

Covid Confessionals: A Rapid Response Public Intervention

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Covid Confessionals is a rapid response temporary installation intended to promote healthy communities in the midst of a global pandemic. Specifically, the installation acts as a public intervention which tries to support mental wellness during a time of distressing social isolation. It asks, how might a public design project provide a timely response to the COVID -19 pandemic and follow guidelines for physical distancing, while still providing relief from isolation? In a broader sense, the project is a case study for design as research which asks, what are the larger social, cultural, and political issues and what are the ways designers can address such issues?

INTRODUCTION

According to a research report and survey results released by United Health Foundation state, “Two-thirds of adults say they are experiencing social isolation, and 66 percent say their anxiety levels have increased during the pandemic.”¹ In response to this mental health concern, the Covid Confessionals project asks how might a public design project provide a timely response to the COVID-19 pandemic and follow guidelines for physical distancing, while still providing a place for interaction and potential relief from isolation? The design uses the Center for Disease Control’s recommended six-foot separation, to prevent virus transmission,² as the modular basis of its production. By providing a collection of room sized face shields, scattered along the light rail in the neighborhood of South End in Charlotte, North Carolina, it allows for physically distanced users to remain socially engaged (Figure 1).

This paper outlines the design and fabrication methods for a rapid response temporary installation along with observations of the public response documented through ethnographic studies, observational documentation, and a catalog of media responses. Additionally, the project is a case study for design as research which asks, what are the larger social, cultural, and political issues and what are the ways designers can address such issues? The project responds to this question by using conflict as a creative tool. It does so by directly appropriating the constraints of physical distancing in the design of a collection of “confessional booths” made of iridescent curved walls, defined by a 6-foot

radius. Daylight and artificially night lit conditions reflect and refract off the curved iridescent walls to produce a vibrant field of color and light, celebrating the sudden appearance of barrier surfaces in public space that bring people together.

DESIGNING A RAPID RESPONSE INTERVENTION

The design of the project primarily addresses four challenges including physically distanced interaction, speed of production, ability to adapt to an unknown site, and drawing awareness to the presence of color and light. The installation addresses distanced interaction with a curving transparent wall configuration based on a 6-foot radius circular grid. The walls vary in height depending upon conditions for sitting or standing. Additionally, a temporary painted grid on the ground plane along with vibration activated light pads, generously spaced at the center of circular grid units, demarcate zones for safely distanced interaction and play.

The final install involved a temporary urban scale installation up during the month January 2021. Deployment of the project included a series of modules distributed in various nooks across two city blocks with five different spatial configurations. The distributed units act like phone booths or bus stops except programmed as urban shields providing a means for distanced interactions in public space.

Similar to temporary relief shelters provided after catastrophic events, such as tornadoes, hurricanes, and forest fires, the design and fabrication methods undertaken for Covid Confessionals focus on the provision of a community space for in person exchange in time of emergency. The design team produced a project scheme, proposal, and budget within two days and then completed design development, prototyping, fabrication, and install in two months with a single week allocated for install. As a result of the rapid nature of the project, much of the fabrication methods used off-the-shelf assemblies and accessible materials in the design. Additional procedures for a timely response involved design-build strategies which eliminated the need for a detailed set of drawings, but rather communication with city partners involved schematic plans and full-scale prototypes. The prototypes also allowed for early troubleshooting of fabrication related issues addressing material constraints and assembly of parts.



Figure 1. Covid Confessionals installation sited in South End, Charlotte.

FABRICATION AND SITE

These fabrication strategies relied on easy transportation and fast assembly along with local access to materials as a way to facilitate a quick and efficient construction process. This included ready-made and prefabricated parts such as concrete deck blocks, rigid metal conduit and conduit connectors to accommodate various configurations which expand or contract based on variations in site. The rigid metal frame involved a hexagonal grid suspended above the six-foot radius circular grid and relied on deck blocks for foundational support. The curving iridescent walls (made of flexible PETG and applied dichroic film) were then strategically pinned along a frame of bent conduit members (bent at 6-foot radius) with prefab conduit hangers.

The project client, Charlotte City Center Partners, did not have a definitive site when the project began which thus required flexibility in siting strategies. The modularity of the project grid along with prefabricated parts allowed for the number of booths and length of enclosure to vary based on variable site conditions. This aspect is also important to other emergency relief projects including Rural Housing Prototype in Apan by DVCH De Villar CHacon Architecture. In the case of the DVCH project, it produces an alternative social housing response involving, “A dwelling that could grow but also shrink. Any change in the layout of

spaces could easily be made by contacting an existing space or generating a new expansion and configuration.”³ Like the DVCH project, the Covid Confessionals installation uses adjustability of prefabricated structural members in order to be able to change configuration. The light membrane of transparent PETG walls then infills based on the arrangement of the structure to produce various configurations of enclosing shields.

