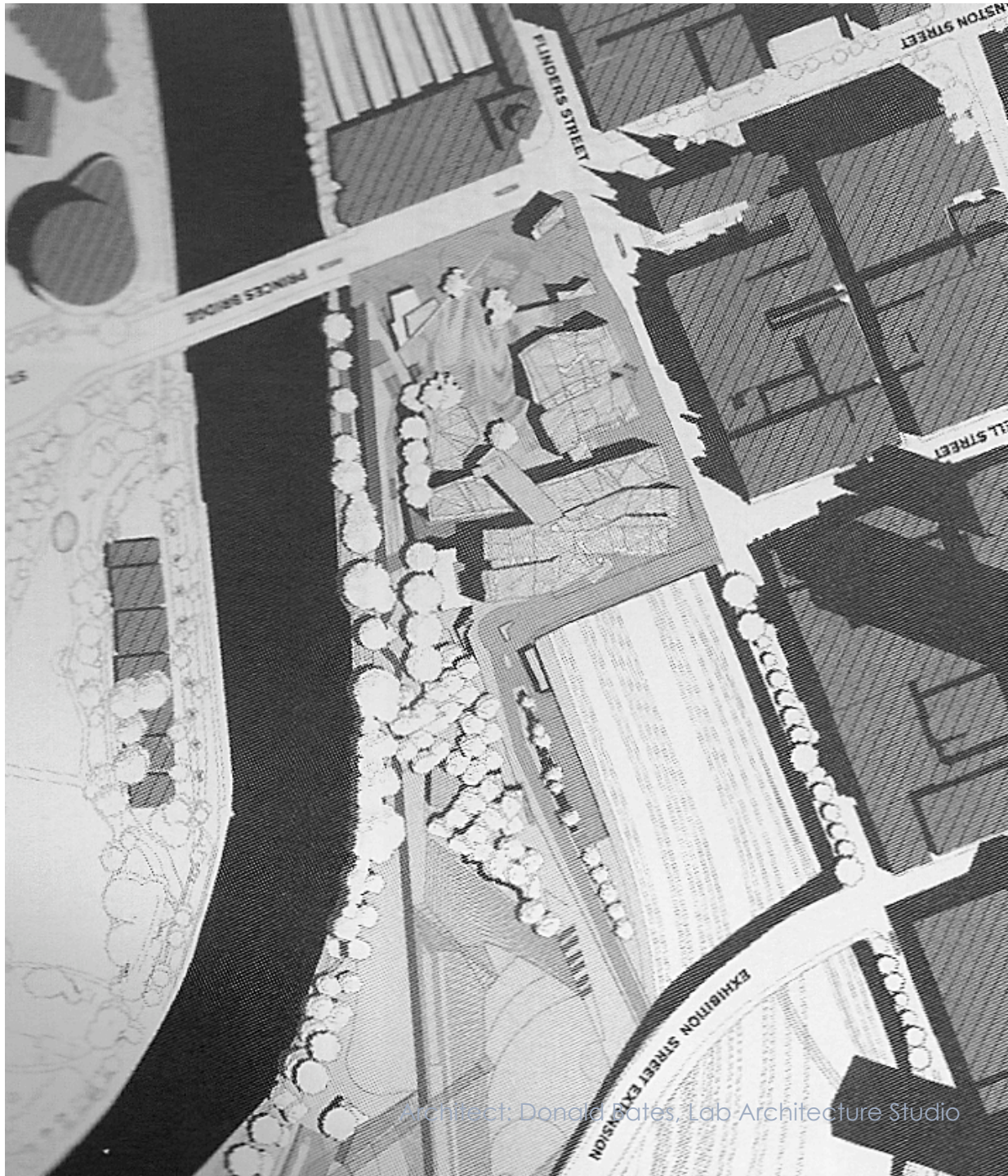


Federation Square

Latticed Walls

Architect: Donald Bates, Lab Architecture Studio



Design Competition
sited in Melbourne,
Australia

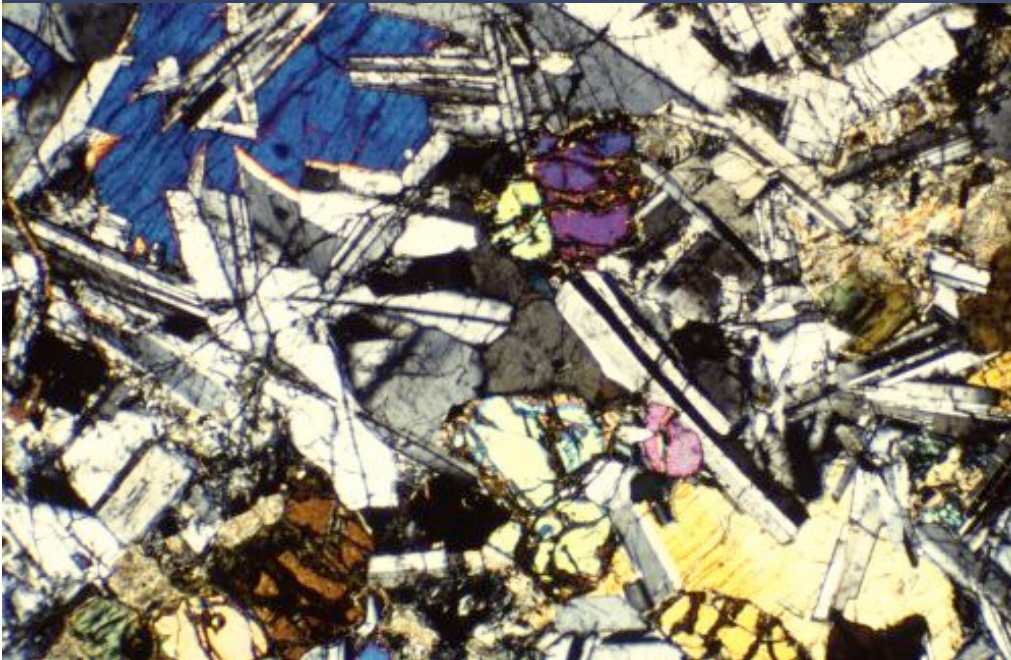
Above the railroad
tracks

Between a main street
and the river.

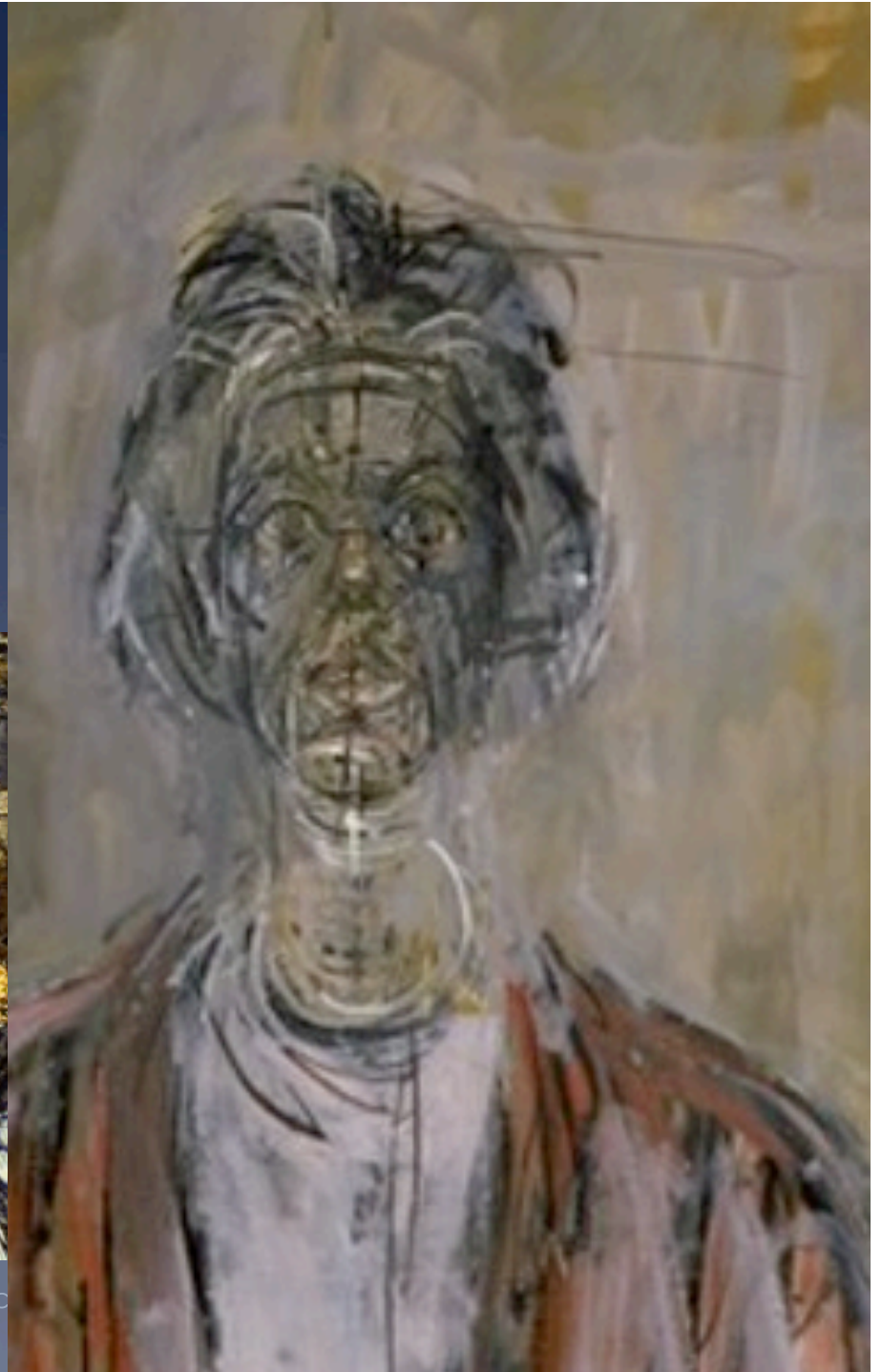
Two primary inspirations:

“Giacometti uses a multiplicity of lines, so that there is no singular line that makes the chin, nose, or ear”

“ a different kind of organizational strategy, a ‘matrix order’ ”



