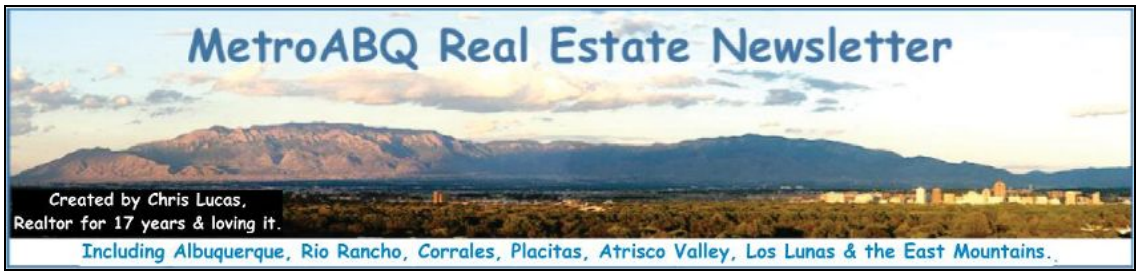


<April>

An Architect & Artist's Downtown Digs

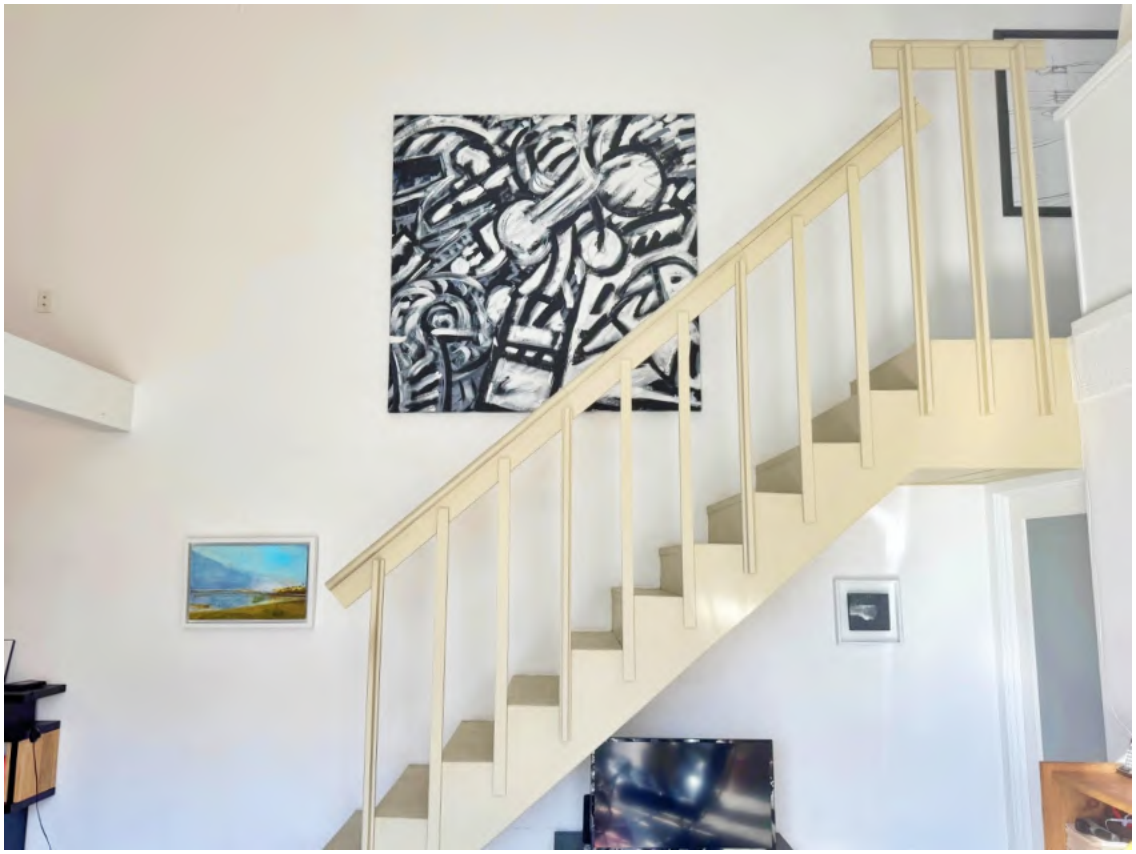
Trombe Walls Form & Function

MetroABQ Downtown has an abundance of wonderfully unique pocket neighborhoods, small enough that if you blink & miss the turn, they're gone. A few that readily come to mind are the Watson Adobes in Old Town, some North Zoo streets in Barelas, & the few blocks of the historic 8th & Forrester district; they all tend to stand out & have something in common.