Marina Smolova and Daria Smolova discuss the efficiency of modular construction as a response to the pandemic outbreak making a case for its ability “to provide expeditious and secure health care” while also providing “design flexibility as a key to rapid emergency solutions.”⁴ While this installation draws on the nature of these methods of construction, it differs by appropriating such methods toward an interactive public intervention rather than for hospitals. In doing so, it suggests the considerations of health in architecture should widen focus beyond those that are physically ill and also consider ways of addressing mental health concerns in the public domain. Rather than subverting the issue of distancing, it becomes architecturalized, transforming social isolation into a public issue of importance.

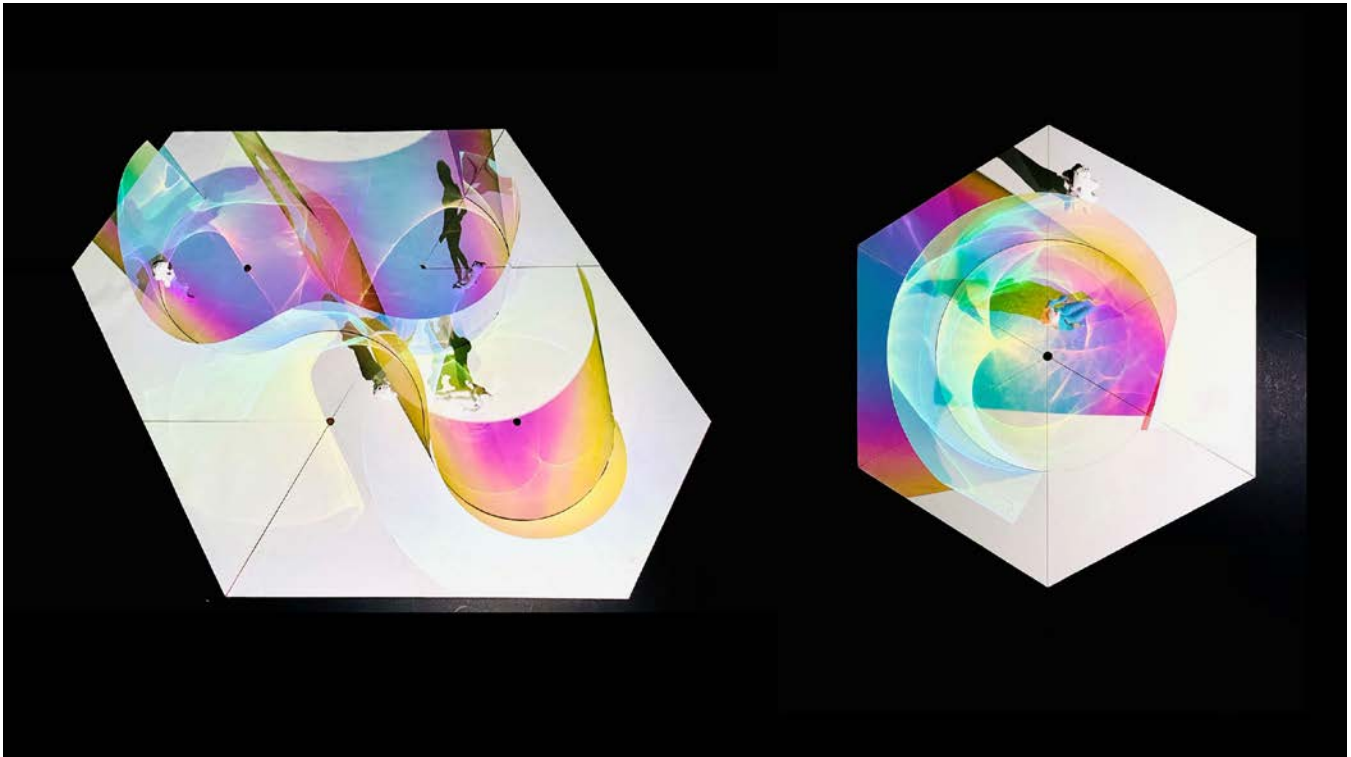


Figure 2. Physical scale models made with dichroic film. Dickey/Radnia.

