# Pause

Bachelor of Fine Arts Thesis
by Zach Triola

"At the beginning of my career I made the mistake of putting form ahead of light itself, but I quickly learned that form should not dictate the process - that the beauty of the light is always the most important thing. I try to make people aware of the quality of light, which is directly connected to our emotions. Many people feel unhappy when they come home, and it is because their house is drearily lit - they don't realise they could improve their wellbeing by replacing this with a better quality of light. Light should be embracing and not too intrusive or overwhelming: it should create a wonderful spirit around you"

-Ingo Maurer

(foreward, *21st Century Lighting Design*)

## Artist Statement

Light is powerful. It influences our emotions and enriches our lives. Light has the power to make us feel better, to bring comfort and stillness.

The difference between good quality light and bad quality light is similar to the difference between sitting on a soft velvet couch next to a crackling fireplace and sitting on a cold concrete bench in a parking lot. Good quality light is inviting and warm. It is soft and rich. It makes us appreciate our surroundings and aware of the beauty of materials. Poor quality light makes us feel restless. It is cold and hard.

The emotional response to light I am most interested in is one of contentment and stillness. This quality of light demands my attention in a way that brings me to the present, eroding worries of the past and fears of the future. This moment brings quiet pause.

## Introduction

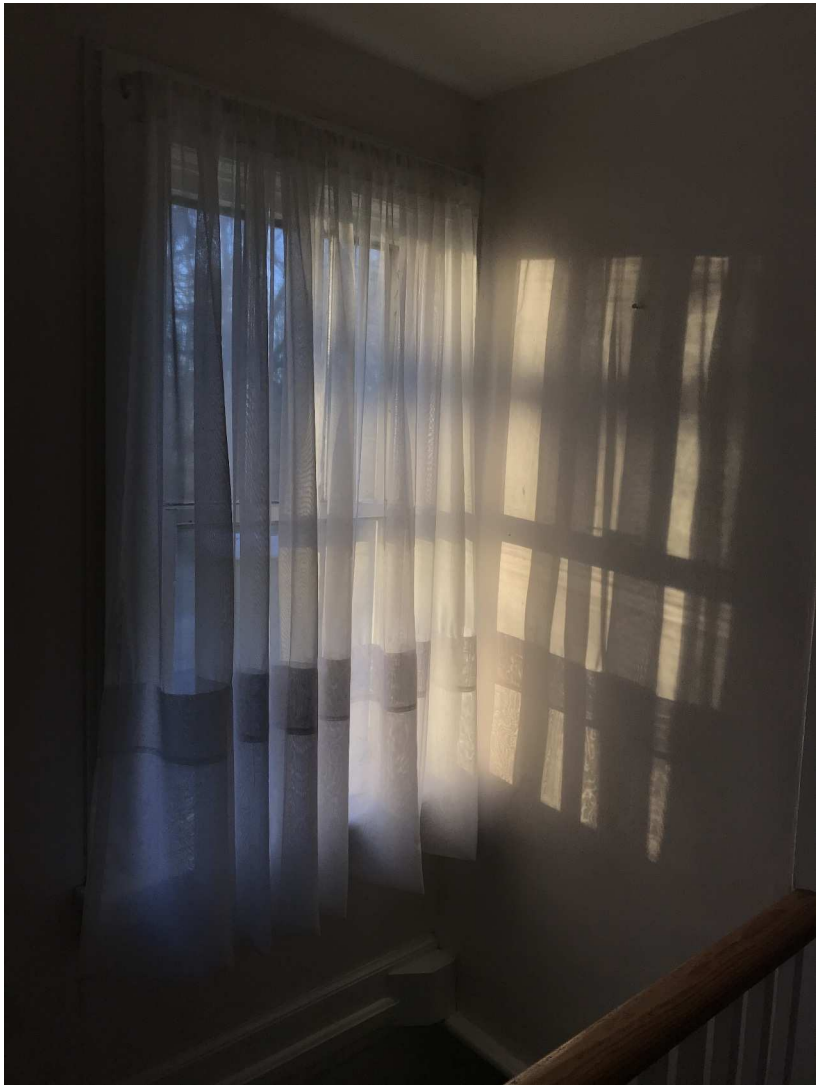
My curiosity in light began about ten years ago when I started studying photography. I photographed mostly landscapes and objects but I was always interested more in the quality of light falling on the subject rather than the subject itself. First I experience the light in a given situation as a whole. Then I consider how specific elements of the light are affecting that experience. I look at elements such as the softness or clarity of shadow, color temperature, directionality, and how light emphasizes or understates form. All of these produce a feeling that is unique to that situation.

