Text Mesh T-Shirt Research & Development

James Terrazas
Spring 2024
Proprietary Processes

Process

This project started with a prompt given by a professor in my creative construction class of 2023. The idea was to pick an object, and design a look solely based off the physical characteristics of the object.

The object I chose was an old book that was picked at random from the

Library.

Whilst ideating what different aspects of gestalt I could take from this physical object, the idea of transparency and the human silhoutte kept popping into the forefront of my mind.

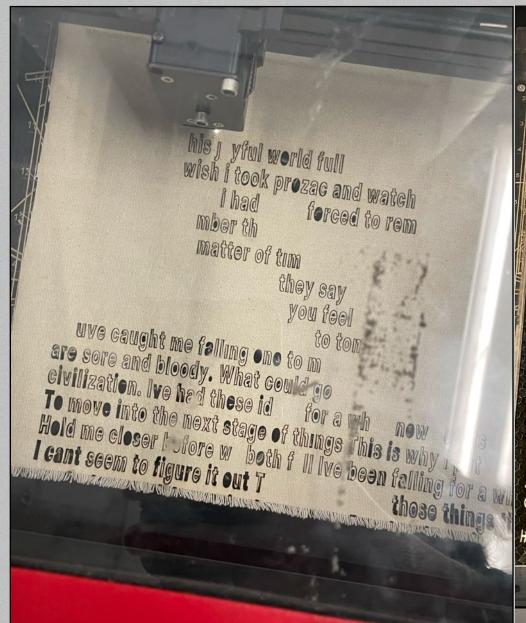
I wanted to design a garment that outlined the human figure, yet obscured the details. Through layering a baggier cut t shirt with a tighter fitting garment underneath, you see the outline of the body as just a silhoutte, rather than the details that often come to the forefront of your eyes.

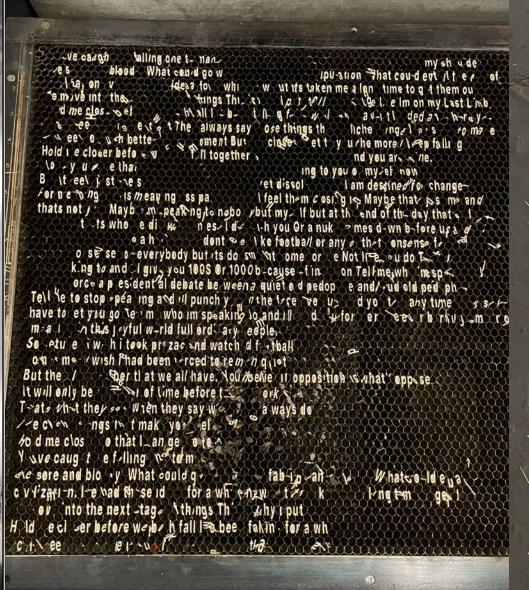


At the same time, I had been experimenting with different methods of incorporating text & graphics into clothing that I made.

This all resulted in the idea of creating a garment purely out of laser cut text. Of creating my own "mesh" out of a poem I had written, opening the possibility for a breathable garment with a wide range of styling possibilities.







Youve caught m falling one to many are s bloody What could go w nipulation. What could entail the end of Ivilization, ly ideas for whil now ut its taken me a long time to get them out. To move int the n f things This is why I put it all ut on the line im on my Last Limb. Hold me closer before w both fall Ive been falling for a while and hevent leaded anywhere yet. I cant seem to figure it out. They always say those things the liche things that seem to make you feel so ush better in the moment But the closer I get to you the more I keep falling. bloody What could go w Hold me closer before w f II together n I love you more than wen fleerm to nev of pai But it feels just the s

For meaning in this meaning! as pan

I feel them closing in. Maybe thats just me and thats not you. Maybe im speaking to nobedy but myself but at the end of the day that's alright thats who we die with Unless! die with you or a nuke somes down before us and I dive like a hail m ry! dent even like feetbell or any of that nemence for that matter nemence for everybody but its desent hit home for me Not like you do Tell me who But it fools just the s king to and ill give you 100\$ Or 1000 because of inflation. Toll me who im speaking to erec a precidential debate between a quiet old pedephile and loud old pedephile.