Always a place for reinvention, the MetroABQ core also has unique, slowly emerging pocket neighborhoods that may become famous shortly. Some are so small they may never appear on a map, but are interesting enough to be noted.

One emerging spot is a small section--maybe four blocks--on the edge of the Railyards Warehouse District. Tucked in near auto mechanical shops, an overnight unhoused shelter & a Soul Harvest Ministry, the area consists of a scattering of undeveloped lots, & a few atypical-style residential homes, created by a few atypical people.

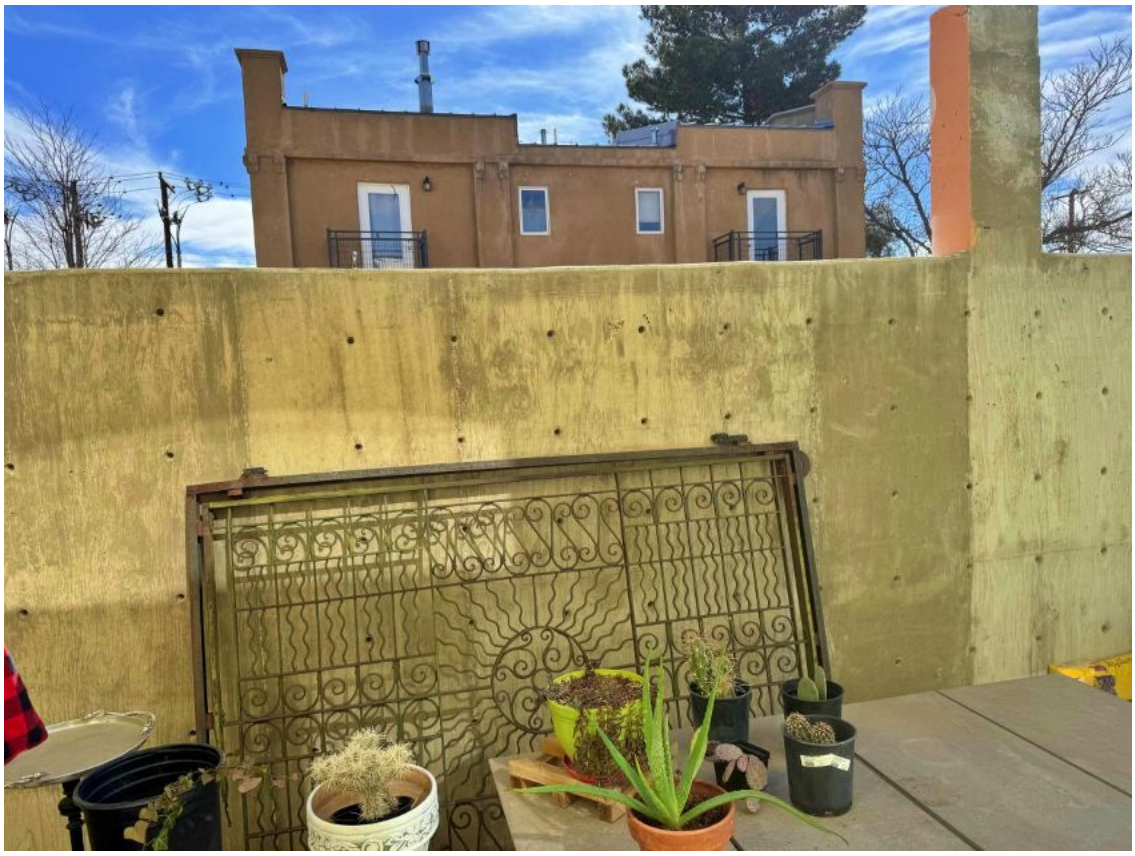
I was fortunate to be invited into one of the homes in the neighborhood, to see how an architect & an artist transformed one of the vacant lots into a fantastic living space & studio.



The Home

At around 1800sqft, including the 900sqft studio addition & connecting corridor, the living space is well designed. It's not overly-sized, generally designed for one or two people to live comfortably. The lot is long & thin, so building up was important to create more space, hence the creation of a 2nd floor loft. The stairwell entry to the loft is above & below.

