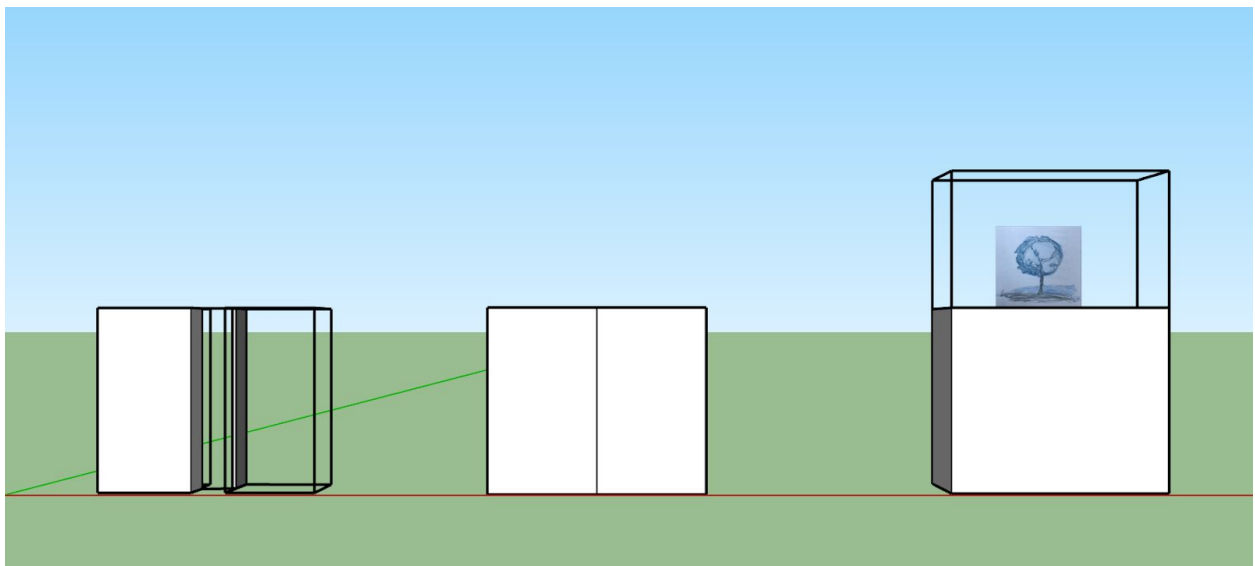


# **Feasibility study of modular museum displays for increased sustainable practices; highlighting the seam**

Final Report

D-Lab 1



March 10th, 2020

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## **EXECUTIVE SUMMARY**

The goals of this project are to explore further innovations, develop and ultimately, determine and manufacture modular exhibit pedestals that function with the Manetti Shrem aesthetics, eventually, to all “white cube” museums, based primarily on modularity and sustainability. The primary components of the pedestals originate from sustainable and low-emission materials (preferably local), bio-based paints, and upcycling is taken into consideration, wherever possible, to extend the life of the pedestal.

To determine what direction to take when creating the final phase of the pedestal, research was conducted in the form of visiting the actual space and gathering information, Manetti Shrem Museum. Upon visiting, factors such as the variety of visitors to the space, the typical artwork being displayed, what materials/methods were being used to manufacture these pedestals and their current effectiveness, the manufacturing facilities, etc. were all taken into consideration. Information gathered helped guide the way to a more sustainable approach by, first and foremost, establishing the problem at hand, which was taking the current, non-recyclable, one-time use pedestal and doing a complete overhaul by attempting to add an interlocking element in which both practicality and an unseamed aesthetic are achieved.

The results have slightly changed in that the interlocking factor remains an essential part of the project, however, explorations and applying different degrees of investigation in seam concealment was not achievable without it affecting the original idea, therefore, we have

incorporated the seam that is made by bringing the two pedestal elements together to form one and embracing the seam rather than try to conceal it.