## Porcelain

Clay is unique because of its plasticity, its ability to reveal the touch of the hand that formed it. When the hand preserved in the fired outcome, so is the softness of the wet clay. The surface of unglazed porcelain is seductive, even though it is as hard as stone it can appear soft and inviting to touch. The light I intended to produce with these works is soft and atmospheric. The soft visual qualities of porcelain contribute to my intention of designing soft, comforting light. Porcelain is also an ideal ceramic material for lighting fixtures because it is translucent. Light permeates the form the way I imagine light saturating and filling a space. Porcelain acts as a filter: it holds onto some of the light, and allows some of it to spill beyond the form.

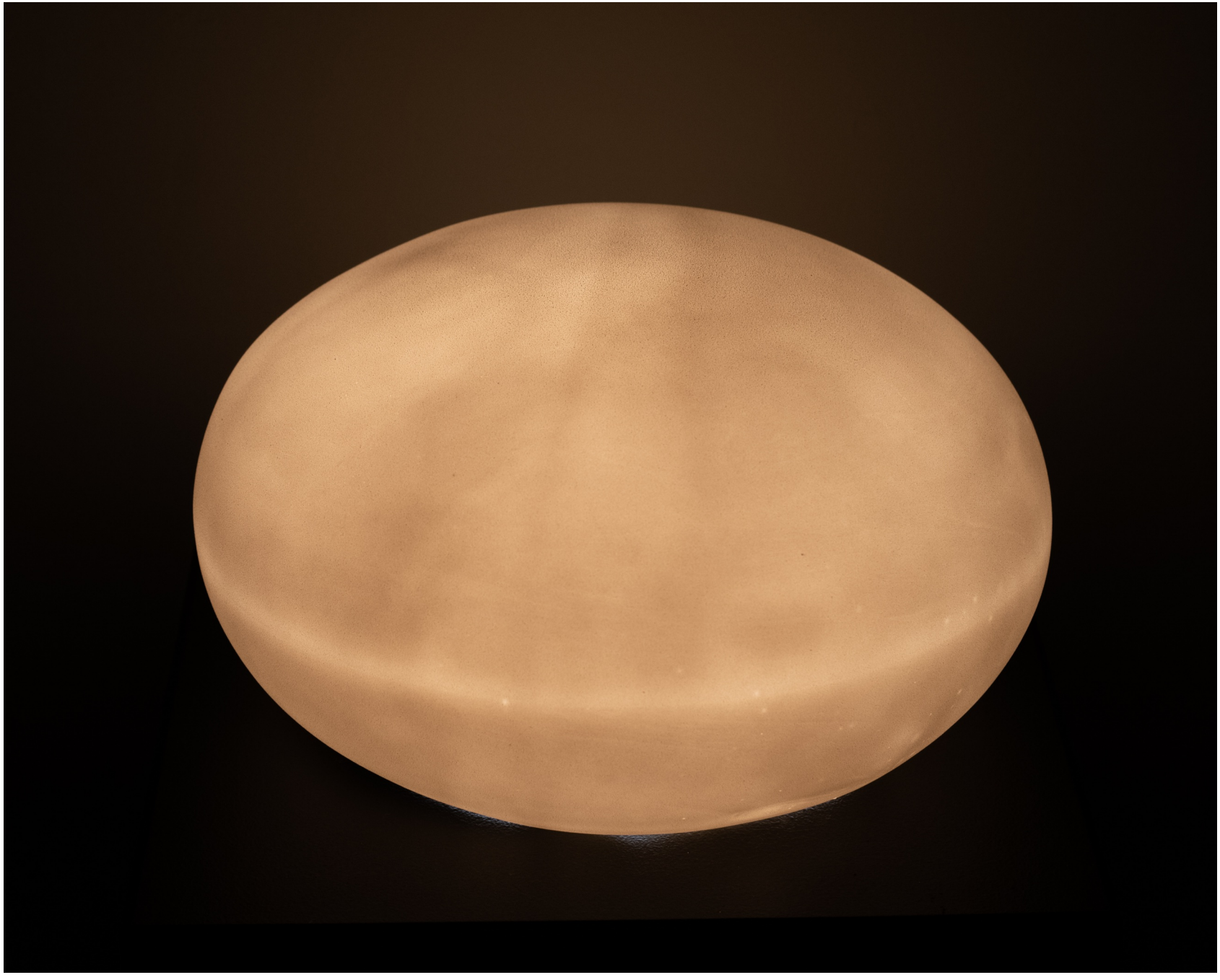
In art history, windows have been identified as a symbolic tool. I arrived to the window as a gateway for the outdoors to enter an interior space. I began thinking of light as something that has volume. Sunlight enters through this passage and fills the room, the way breathing fills our lungs with air. These shapes began as rectangles, the format of common window panes. I imagined what the window would look like if each pane was made of an elastic material that was filled with voluminous light. This apparent expansion of volume is accentuated by the tightness of the form, nearly bursting at the seams.