Architect: Donald Bates, Lab Architect





Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio

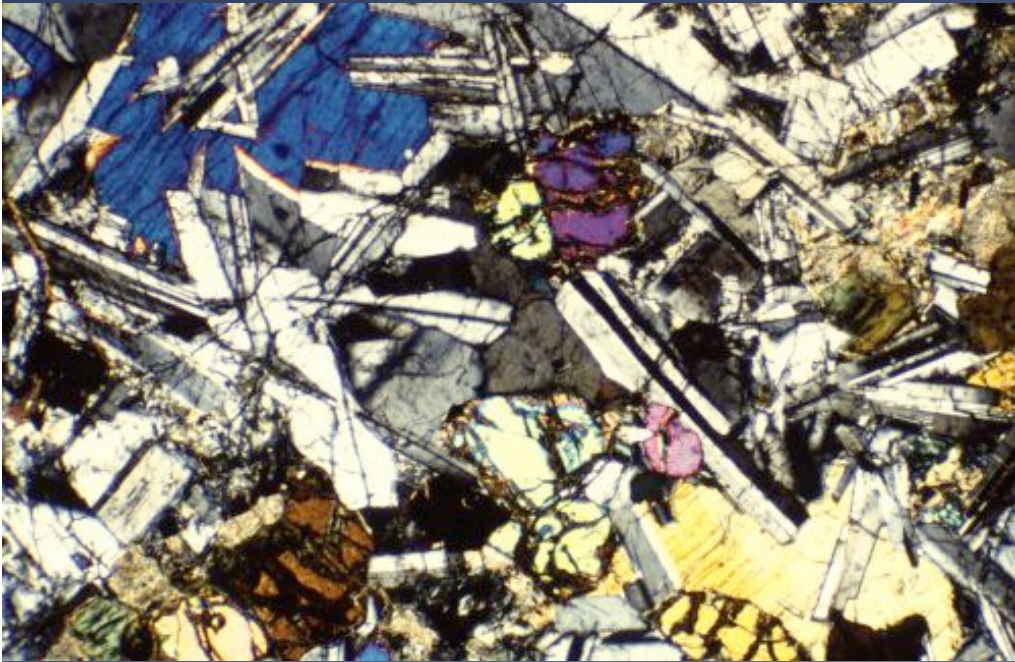


Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio

acmi



How to achieve this order?

Constantly shifting

Yet ordered by the molecular structure

The underlying lattice

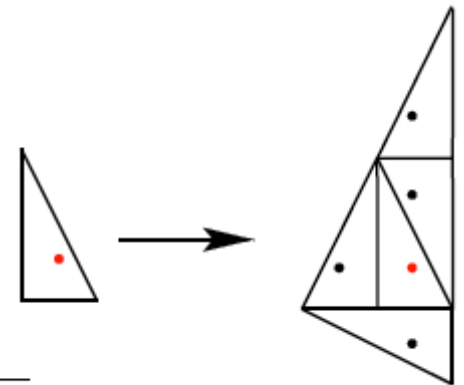
Architect: Donald Bates, Lab Architecture Studio

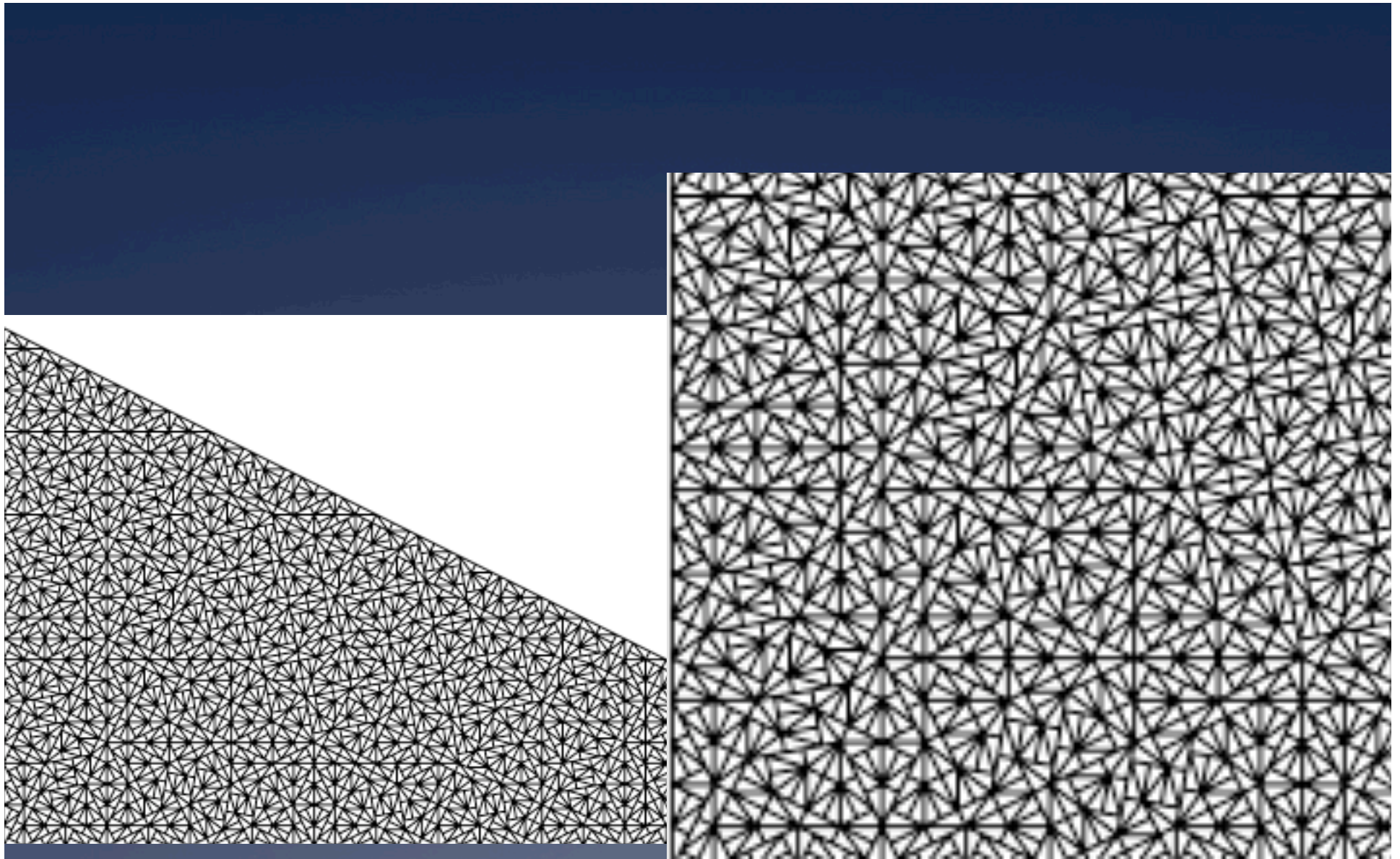
Conway-Radin Pinwheel Tiling

C. Radin, *The pinwheel tilings of the plane*, Annals Math. 139 (1994) 661–702

Some properties:

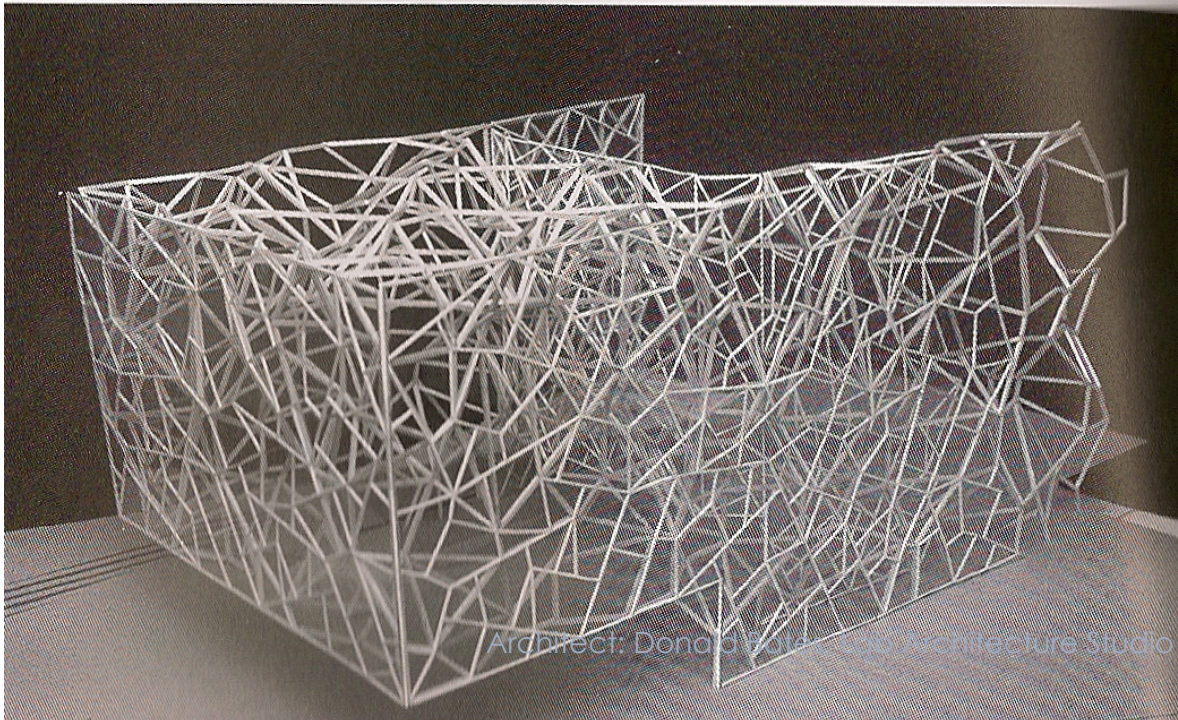
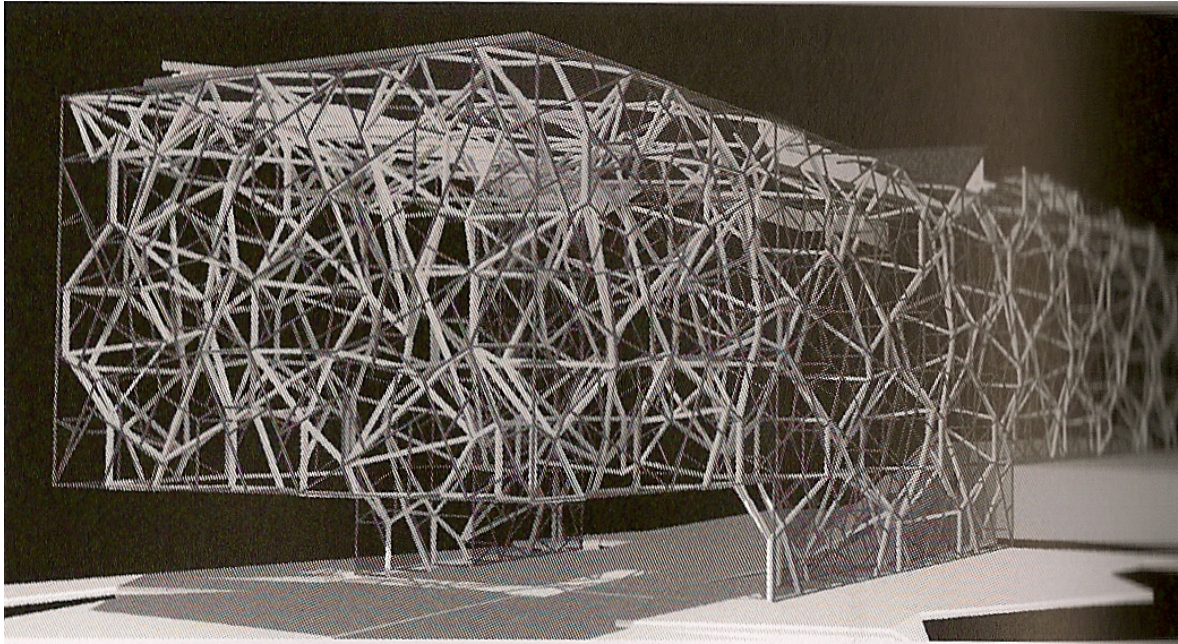
- Substitution tiling
- Tiles: triangles of side length 1, 2, $\sqrt{5}$
- Rotation by $\arctan(\frac{1}{2}) \notin \pi\mathbb{Q}$
- Infinitely many orientations