## **INTRODUCTION**

As we move forward to both keep and highlight the seam, it's important to consider how that will change the museum as a whole. This includes how the museum as an entity will communicate with artists, how the seam will look on the pedestal, and how it might be incorporated into the exhibition's overall design. A sample letter to communicate with artists might look something like this.

Dear (insert artist's preferred name),

We are honored to display your work in the Manetti Shrem Museum in Davis, California. In recent years we are becoming more conscious of our decisions and environmental impact. As such, we are making an effort to move away from disposable objects in our gallery, this includes the design of our pedestals. Previously, we have custom made each of our pedestals to exhibit every artist's work. We are now considering reusing some of these components by creating smaller pieces and connecting them together to create one pedestal overall. In doing this we have changed the look of the box pedestal and are currently offering all showing artists the option to highlight their environmental preference by using these new, reusable pedestals. You will have the option of choosing the reusable model and any design components on it such as highlighting the seam where each part comes

together. You may also choose to have a small sticker on the pedestal that includes information on the date of it's build to show gallery visitors you support reuse. Attached are images of what these options look like. Please let us know if you have any questions.

Thank you for considering our new approach, we look forward to walking into the future together.

Sincerely, *The Manetti Shrem*

As this letter details, an artist could be offered this new design as an option, as to not deter away anyone who is not interested. The new, inclusive seam could be highlighted in different ways using paint, tape, or other materials the museum has on hand (see Fig.4.). The seam highlight may match an exhibition if the artist is interested (see Fig.2. vs Fig.3.). Finally, the museum may consider putting some form of sticker or notation on each pedestal part to indicate when it was created. This would ensure artists and visitors they are being reused and have a longer lifecycle.

## **METHODOLOGY**

1. Learning about contemporary museum furniture at the Manetti Shrem
2. Define objectives, hypothesis, and timeline
3. Use of analytical tools to understand key partners involved such as board members, museum employees, University of California, Davis, and the community of Davis and

others. Such tools include stakeholder analysis, community mapping and design tools such as Ultimaker 2 Extended 3D printer and Sketchup. (see Fig. 5.)

4. Meeting with Luke Turner
5. Creating more sketches, designs, and other visuals based on client and community feedback (see Fig. 1.)
6. Analysis and discussion of information received

### **Timeline**

6th week - Ordering material samples from manufacturers, drawing concept plans and printing prototypes

7th week - Create sample board, drawing concept plans and printing prototypes

8th week - Continue sample board, printing and feasibility study

9th week - Finish feasibility study

10th week - Complete final deliverable, conclude research and develop and refine final ideas

### **RESULTS AND DISCUSSION**

Improvement of development from regular, single-use museum pedestal to a more sustainable, modular, reusable pedestal, and moving away from disposable design, that includes bio-based paints, low-emission materials; sustainable materials with consideration to social, economic and environmental factors. Using feasibility studies and on-site investigations, we have gained knowledge, awareness of the areas that need improvement in order to create a successful final product that can be implemented at the Manetti Shrem, eventually, disseminate ideas to more modern museums who don't practice sustainability.

We believe it prudent to communicate and compromise every step of the way when changing a standard. The white cube mentality has lived its life, we see the possibility of new options in the art world, ones that focus on carbon emission, embodied energy, and lifecycle as well. Going forward to test and implement some of these ideas would require multiple iterations and conversations with museum stakeholders.

## **CONCLUSION**

With the use of the analytical tools used we were able to determine the vastly different people the project would interact with. In the next stage of this project, we would work with the team at the Manetti Shrem to see behind the scenes of their design build specifically for the pedestals in each stage of its construction. There we have the opportunity to try out different designs and focus on the meeting of each part at the seam and how to incorporate that into exhibitions in different ways. Should the Manetti Shrem chose to pursue modular, seam aware pedestals there will need to be open channels of communication and space for new ideas. This is not just about how to convince folks the seam is interesting and worth highlighting, but also designing modular components including how they fit together, as well as having a safe space to brainstorm these things and have a conversation about moving away from the art world standard.