# Voluminous Window Ideation



# Plaster Model

The bulbous form of this lamp is a direct visual reference to mid-century modern designer William Curry's "mushroom" lamps. While his lamps are comprised of a glass shade that sits atop a metal base, this design eliminates the base so the shade sits directly on the table. This simple shift in orientation dramatically changes the visual outcome of the form. It now appears as a soft shape that was once spherical Now, affected by gravity, it is slumping and relaxed. Soft light radiating from the translucent porcelain, combined with the seemingly relaxed form, surrounds the object with a calming atmosphere.



**Slumped Sphere Ideation:**
resting dough and William Curry Mushroom Lamp

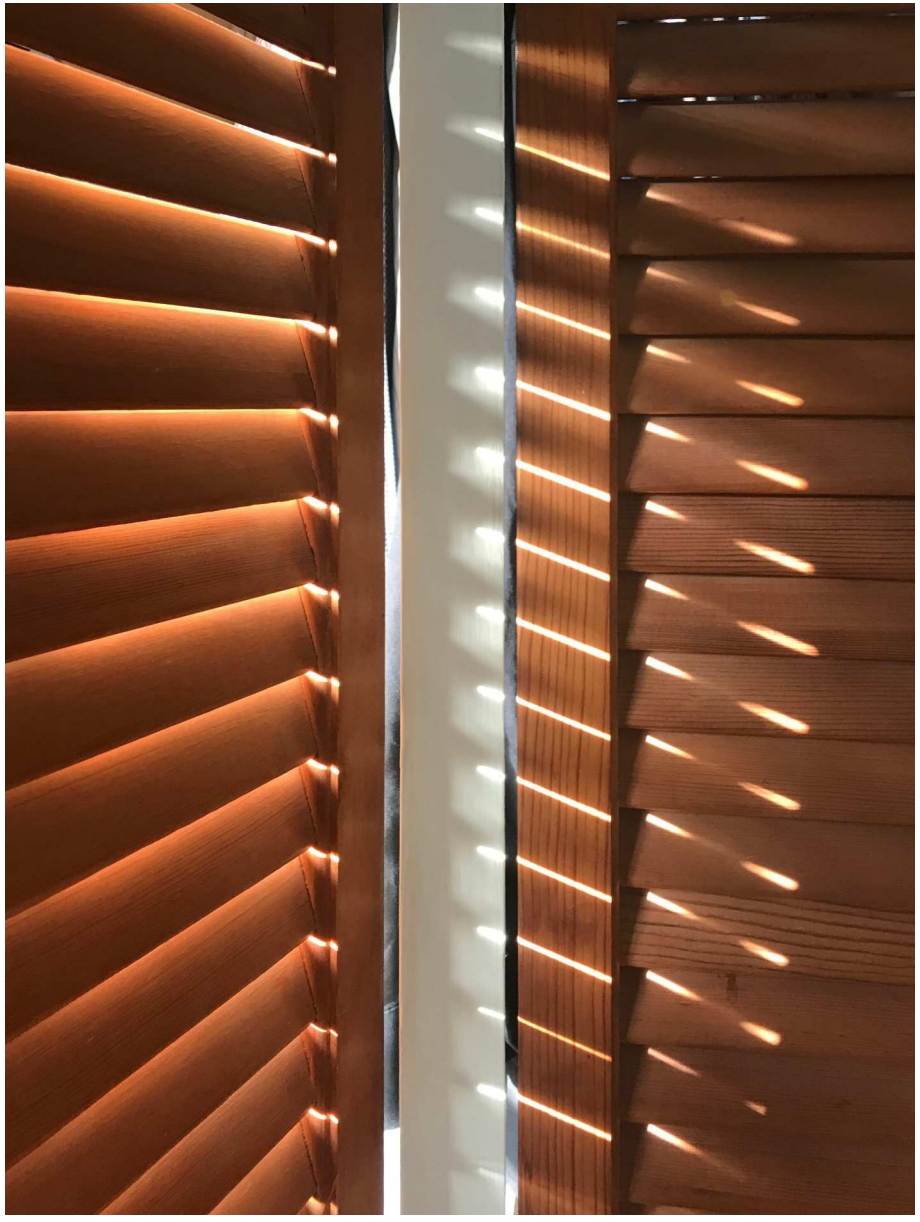
# Turning of Plaster Model

This shape of this bowl visually references another iconic mid-century modern design: the Mushroom, an armchair designed by Pierre Paulin. If gravity continued to act upon the bulbous shape of William Curry's lamp, I imagined it would cave in on itself, leaving a depression in the top of the form. The result of this progression would be a shallow bowl. The generous rim unifies the interior and exterior of the bowl into one continuous surface. The quality of light produced is similar to the bulbous lamp that preceded this design. Because it is a bowl, it also suggests a comfortable resting place..