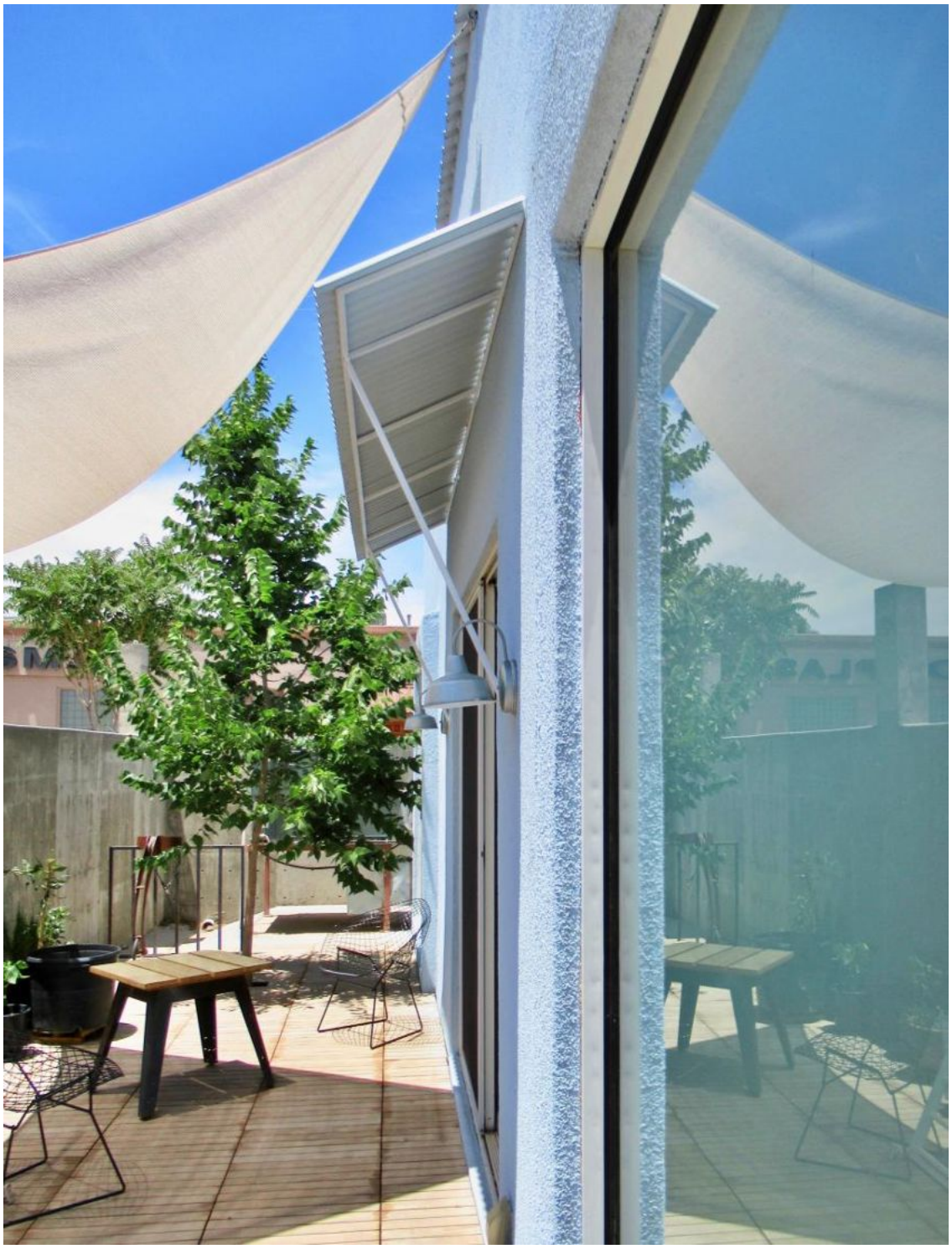
The architect/owner's goal was to "create the most solid & beautiful building one can make, on a low budget." So OSB (Oriented Strand Board) was used, above, instead of typical plywood, because it is less expensive & can be manufactured in large panels.



The Courtyard

The poured concrete courtyard wall is solid; close-up, notice the imprint of the knots & wood grain from the likely plywood forms.