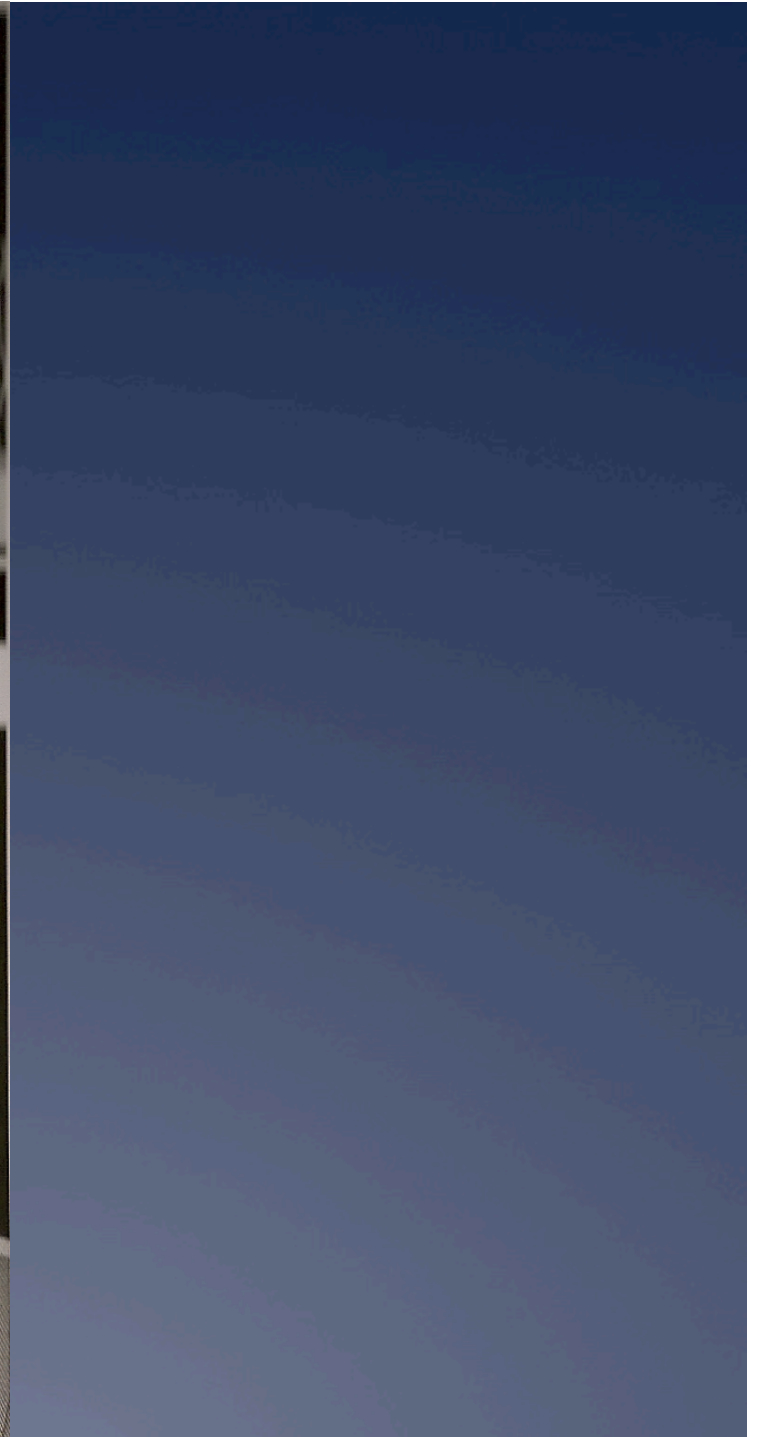


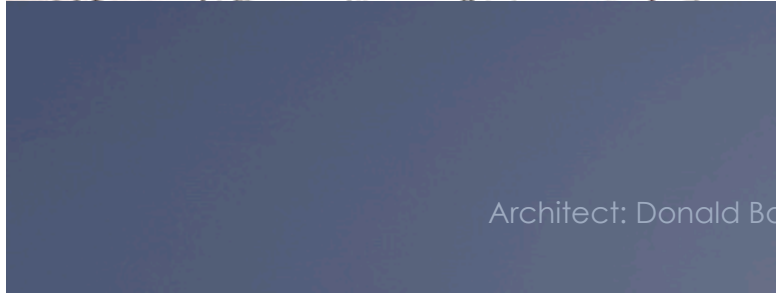
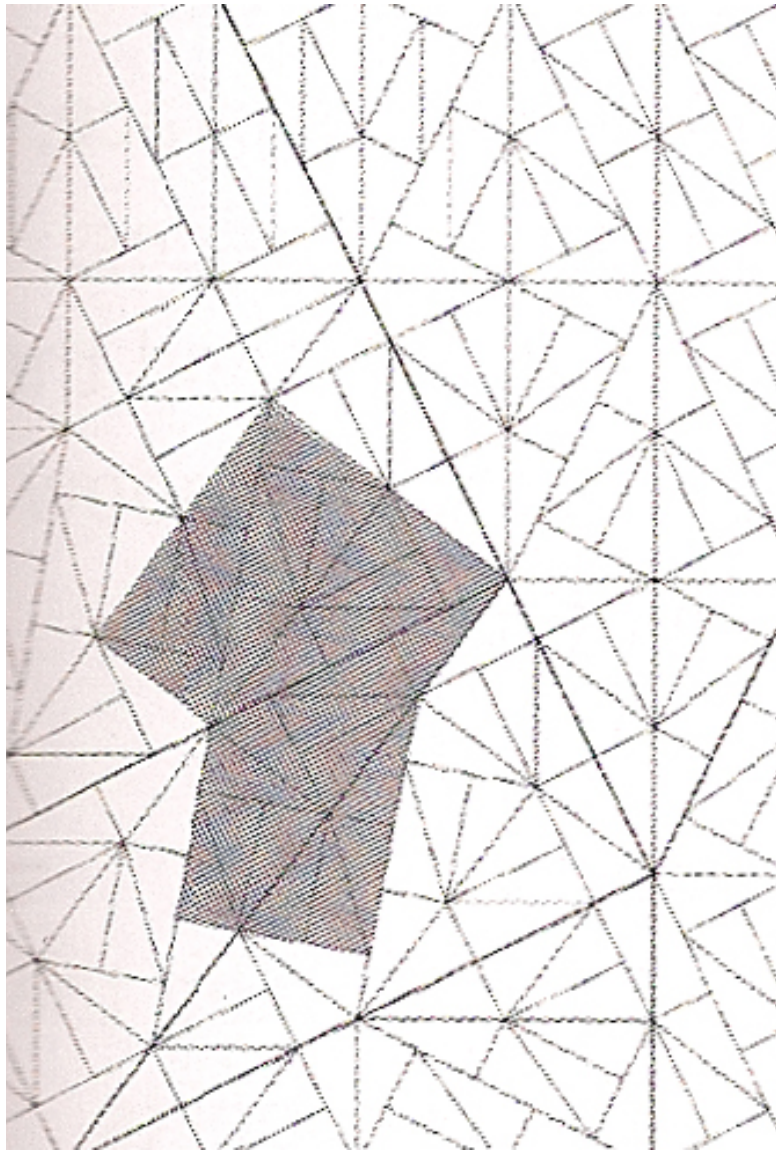
Conway's pinwheel rotated grid..."Aperiodic" always changing