## **Challenges**

Breaking away from the white cube, even for the shake of sustainability, may be difficult for some. We had trouble finding current exhibition space that includes both a sleek, clean design for a modern museum other than the classic white walls and white boxes that also offered

information on their approach to environmental awareness and what they are doing to be sustainable.

## **RECOMMENDATIONS AND NEXT STEPS**

### **Comments**

- Luke Turner suggested a way to embrace the seam rather than conceal it; see it more as a decorative element depending on the particular exhibit.
- Find a way to incorporate another pedestal in order to make a bigger 'super' pedestal to exhibit larger art pieces.

### **Opportunities for D-Lab 2:**

- Improve the interlocking mechanism and method of expansion.
- Trying out different design builds.
- Materials testing for highlighting the seam.
- Incorporating new concepts into the gallery space.

### **Future Research and Actions**

- How will the design affect people with disabilities?
- Research more techniques and local, sustainable materials.
- Conduct life-cycle analysis of the pedestal, will it stand the test of time or through various exhibits?



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APPENDICES

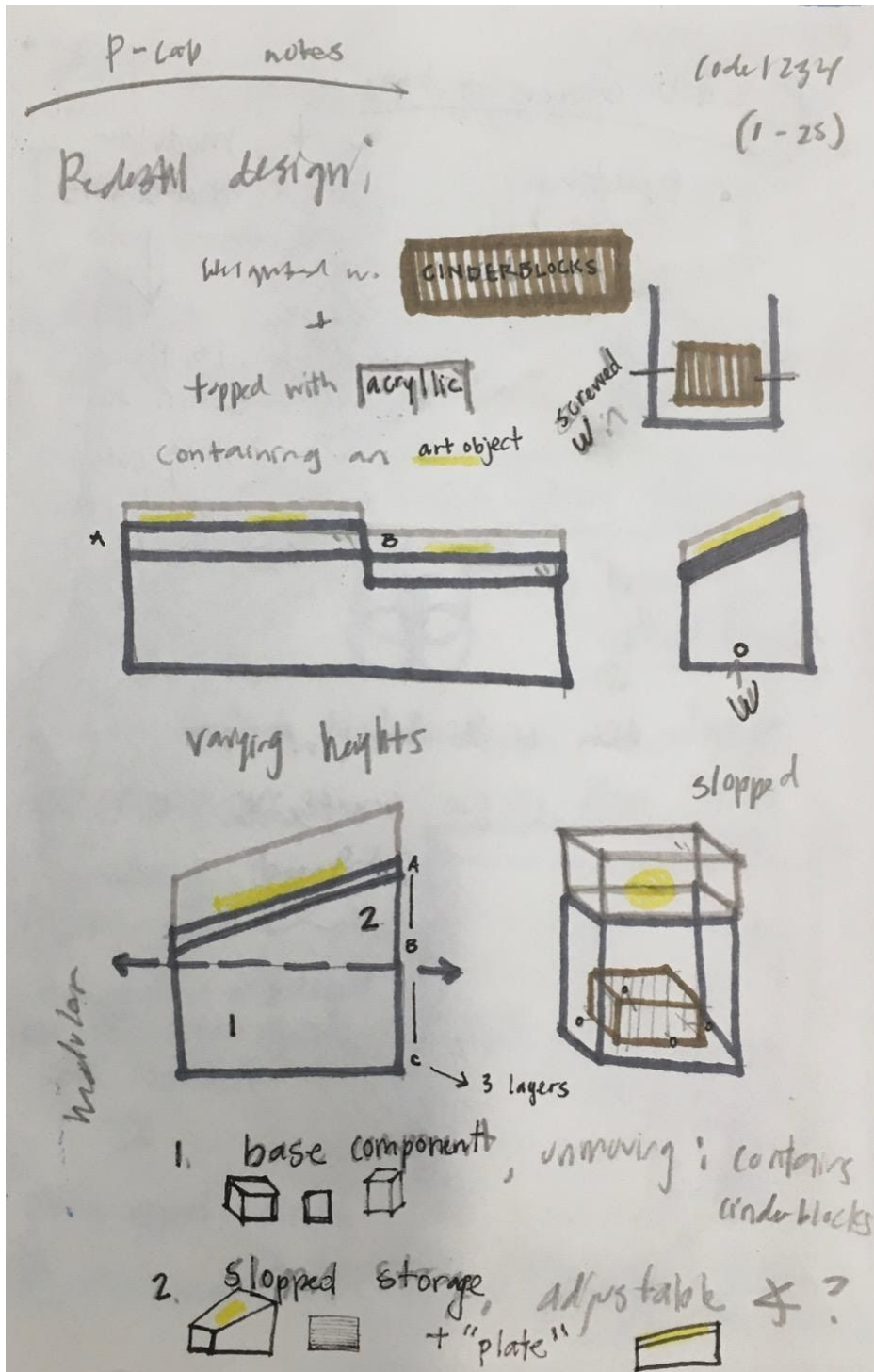


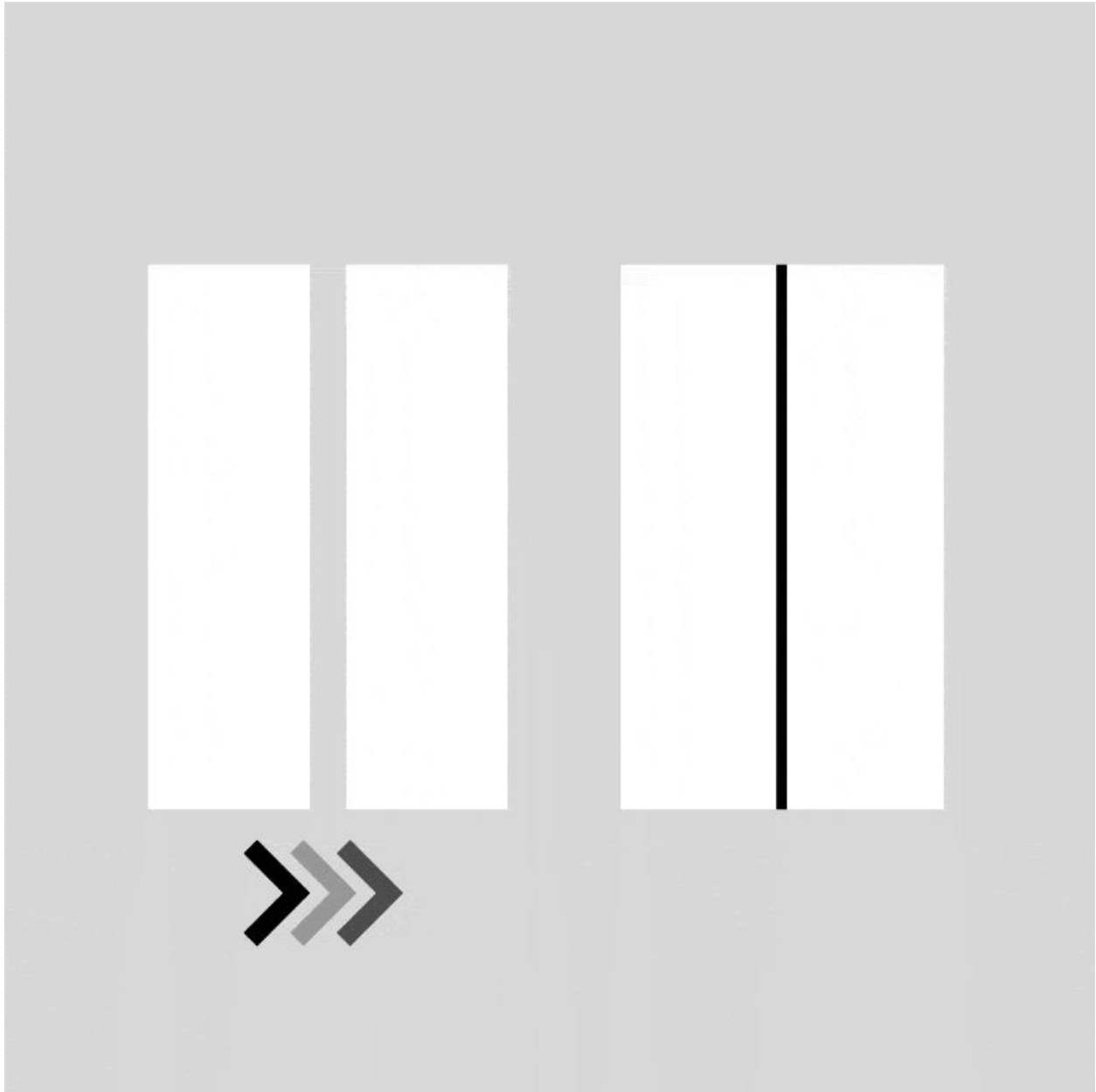
Fig.1.