Unlike the make-shift clear plastic shields popping up around grocery stores, pharmacies, and so forth, an additional design component of the installation involves the play of color and light as a way to celebrate the presence of protective surfaces in public space. Specifically, the project involves the study of caustics, a lighting effect produced by an envelope of light rays reflected by curved surfaces. It also explores the dispersion of light and color effects from a dichroic film.

Early tests for the installation design involved bending a sheet of dichroic film to understand light pattern behavior based on surface curvature. In fact, the schematic design proposal involved photographs of scale models made out of the film as a way to more accurately represent caustic behavior, as seen in Figure 2. In the article “Architectural Caustics—Controlling Light with Geometry” the design researchers also describe experimenting with physical prototypes to illustrate the physical realization of optimizing geometry to reflect light.⁵ The dichroic color changing material has also been used in other public art projects including Soft Lab’s projects Billow and Nova which draw upon iridescence as a way to generate artwork that looks different from all sides. Artist, Chris Wood, likewise produces dichroic sculptures which display a spectrum of color by rotating panels of glass at various orientations in order to respond to light conditions. Covid Confessionals differs by exploring an inhabitable field of light, color, and pattern.

The results of these effects in the built installation provide a network of socially enveloping fields of color and light which

differ based on concave and convex sides of the surface. The concave side reflects light forward generating a caustic pattern, while the convex side casts raking colorful shadows. The walls also provide an analog color distorted filter upon which to view the city much like the digital filters used on phone cameras today. Thus, the installation not only provides a physical mediator to help prevent the spread of COVID-19, but also provides a lense to ways of seeing and encountering the environment around the visitor. While not measurable, the project tries to contribute to health aspects at the community and individual level. Specifically focusing on mental health, offering a playful and cheerful space for people to engage one another in public. Subjectively, the architecture does not suggest it can solve the problem of social isolation, but rather provide an alternative place for safe interaction, colorfully reminding us of capacity for resilience.

COMMUNITY INTERACTION AND PUBLIC RESPONSE

The third research area provides ethnographic studies, qualitative observation and documentation, and a selection of social media responses to the project to demonstrate how design can provide a safe space to support the health and well-being of the community in a time of social isolation due to a global pandemic.

“For decades, planners, architects and placemakers have been working to improve health and well-being. In doing so, they’ve made the case for—among other things—active travel and neighbourhood designs that promote physical activity, enhance social connections and strengthen mental health.”⁶