On the thin lot, space was in short supply & each opportunity for greenery was greeted with enthusiasm. Vines--English Ivy was a good choice, as it stays green in winter--& a Locust tree were planted on the side of the home, above, & an ever-changing greenspace in the thin but long courtyard was anchored by a Hackberry tree, below, itself ever-changing throughout the year.



Prominent & Discreet

Trombe Walls

The architect designed the home to revolve somewhat around two Trombe walls, positioned to maximize the southern exposure. These solar walls can efficiently heat up a room for many hours in the cooler months. They are so well integrated into the house, you might not know they were there, or what they were. Above, the pane of glass in on the right-hand side of the image is part of the glazing of the Trombe wall, yet it blends seamlessly into the courtyard scene.

Below, the double glass panes on the right side are also part of the Trombe system & may look like doors but are not. In the middle below, under the accordion overhang, are double glass actual sliding doors, for access to the courtyard. Then further left is another set of glass panes, which is the 2nd Trombe wall, by the tree.

Solar energy absorption. Trombe walls are positioned on the sun-facing, equator-side of a building, & are constructed with a thick, dark-colored material, often concrete, adobe or brick. **Glazing:** The thick wall outside is covered with a layer of glass, leaving a small air gap between the glass & the wall. **Heat Storage:** When sunlight passes through the glass, it heats the dark wall, & the wall stores the heat. **Heat Release:** As the outside temperature drops, the heated wall slowly releases its stored energy into the building, providing warmth from the Sun, many hours after it has set.

The Speed of Light

The architect explained it this way:

A Trombe Wall is a simple device for heating a building with solar energy. It consists of a mass, [in this case a 12 inch thick concrete wall], with a black surface, an airspace & glass facing the exterior.

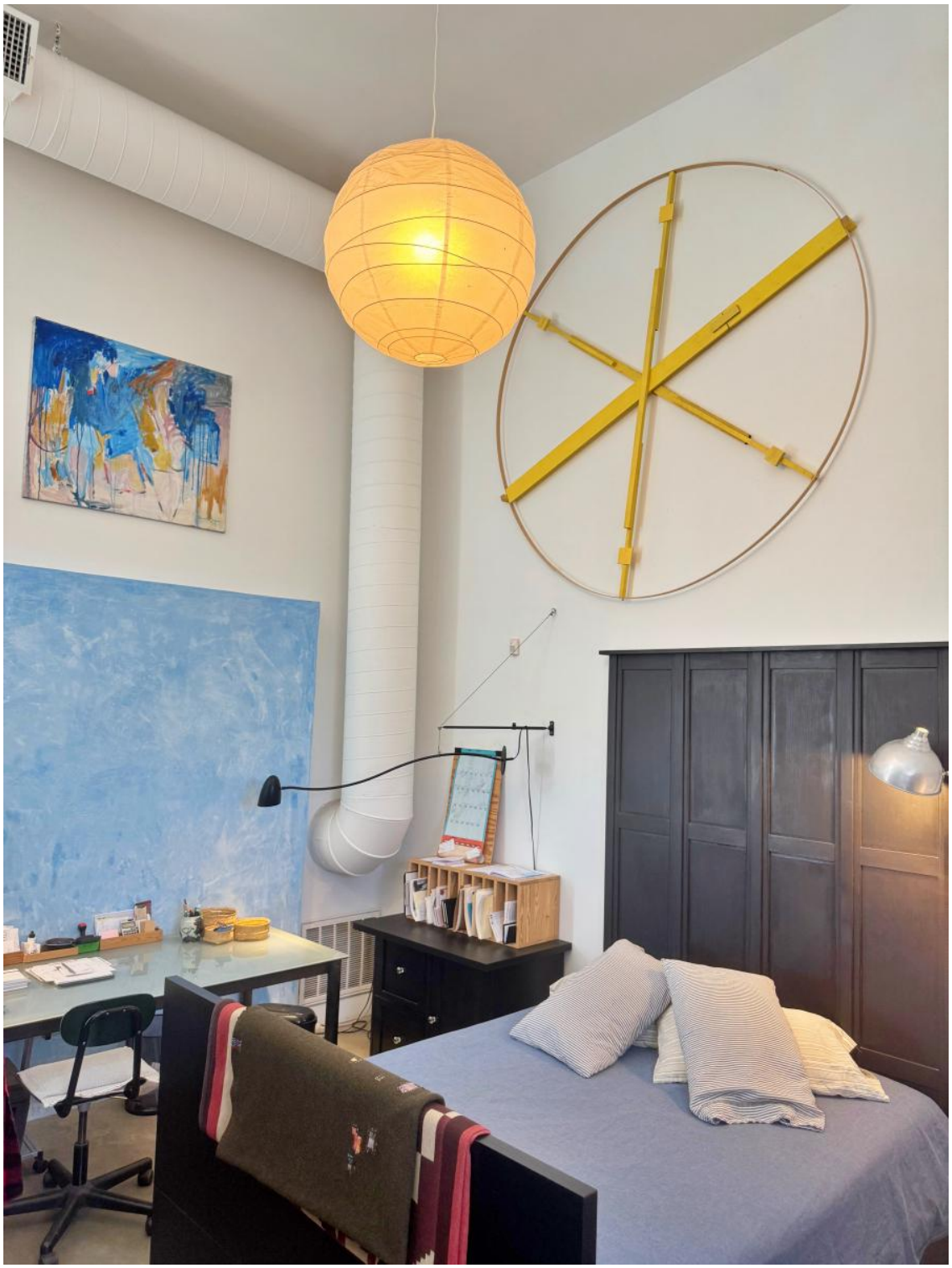
The Earth receives energy from the Sun as radiation. When that radiant energy hits the black surface of the Trombe wall, what had been moving at the speed of light translates into the rising temperature of the mass of the wall. That heat moves very slowly through the concrete, at about an inch an hour. From the