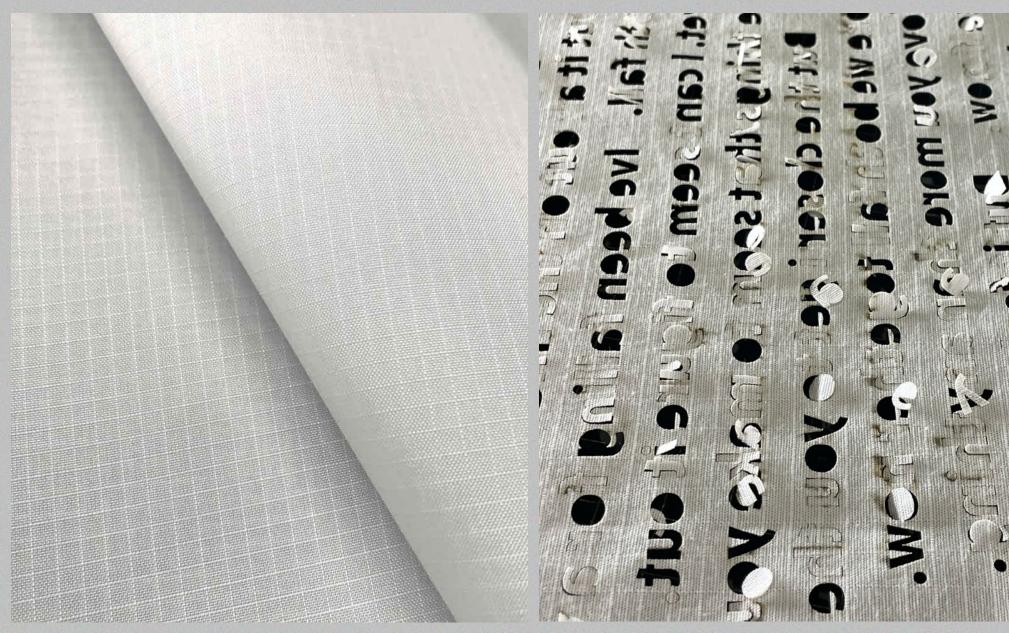
Tell me to step speaking and ill punch you in the face. Ive punched you to many times now so ill have to let you go Tell me who im speaking to and ill held you ferever The ever burning ember of meaning in this joyful world full ordinary people. Semetimes i wish I took prozac and watched football. Semetimes I wish I had been forced to remain quiet. But then I remember that we all have. Your boiled in eppecition is what I eppece. It will only be a matter of time before things work out. Thats what they say when they say what they always do The clicke things that make you feel ter Held me eleger so that I can get to tem Youve eaught me falling one to m are sere and bloody. What could go no with fabric manapulation. What could entail civilization. Ive had these id for a while new ut it's k long tim got the To move into the next stage of things This is why i put Hold me elecar before we both fall live been falling for a wh I can't seem to figure it out. They always say those things th

Test 1

I had 3 main goals for this project

- to create a mesh shirt entirely out of text
- to cut each panel seperately on the laser bed and pattern my garment digitally through Clo3d
- to outline the silhoutte of the human body

To produce this technique in a functional manner it took dozens of hours of research & development experimenting with different textiles, fonts, file types & laser settings.



100% Cotton Ripstop Final Fabric

The perfect laser ratio

Finalized Front Panel Vector File

One of my limitations with this project was that I could only laser cut natural fibers at my school's lab. I first tested the design on muslin to get a general feel for how fabric would react to this many cuts. I quickly realized that I would need not only a thicker and more durable fabric, but one that was woven in a way to prevent fraying. This is why I landed on a Cotton Ripstop.

The other challenge was how I formatted the text in illustrator. If the kerning of the letters was too small then the fabric would fall apart completely, if it was too big, then the general "mesh" effect wouldn't come to fruition. Another issue was that the overall cut time of the file needed to be as quick as possible, yet if it was too fast/powerful the fabric would ignite and I would need to start all over again.

To achieve a successful end product, I needed to find a middle ground of laser intensity, speed, & font size to create a design that was durable, looks like a mesh, and had a relatively fast cut time on the laser bed.

Youve many times now many times now im bumping into both walls and my shoulders are sore and bloody. What could go wrong with fabric manipulation what could entail the end of civilization. Iwe had these ideas for a while now but its taken me a long time to get them out. To move into the next stage of things This is why i put it all out on the line. Im on my blast, limb. Hold me closer

its taken me a long time to get them out. To move into the next stage of thing:
This is why i put it all out on the line. Im on my. Last. Limb. Hold me doser
before we both fall. Ive been falling for a while and havent landed
anywhere yet. I cant seem to figure it out. They always say those things
those didne things that seem to make you feel so much better in the
moment. But the closer i get to you the more I keep falling. Hold me
doser before we both fall together now. For i am yours and you are
mine. I love you more than anything. I don't know if im speaking to
you or myself now. But it feels just the same. For my ego has not yet
dissolved and I am destined for change. For meaning in this

meaningless panopticon. I feel them closing in. Maybe thats just me and thats not you. Maybe im speaking to nobody but myself but at the end of the day that's alright because thats who we die with Unless i die with you. Or a nuke comes down before us and I dive down to catch it like a hall mary. I dont even like football or any of that nonsense for that matter. Its not nonsense for everybody but its doesnt hit home for me. Not like you do. Tell me who im speaking to and ill give you 100\$. Or 1000 because of inflation. Tell me who im speaking to and ill force a presidential debate between a quiet old pedophile and loud old pedophile. Tell me to stop speaking and ill punch you in the face. Ive punched you to many times now so ill have to let you go.