**Illuminated Bowl Ideation:**
Pierre Paulin Mushroom Chair and orecchiette pasta

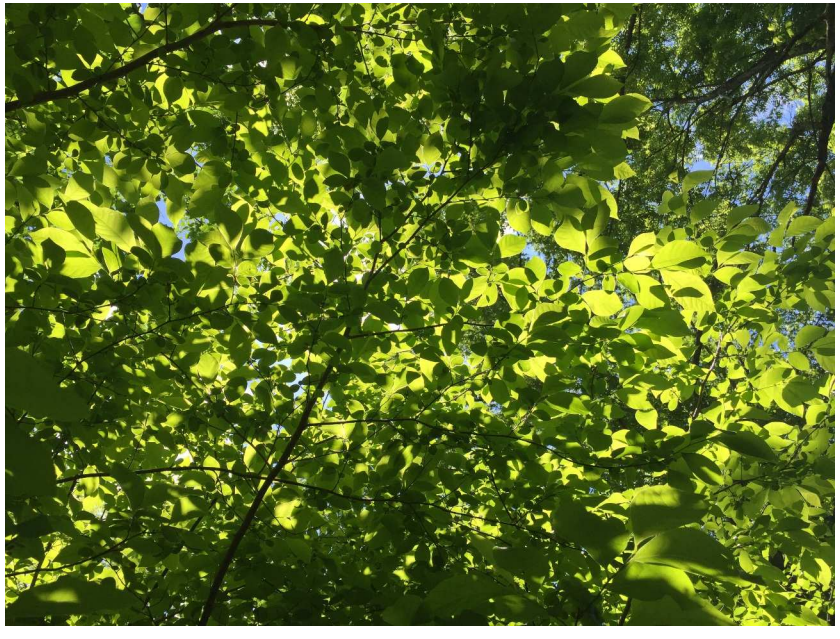
Direct sunlight beams through wooden blinds. As the light catches the edge of the blinds, it leaves a hard shadow on the adjacent surface. The dark shadow sharply contrasts the intensity of the sunlight next to it. This hard edge, the boundary between light and shadow, is blurred as the sunlight radiates off the reflective surface on which it rests. The ambiguity between hard and soft produces a still, meditative emotional state. This stack recreates this visual effect and the play of polarities is enhanced by the material properties of porcelain. Each layer appears spontaneously wavy, characteristic of a soft material such as wet clay. Now fired to the hardness of stone, this undulation is contrasted with the sharp, knife-like edge of each layer. The bright light bulb inside the stack shines directly into the eyes of the viewer, making it almost difficult to look. But when carefully examined, one can see the soft glowing of the translucent porcelain as each layer soaks up the intense light.