point of view of solar design, this is very fortunate.

The energy of the first light of the morning doesn't get through until the evening, & the energy of the late afternoon doesn't arrive until the next morning. I like to think of a Trombe wall as a device capable of "putting the brakes" on the speed of light.

Inside the house, the two Trombe walls--in the kitchen & bedroom, both in blue above & below--are heat sources during the cooler months, when the sun is in its southern/low arc.

Notice the Venetian Plaster--the shiny surface & non-uniform blue sheen of the Trombe walls. Venetian plaster is extremely durable & environmentally friendlier than plaster alone, as it does not emit volatile organic compounds (VOC's). It also allows the walls to 'breathe,' whereas paint covers & seals the surface, minimizing the movement of air. Venetian Plaster is a bit more expensive than the alterntive; however, it's one important aspect of the highly-efficient Trombe wall.



Carry-on Art

The sculpture above was a gift from the owner, one of numerous "carry-on art" pieces created for just that purpose--portable art, small enough to be brought onto a plane. The studio had some of these lightweight-for-travel art pieces to peruse, below.

The artist also mentioned that he likes to "optimize the value of things already in existence." In other words, an avid recycler. An example is the vertical board

attached to the head of the bed, two images above, which was two bi-fold doors, now being optimized in their new life as the (only) bedroom's headboard.

Below are more examples of Carry-on Art, using mostly recycled materials. I call the series his Weird Lamps Project. It looks like one of the Weird Lamps has a pear-shaped gourd that I've seen around New Mexico, being used as the base of the lamp on the left.

More Lamps

Above & below are two more lamps created by the artist over the years. The lampshade below is stratified with Linden Pine & was made over 35 years ago, along with other similar lamps, using different wood like Oak. Above is a floor lamp with steel shade; in the background to the right is a Weird Lamp-in-progress, fashioned from found pieces of plastic, & put into a clothes washer on a gentle cycle, then hung on the piece.