Architect: Donald Bates, Lab Architecture Studio

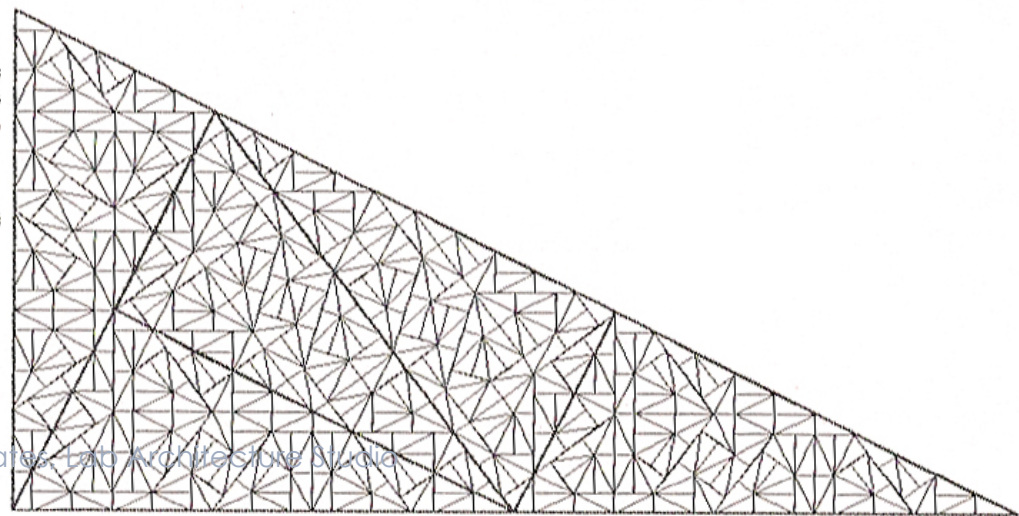
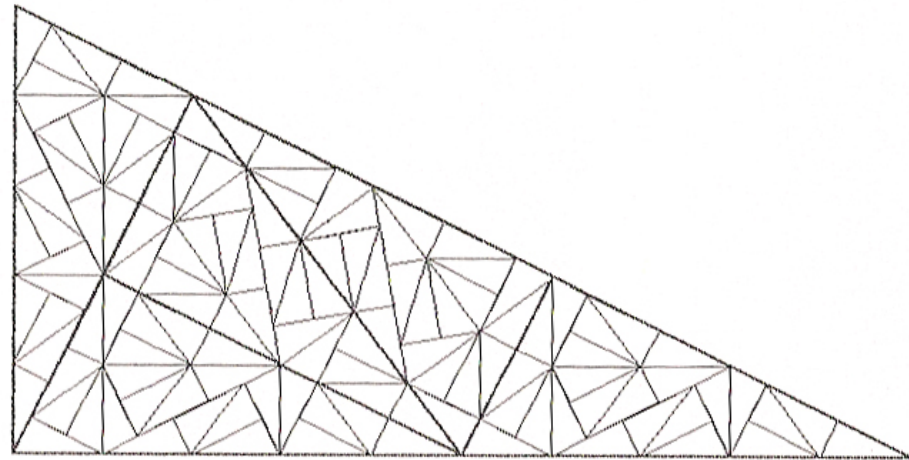
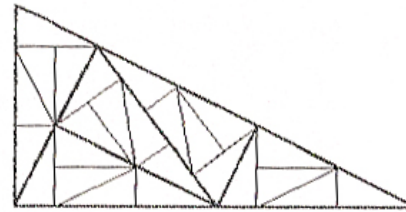
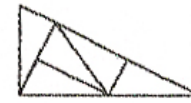


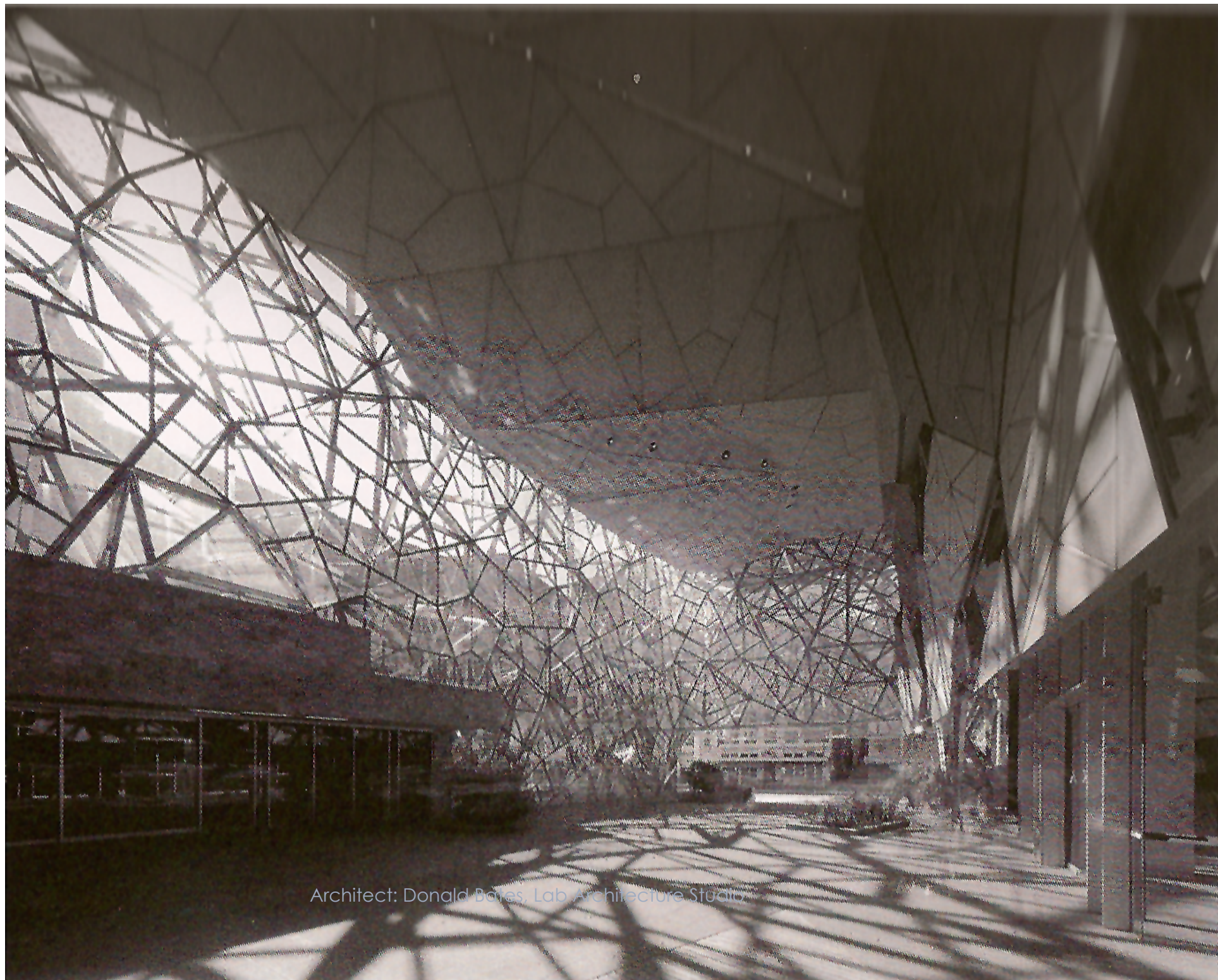
Architect: Donald F. + Lab Architecture Studio