# Stack Ideation



Standing beneath a canopy of trees brings a feeling of comfort and security. Surrounded by branches and leaves, we are protected from the elements. This chandelier recreates a similar feeling of comfort. Pinched "leaves" are suspended on a wire structure. The translucency of the porcelain and spaces between the leaves allow light to shine through in a spectrum of intensities. The aesthetic of the chandelier appears fabricated due to it's materiality, but the overall emotional response is reminiscent of what one would experience in nature.

**Canopy Ideation:**
Italian tole chandelier and sunlight beaming through trees



## Process / Technical Challenges

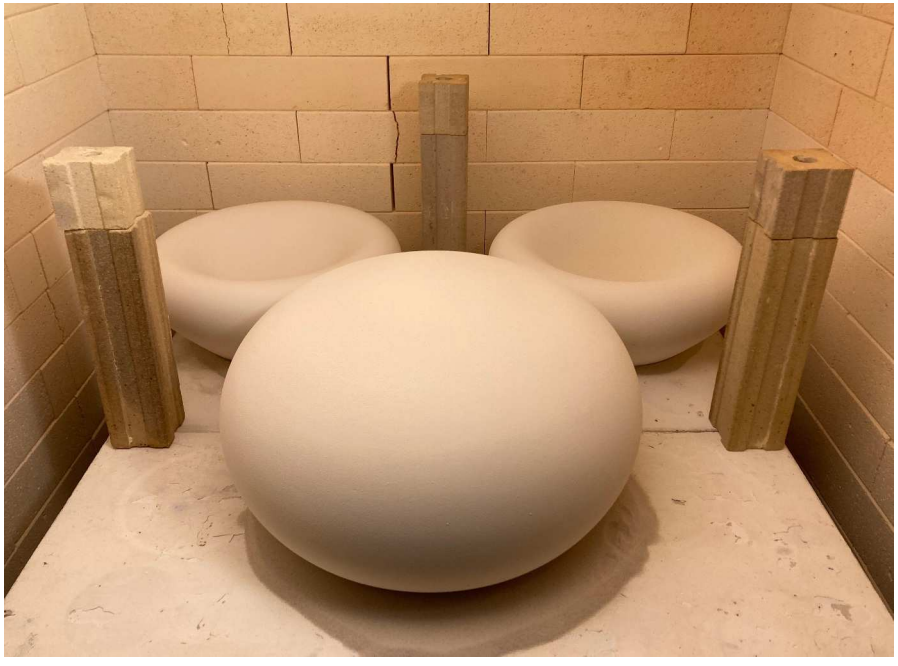
Technical problems are inevitable in ceramics and working with translucent porcelain can be especially difficult. Although my challenges were not unique, they required a great deal of experimentation to find a balance between my desired outcome and the limits of the material.