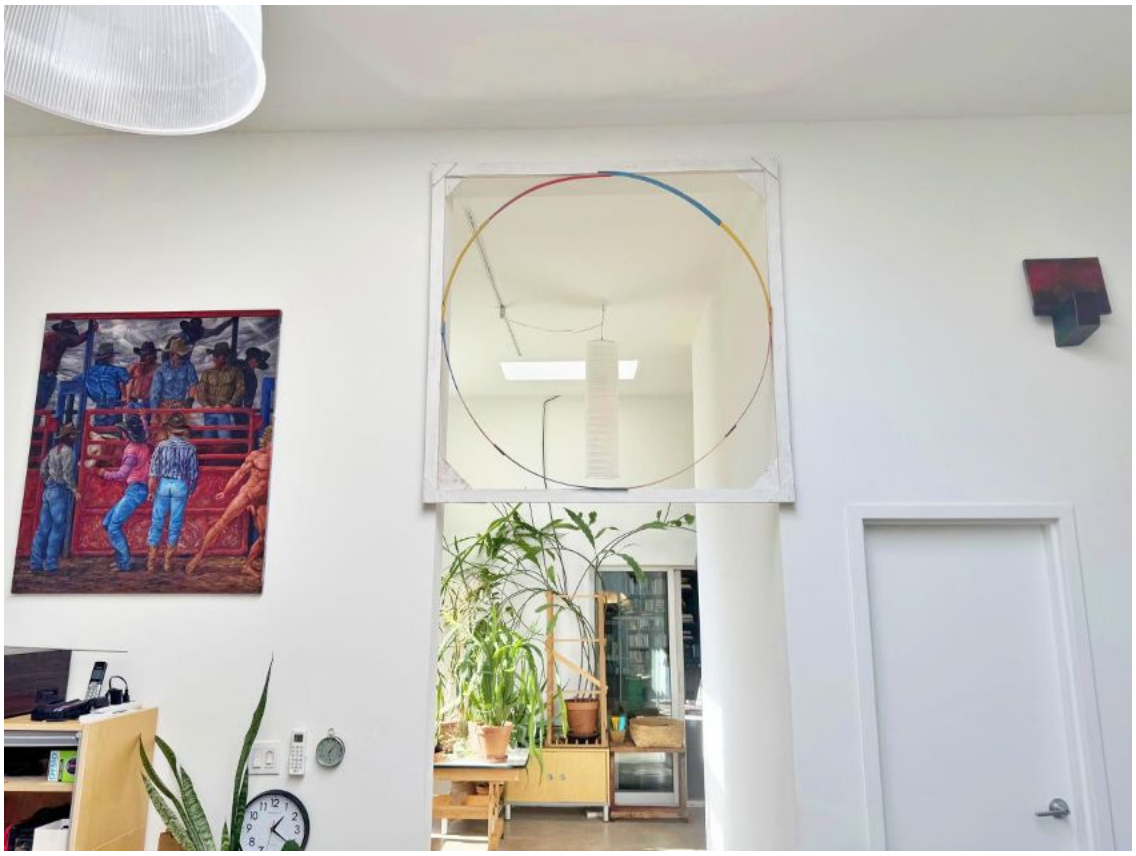
As greenspace is limited, the architect inserted it when & wherever possible. On the way to the studio, above & below, the wide corridor doubles as a tall-ceilinged plantatarium. From the skylights & southern exposure windows, & also the transom, the corridor provides plenty of direct light to the plants, which clearly love where they live.

Sunbenders

Another efficient way to harness the heat & light energy from the sun is to reflect it into the structure when you want the heat/light, or reflect it away when you don't need it. Enter Sunbenders, which are what they sound like: they bend the sunlight to where it's needed with just a tilting of the reflectors, or they shunt it away when it's not wanted, usually during the summer months.

The architect has been utilizing solar energy generated by Sunbenders for decades,

starting with an old laundromat he converted into a residence in Hyder Park. Notice the long row of Sunbenders when you turn around at the start of the 3D Tour, linked. The Sunbender in the studio room, sitting on top of a skylight, smartly runs east & west, & is nice & long, creating abundant light year-round, plus additional heat in winter.



The Studio

Tall ceilings, the long Sunbender skylight & plenty of space makes the studio room more like a place to hang out with company, than a serious place of work. Luckily it's both. Above is the entrance to the studio from the Plantatarium, framed by a colorful circle sculpture, where a transom might have been initially envisioned.

The studio was a good place to end the tour, as it's filled with Carry-on Art, other art objects optimized for value, plus other people's art, like the canvas along the south wall.


Cervantes

What a difference two months can make in the MetroABQ--the image above was taken in February, while the image at the top of the newsletter was snapped two weeks ago. At 1st glance, they seem to have only the blue wall in common.

Thx for reading.

For the MetroABQ Article Archive:
Medium.com/@MetroABQ

The complete MetroABQ Newsletter Archive is here:
Chrislucasabq.com/newsletter-archive

Property Management Corner

As interest rates fluctuate, many people are seeking mid-to-long-term rental solutions. Good property management--**for both tenants & owners**--is more essential than ever. Going on a year-long sabbatical? Call me--I quickly find good, temporary & long-term tenants for all the properties I manage.

I am a dedicated seven-days-a-week real estate professional, representing clients for over 17 years--I love this city!

I continuously seek out the hidden gems at any price-point for my Buyers, & am a tireless promoter for all of my Sellers' listings. I love talking real estate.

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