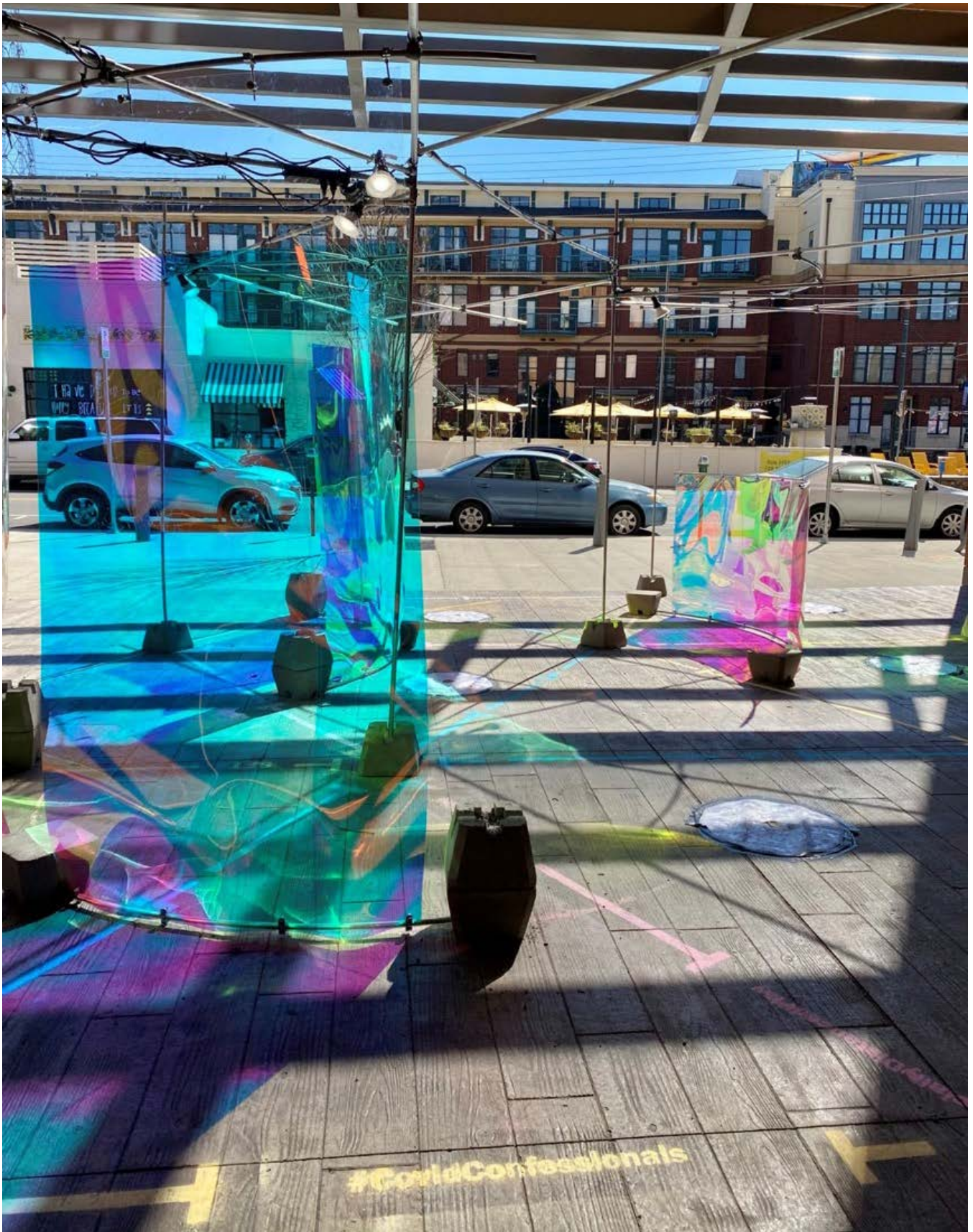


Figure 3. Iridescent walls with demarcated zones and interactive light pads on ground plane. Dickey/Radnia.