**Fig.2.**



**Fig.3.**



**Fig.4.**

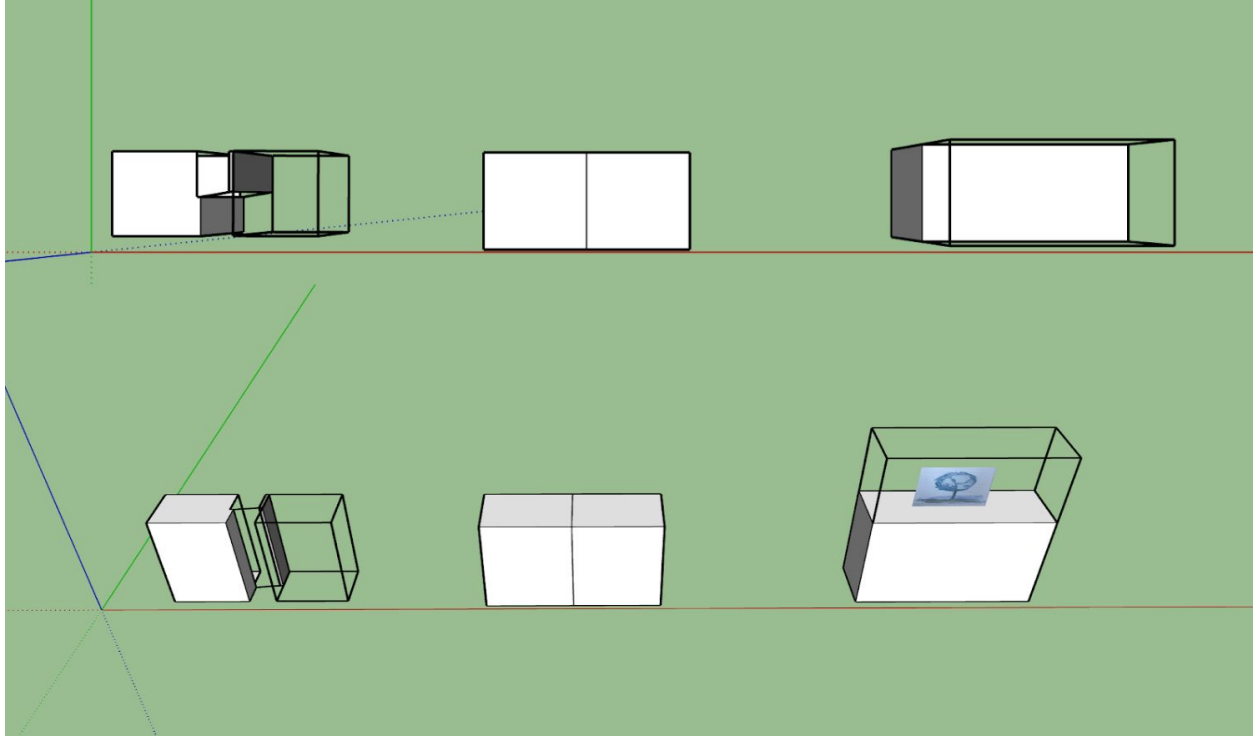


Fig. 5.