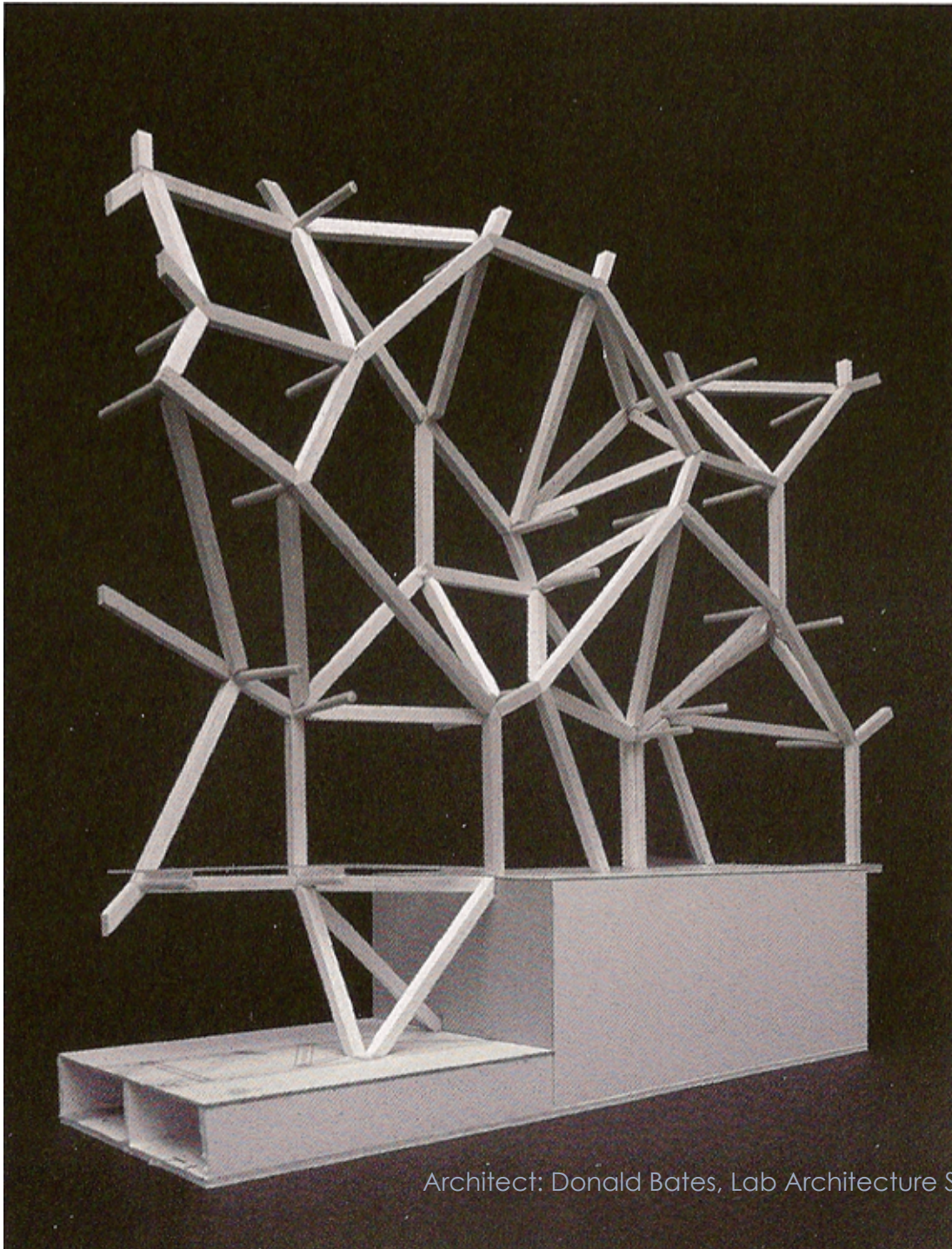


Architect: Donald Bates, Latta Architects Studio

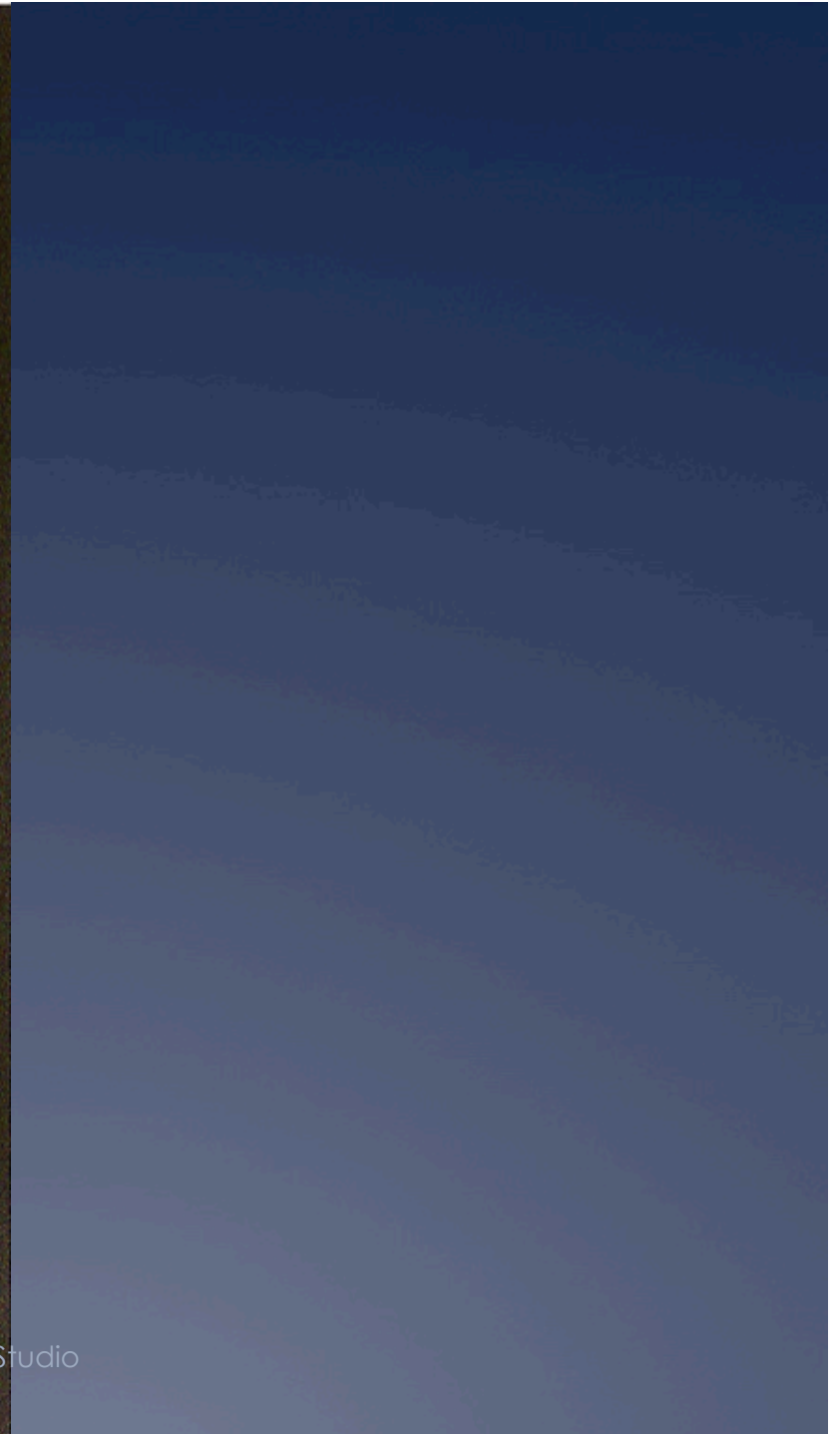


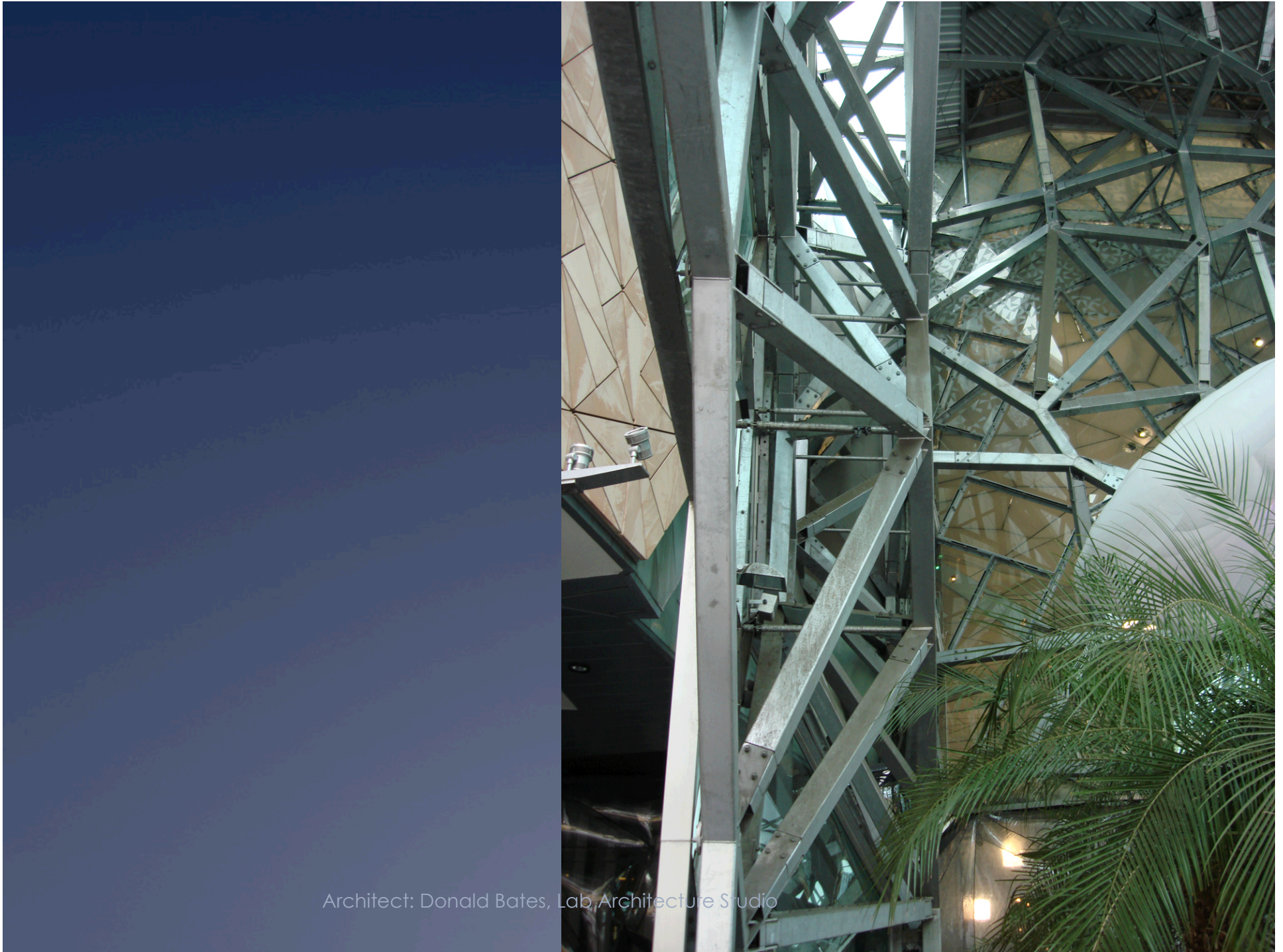


Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio





Architect: Donald Bates, Lab, Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