In order to create the whitest and most translucent clay body, I chose to use New Zealand Halloysite as the base for my slip casting recipe. However, this material shrinks very little going from wet to leather hard, which makes it difficult to remove the cast piece from the plaster mold. If the clay does not shrink enough after draining the casting slip from the mold, it will stick to the mold and tear itself apart as it dries. To increase the wet to dry shrinkage of the clay, I added various amounts of Veegum. I found that a 1% addition was far too much and increased the casting time dramatically. Adding 0.25% Veegum gave me the best balance - it increased the shrinkage of the leather hard cast, increased the green strength of the cast, and did not increase the casting time too much,. However, the casts were still sticking to the mold more than I had hoped. To avoid this from happening, I used a technique described in Andrew Martin's book, "The Essential Guide to Mold Making & Slip Casting." Martin says that with molds that are difficult to cast, one can use a non-plastic dust to coat the interior of the mold surface before casting, which acts as release agent for the cast. I decided to use calcined casting slip powder instead of talc or nepheline syenite to "dust" the molds.

The results from my first reduction firing revealed several technical challenges inherent to porcelain. The first thing I noticed was slumping and warping. The form was designed as a round shape with an slightly domed top. After they were fired, the top had been slumped inward, flattened, and the subtlety of the form was lost. Similarly, the once circular foot, was now warped badly. After the firing some areas of the foot stuck to the kiln shelf and some areas warped upwards, so there were gaps between the piece and the surface on which is was resting. Porcelain is particularly susceptible to pyroplastic deformation, which is the tendency of a ceramic material to warp as it reaches its maturity in the firing. In order to be translucent, porcelain must be thin and fired to maturity, which increases its tendency to warp or slump in the firing. To correct the slumping of the dome shape, I fired to a lower cone number (cone 6 instead of cone 7). To prevent the pieces from sticking to the kiln shelf during firing, I fired each piece on a bed of silica sand, which allowed the pieces to move with less friction as they shrank.

Warping and slumping is dependent on the form, so some are more susceptible than others. After some experience one can visualize how a piece may react to the heat of the kiln and gravity. With the form that resembles a pillow, I did not foresee slumping being a problem. The weight of the top half of the form, combined with the shallow angle of the bottom half, caused the “pillows” to slump badly in the firing. The once straight sides were now curved and the domed top had lost the tight curve it had before firing. My intent was for these to be translucent and for light to shine through from the inside. For this form it was very important to me to keep the form the exact way it was designed. So instead of firing the “pillows” to maturity (cone 6), I fired them to a lower temperature (cone 04) with a matte white glaze. As a result they were not translucent but the tightness of the form was retained.

# Problem (warping) and Solution (piece fired on a bed of silica sand)



**Clay**

Handbuilding Clay Body

Frost by Laguna Clay (Cone 6)

Slip Casting Bodies

New Zealand Porcelain (Cone 6)

| | |
|---|---|
| New Zealand Halloysite | 39 |
| Nepheline Syenite | 38 |
| Silica | 23 |
| Vee Gum T | 0.25 |
| Water | 43 |
| Darvan 811 | 0.2 |

Grolleg Porcelain (Cone 6)

| | |
|---|---|
| Grolleg Kaolin | 40 |
| Nepheline Syenite | 34 |
| Silica | 26 |
| Water | 43 |
| Darvan 811 | 0.1 |

**Glaze**

Matte Base - for Voluminous Window (Cone 04) - from digitalfire.com

| | |
|---|---|
| Ferro Frit 3134 | 44 |
| EPK | 12 |
| Silica | 28 |
| Dolomite | 8 |
| Whiting | 8 |

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Without your support I would not be where I am today.

Image Sources

William Curry Mushroom Lamp
https://images.skinnerinc.com/full/376/1246376_view%2002_02.jpg

resting dough
https://www.insidetherustickitchen.com/wp-content/uploads/2017/10/the-best-basic-pizza-dough-1-740x1110-inside-the-rustic-kitchen.jpg

Pierre Paulin Mushroom Chair
https://i.pinimg.com/originals/77/cc/87/77cc87c41ba1332663f9cb7e8d4925ce.jpg

orecchiete pasta
https://chefsmandala.com/wp-content/uploads/2018/02/Orecchiette-Pasta-shutterstock_401783734.jpg

dinner rolls
https://www.washingtonpost.com/wp-apps/imrs.php?src=https://arc-anglerfish-washpost-prod-washpost.s3.amazonaws.com/public/WT2NVNFYSYY6LEOL27ZEGRWPLM.jpg&w=860