls and extended over the windows. The window slats could be operated and adjusted according to the tenant’s wishes as

in the **Private House** by Henning Larsen Tegnestue. The **Private House** struck us as a very inspiring work because it communicated porousness as well as solidity in its design. Because of the way the wooden slats were used on its facades, the dwelling could appear completely impermeable (when the shades were closed for tenant's privacy and comfort) or entirely open (when the slats were raised to let in the sunlight, allow for better air circulation and optimize the tenant's views). Our *wooden box* housed the living room (which extended towards the street), the library and the upstairs bedrooms. It was the leisure and entertainment portion of the house symbolically fueled and supported by the base of the dwelling (the concrete bottom which housed the services).



Image 4 : Private House

The *plastic shaft* was meant to be the kinetic part of a static dwelling unit. It is where all of the deliberate circulation paths (stairways and landings) were found. The exterior cladding of the *circulation shaft* was inspired by Herzog & de Meuron's Stirling Prize Winning design of the **Laban Dance School**. At **Laban**, the perimeter windows of the building were all covered in a layer of plastic polycarbonate which distorts and diffuses light and shadows created by the occupants. Because of its transparent and translucent qualities, the façade of the centre becomes an everlasting art piece – continuously emitting the silhouettes of the dancers on its surface. It is a delight for the eye whether during the day, when the skin mostly reflects the weather conditions, or in the evening, when the dancing bodies animate the surface of the complex. The *circulation shaft* of our design would be clad in exactly the same material in order to communicate to the exterior the movement that is happening within the house and in that way link it to the street. The choice for this material was also

influenced by the fact that it can be manufactured at any size, it is of a lower cost and it is readily available at any plastic-making facility.

The wish for a creation of a free plan in our design came out of the need to make the building as versatile and as timeless as was possible. By not attributing any particular designation to the building spaces, they could be sold to a variety of clients and adopted to their specific and ever changing needs. The least flexibility was found in the concrete base of the building, the most in first and second floor which could be altered to accommodate one individual, one family, or a more numerous grouping of people. The only clear separation of the upstairs spaces was exerted by the circulation shaft. The shaft was also serving a structural purpose in that it supported the floor slabs. This circulation space created two very large open volumes on its either side on each floor. As the resulting spaces were unobstructed and had no partition walls, they could be used in any way the tenant wished. They could be bedrooms, reading rooms, work rooms or simply open spaces. In case the tenants did not wish to use a particular part of the dwelling unit, they could seal it off by the use of pocket doors which were embedded in the circulation shaft. This would allow them to cease the heating/cooling for that portion of the house for as long as they were not using it and ultimately economize on their living costs and environmental impact.

As in MVRDV's **Houses on Borneo Sporenburg**, the two major living areas of our design (the kitchen/dining area as well as the proposed living room) were made into double height spaces by shortening the floor slabs of the spaces above them. With this move we hoped to, much like MVRDV, create a feeling of spaciousness and comfort in a small, narrow dwelling. We were also hoping to, with this, attain a certain dynamic in the building section, which would have otherwise been very plain and linear. It is for this reason that we had added a ramp at the exterior building entrance and a number of steps at the entry-kitchen transition and in the supposed living room. We believed that, as in the **Houses**

on **Borneo Sporenburg**, minimal gestures such as adding a few steps to create a more interesting space, could have a great impact on the overall atmosphere in the designed dwelling.



Image 5: Houses on Borneo Sporenburg

With the unification of all of the previously mentioned, carefully examined building elements such as unobstructed living spaces, double height volumes, large window openings facing the street, minimization of wasted space, operable windows and shutters, etc., we aimed to ultimately provide a certain quality of living for the possible tenants of our building design. We were very conscious of the fact that today's clients needed versatility, flexibility and security in a house design. As the competition outcome was mainly targeting a market of young single families, they needed to be confident that the interior of the home they do end up buying could be entirely adopted to their needs and life changes such as the arrival of children or home business opportunities. Similarly, they needed to be assured that buying a small plot of land would still allow them to have access

to private spaces on the exterior of their dwellings. In our design, we tried to resolve this by minimizing the front setback of the house and thus increase the size of the tenant's backyard. We also tried to reduce the building footprint on the soil and build in height as well as create a rooftop terrace for the client's enjoyment.



Image 6: Long Section

Finally, although the competition did not require it of us, we conceived of a building type that could easily be adapted to an environmentally friendly standard (LEED, for example) and thus become exemplary not only in the domain of architectural design but environmental consciousness as well. This would be further explored in the second stage of the design competition.

Bibliography

Periodical References:

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Image 5: Houses on Borneo Sporenburg by MVRDV

http://www.mvrdv.nl/049_borneohouses/index.php

Image 4: Private House by Henning Larsen Tegnestue

<http://www.gma.dk/engvers/summerhouse.htm>

Image 3: Emery House by Denton Corker Marshall

http://www.findarticles.com/p/articles/mi_m0NIT/is_6_89/ai_86628934.htm