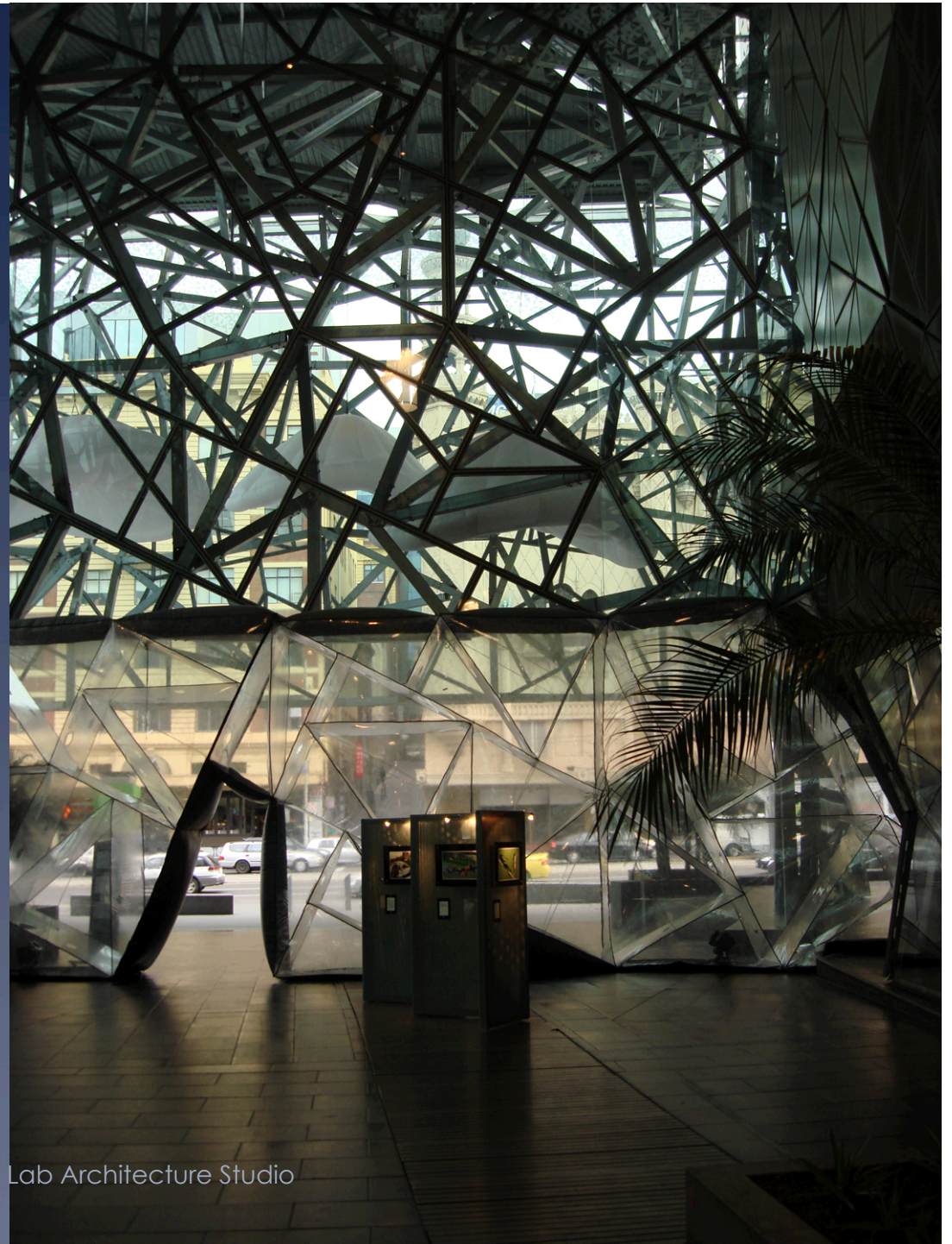
Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



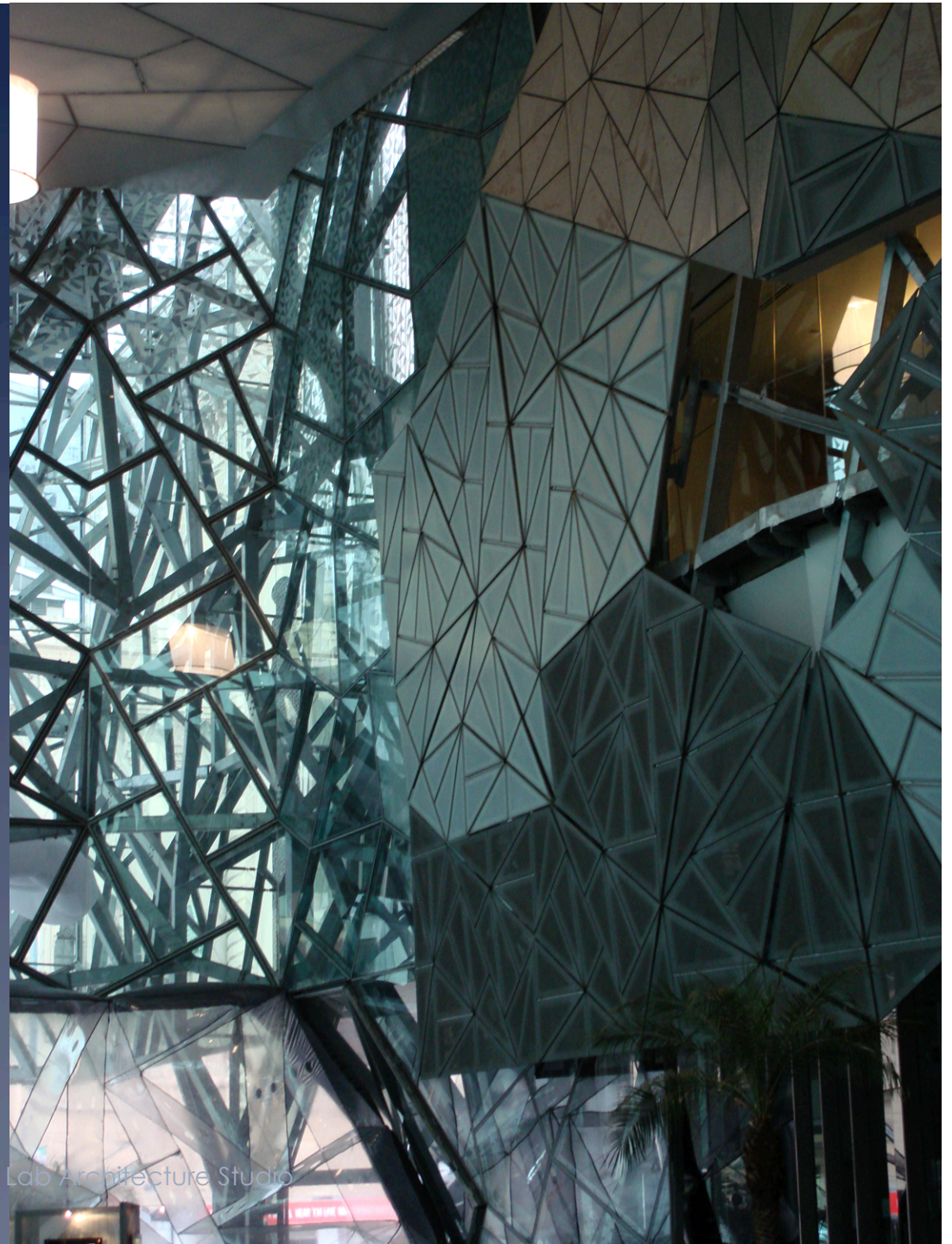
Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



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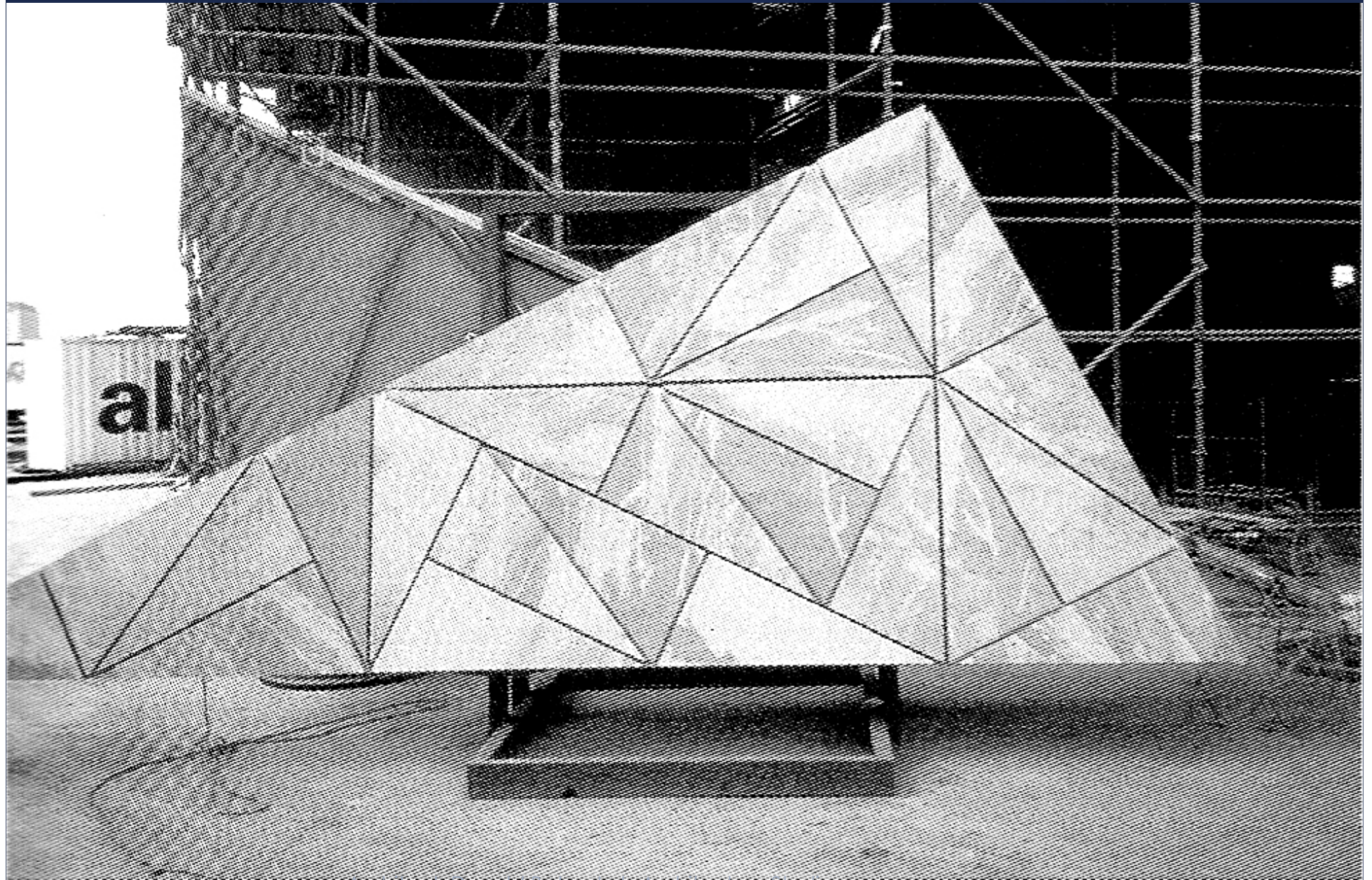