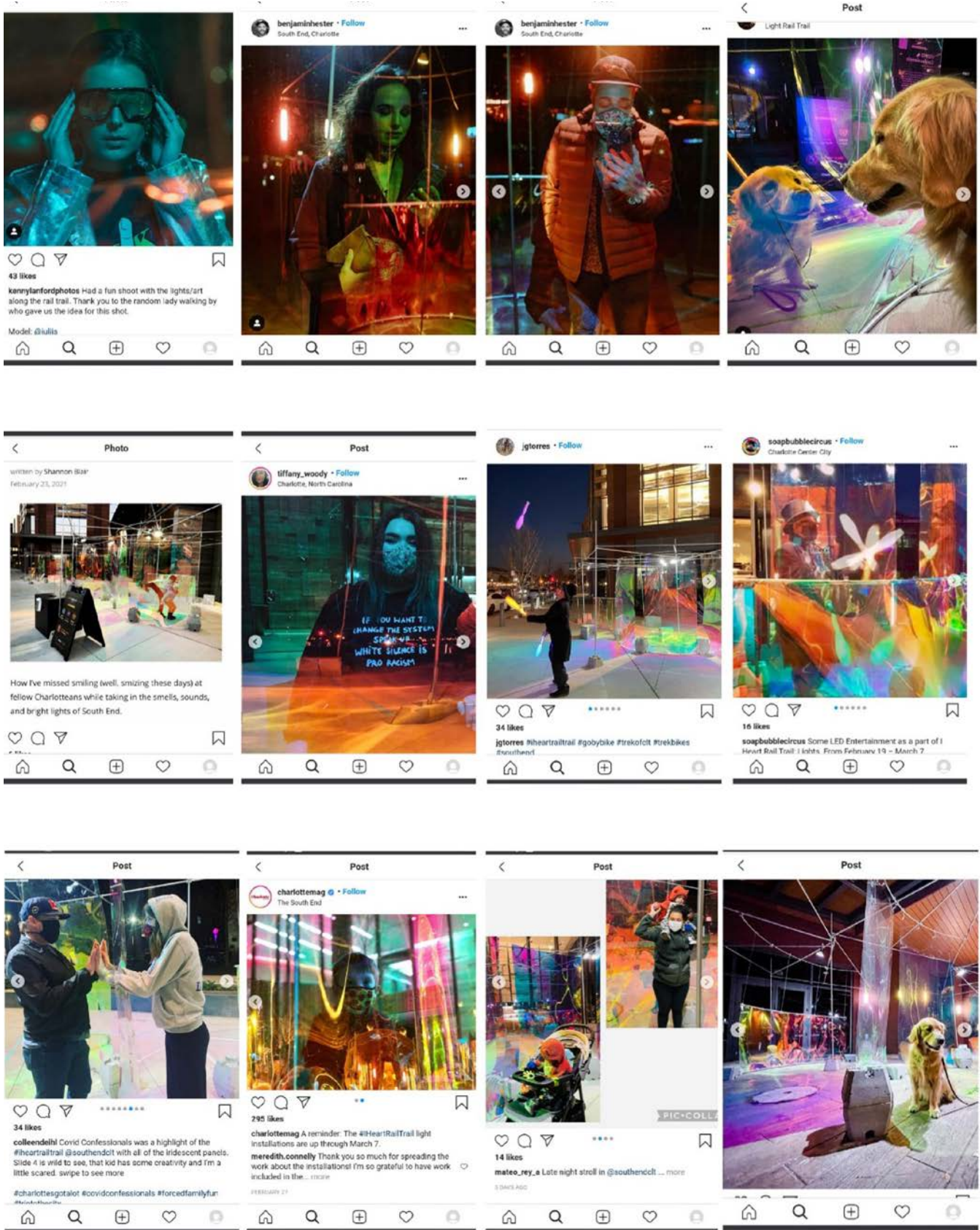


Figure 4. A catalog of social media surge to #covidconfessional. Dickey/Radnia.



Figure 5. Scale, Speed, Interaction and the city fabric. Dickey/Radnia

This public event, happened 9 month after stay at home order, which was considered as one of the first occasions that the city of Charlotte organized to invite people, collectively be part of streets and public space. It was an opportunity to design a piece that would enable a transition and recovery phase to ensure return to healthy communities. In response to this statement, questions such as how design can ensure safety after a public health crisis and encourage community engagement was directing the design.

Located in the commercial and office district of the city, the day time vs. night time activities, social groups and demographics, and weekday vs. weekend events offered different types of responses and engagement with the piece. Considering location and multiple layers of urban life and activities, the team designed varying clusters based on different scenarios and interactions. By maintaining healthy community goals, the design would allow people to come together during a pandemic and engage with the space and each other safely in several ways such as: a booth for an individual to take a lunch break or a phone call, a safe barrier for pairs to have a conversation, a gathering space for a group of people to meet socially distanced, and so on.

Public response to the project spreaded in both physical and digital social realm and was a bit different that what the team anticipated. The team was aware of the negative effects that stem from the lack of social interaction, but still observed an immense outpouring of people coming out and using and photographing the installation in unexpected ways. Designed dichroic shields were being used as a photo lens and filter for

taking selfies whereas it was intended to be a new and safe filter to see the city and surrounding environment.

Another layer of observation revealed different activities that were happening during the time of the project. Covid Confessionals was an added layer of light and play to the fabric of Uptown Charlotte that resulted in seeing new interactions happening in that location. Activities such as passerby strolling and posing in a field of light bounced off the illuminated shields, multiple group of kids playing in a physically distanced ground, social media influencers finding the right background for their selfies were few of the engagements that were new to that context and part of town. Interactions were both centered around individuals and collective explorations. There was even a street performer, poking fun at the material qualities of the installation, with a bubble blowing performance.

The amount and ways of engagement with Covid Confessionals in social media was also being tracked by designated hashtags(#covidconfessional, #sociallydistancedplay) that allowed access to gather captured moments by different users. This investigation also brought attention to the accompanied hashtags such as #communitypossible and #forcedfamilyfun in users' posts.

The week long on-site installation process was an opportunity to monitor the ongoing life and engagement of the users in that area. The qualitative observation of how the installation was being experienced and documenting it highlights the contrast between before and after life of the scattered nooks in the city.

It is a testimony to the role and responsibility of design with social, political and cultural considerations in public domain and how it can push toward revitalizing healthy community goals and discreet engagement among citizens

The above-mentioned ethnography studies of public response and how the installation was experienced both in physical space and social media reminded us of the values of a resilient and healthy community that includes: Engagement, Positive Culture, Responsiveness, growth and so on.

The project was designed around scale, transparency and colourfulness to be integrated in the city and considerate of diverse groups of people that will occupy and interact with it. It was a moment of reconciliation with being in public after months of practicing social isolation and prioritizing safety above anything else. This project was a case study to combine design and material quality to broadcast its ability to play with light and encourage safe physical interactions between strangers.

CONCLUSION

The project views design as research and acts as a design experiment and a design intervention. It asks, How can architecture promote community wellness during a time of distressing social isolation? With an awareness of the mental consequences of social distancing, the project tries to provide a safe place for people to engage with one another in public space, colorfully reminding us of our capacities for resilience.

The public art installation poses some ideas in the context of design about social situations, global challenges, materials, rapid response, and playfulness as ways to think about how design and designers can play a role in the community to conduct a dialog about social, political and cultural issues.

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