Architect: Donald Bates, Lab Architecture Studio

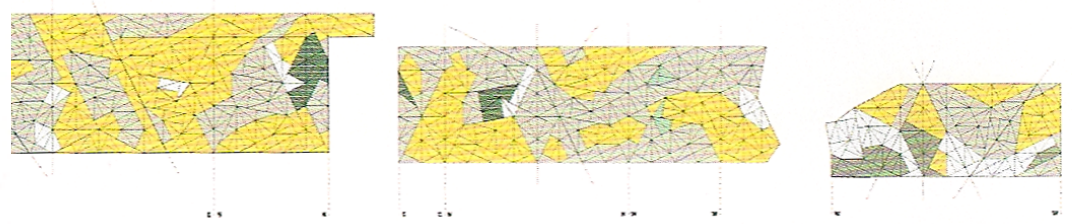
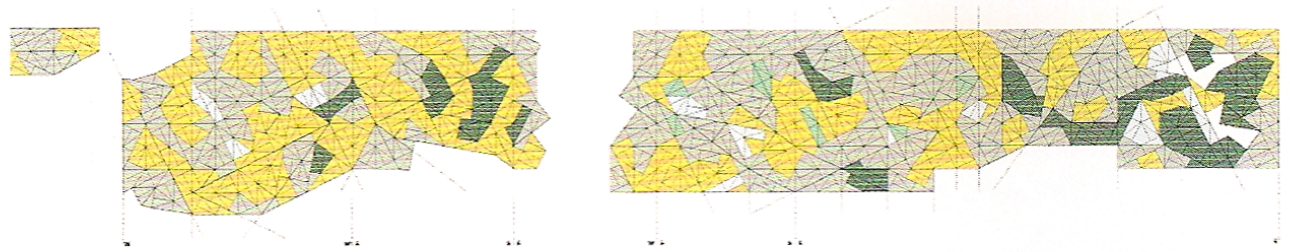
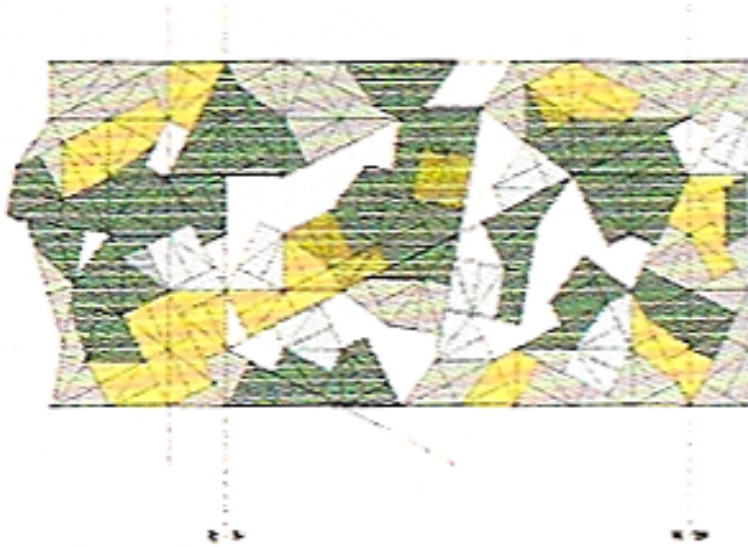
“surface is not superficial, but
rather uncertain in its depth of
influence and involvement”

Architect: Donald Bates, Lab Architecture Studio

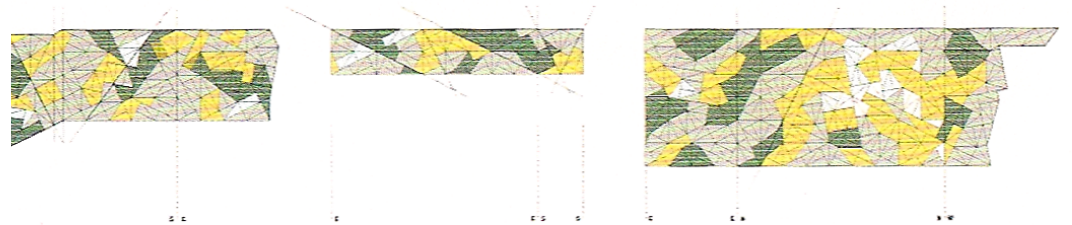




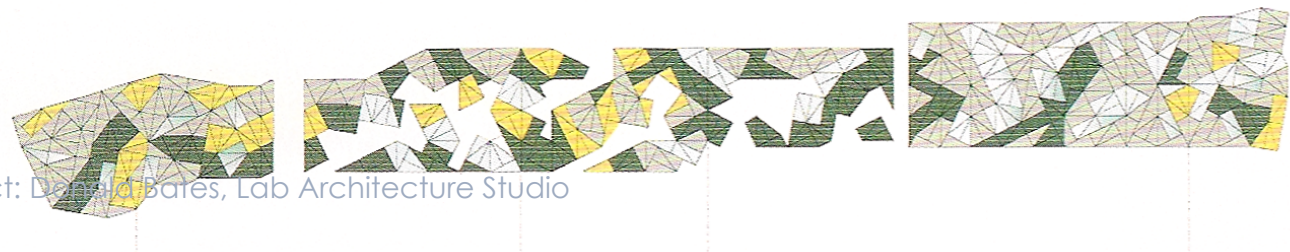
Architect: Donald Bares, Lab Architecture Studio



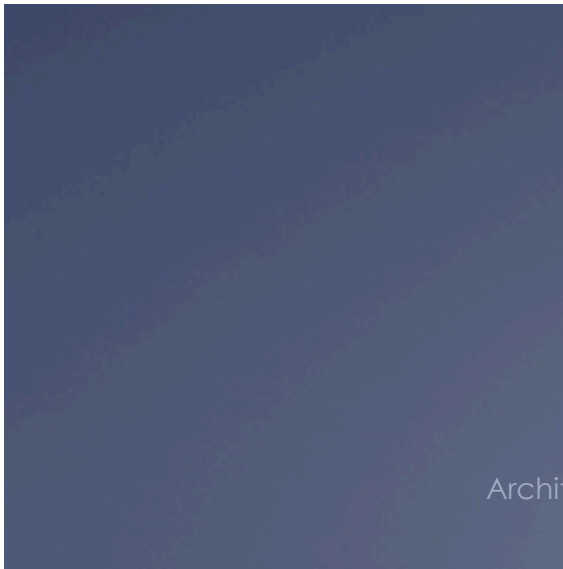
MoAA FACADE WRAP



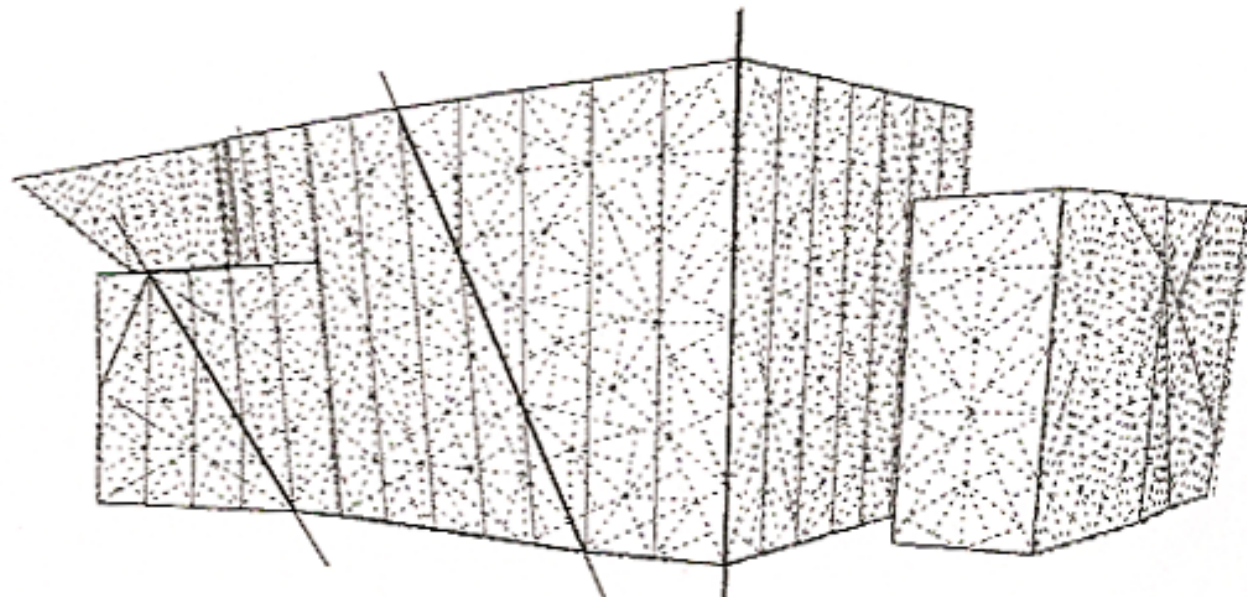
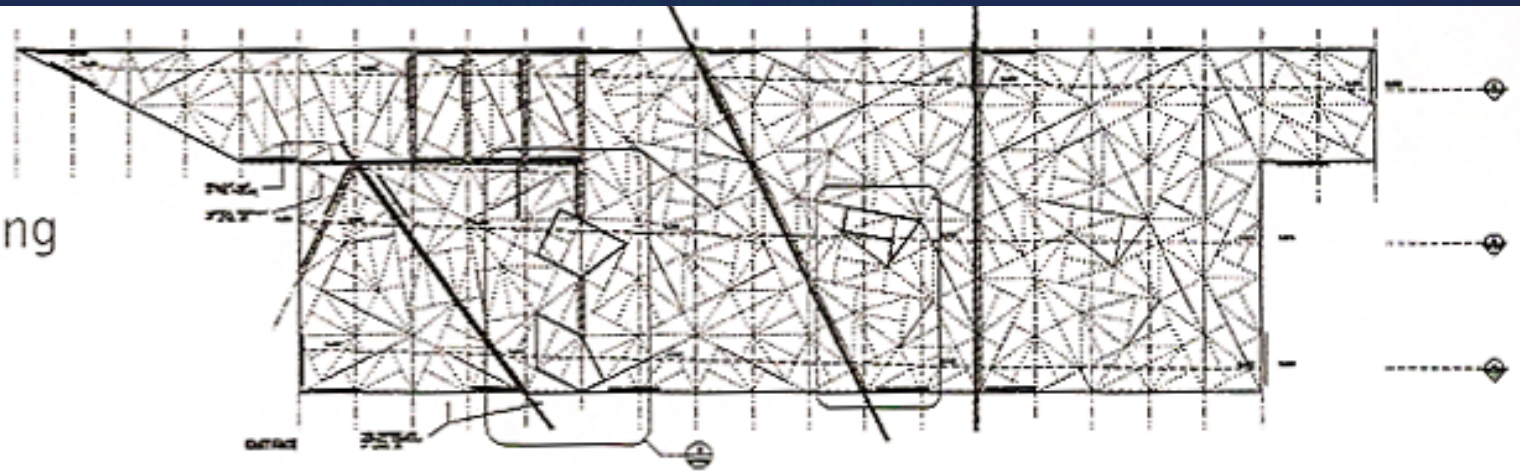
CINEMEDIA/SBS FACADE WRAP



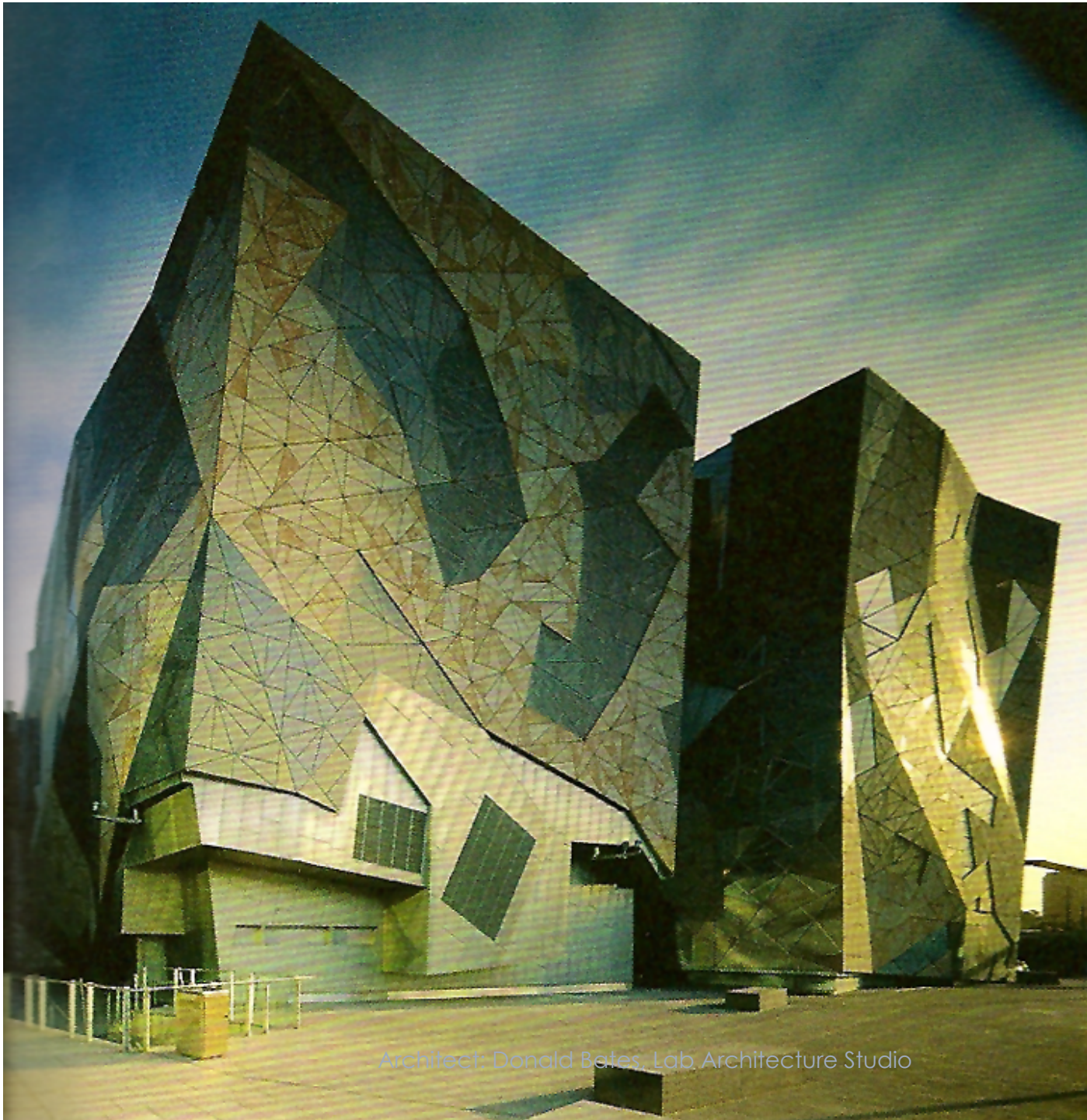
Architect: Donald Bates, Lab Architecture Studio



14.25.
*Federation
Square: folding
the façade.*



Architect: Donald Bates, Lab Architecture Studio



Folding makes for a zone of adjustment

“Additionally, the folding accommodates the mechanical air-handling units and ductwork between the façade and the inside of the galleries.

We were able to push and pull the facades in and out relatively easily to accommodate late changes, such as the need for the mechanical equipment to be larger.” *Donald Bates Lab Architecture Studio*

Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



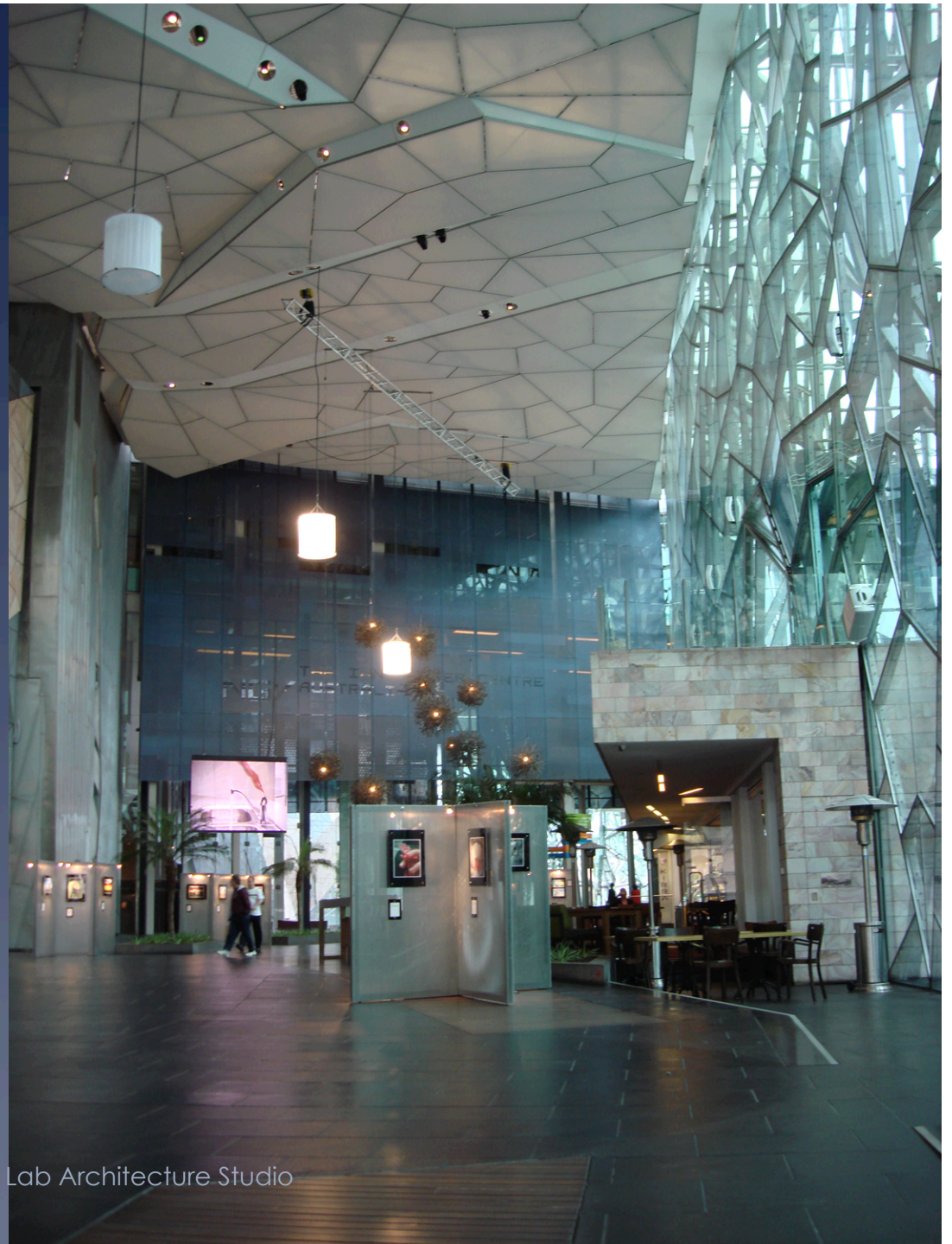
Architect: Donald Bates, Lab Architecture Studio



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Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



Architect: Donald Bates, Lab Architecture Studio



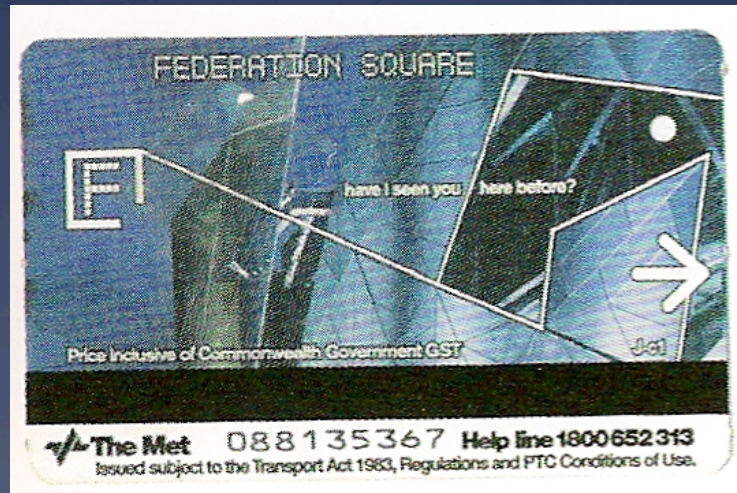
Architect: Donald Bates, Lab Architecture Studio

Looking out from inside

14.22.
View of *Federation
Square* along Flinders
Street.



Architect: Donald Bates, Lab Architecture Studio



Signs of public acceptance

Architect: Donald Bates, Lab Architecture Studio