Tell me who im speaking to and ill hold you forever. The every burning ember of

meaning in this joyful world full ordinary people. Sometimes i wish i took prozac and watched football. Sometimes I wish i had been forced to remain quiet. But then I remember that we all have. Your belief in opposition is what I oppose. It will only be a matter of time before things work out. That's what they say when they say what they always do. The didne things that make you feel better Hold me doser so that i can get to tomorrow. And ill give you the world on a minimalist platter. Youve caught me falling one to many times now. Im bumping into both walls and my shoulders are sore and bloody. What could go wrong with fabric manipulation. What could entail the end of civilization. Ive had these ideas for a while now but its taken me a long time to get them out. To move into the next stage of things. This is why i put it all out on the line. Im on my. Last. Limb. Hold me doser before we both fall. Ive been falling for a while and havent landed anywhere yet. I can't seem to figure it out. They always say those things those diche things that seem to make you feel so much better in the moment. But the closer i get to you the more I keep falling. Hold me doser before we both fall together now. For i am yours and you are mine. I love $y \circ u$ more than anything. I don't know if im speaking to you or myself now. But it feels just the same. For my ego has not yet dissolved and I am destined for change. For meaning in this meaningless panopticon. I feel them dosing in. Maybe thats just me and thats not you. Maybe im speaking to nobody but myself but at the end of the day that's alright because thats who we die with.



I utilized a machine with a larger laser bed, which involved learning how to properly format and operate an Epilpogue Fusion Laser Bed.

no imalist pastizer, Yeuve caught me falling one to many times new, im bumping into both walls and my shoulders are sore and bloody. What could go wrong with fabric Held me Acres se that I can get to tememow. And Ill give you the world on a when they say what they always do. The cliche things that make you feel bett quiec. But then I remember that we all have. Your belief in eppesition is what I only be a matter of thine before things work out. Thats what they say meaning in this Joytul world full endinery people. Sometimes I wish I took prozec and watched feetball. Sometimes I wish I had been forced to remain pur ched you to many times now so til have to let you go.

[all me who im speaking to and ill hold you ferever. The ever burning ember of specially to and ill force a presidential debate between a quiet old pedephile, and out old pedephile. Tell me to stop specially and ill punch you i the face. Two escrypedy but its deesnt hit home for me. Not like you de. Tell me who im speaking to and ill give you 1605, 67 1006 because of inflation. Tell me who im comes down before us and I dive down to catch it like a hall mary. I dont even like 'sochan er any of that nensense for that matter. Its net nonsense for thet's airight because thats who we ale with Unless I ale with you. Or a nuke d'ssolved and la m destined for change. For meaning in this me and meaningless panopticen. I feel them closing in. Maybe thats just me and mine. Heve you mere than anything. Hent knew if in speaking to you or myself new. But it feels just the same. For my ego has net yet mement. But the cleser I get to you the more I keep falling. Hold me cleser befere we beth fall together new. For I am yours and you are ruese cliche things that seem to make you teel so much better in the This is why 'put it all out on the line, by on my . Last. Limb. Hold me cleser before we beth fall. Ive been falling for a while and havent landed 'ts taken me a long time to get them out. To move into the next stage of things What could entail the end of civilization. Ive had these ideas for a while now but slisw rited etal galqmud mi and my shoulders are sere et ene gaillet em าเลียล

Youve saught me many times now. Im bumping into both walls and my could entail the end of civilization. Ive had these ideas for a while now but its taken me long time to get them out. To move into the next stage of things This is why I put it been falling for a while and havent landed anywhere yet. I can't seem to figure it out. They always say those things these clicke things that seem to falling. Hold me closer before we both fall together new. For I am yours an are mine. Here you more than anything. I don't know if im speaking to you myself now. But it feels just the same . For my ego has not yet allsoolyo am destined for change. For meaning in this meaningless panopilison. It is closing in. Maybe thats just me and thats not you. Maybe im speaking to but myself but at the end of the day that's airight because thats who we Unless I die with you. Or a nuke comes down before us and I dive down hall mary. I dent even like feetball or any of that nonsense for that matter. for everybody but its doesn't hit home for me. Not like you do. Tell me who Ill give you 198\$ Or 1999 because of inflation. Tell me who im speaking to and presidential debate between a quiet old pedophile and loud old pedophile. speaking and ill punch you in the face. Ive punched you to many times now. So ill ha you go. Tell me who im speaking to and ill hold you forever. The every burning and or meaning in this joyful world full ordinary people. Sometimes I wish I book process and feetball. Semetimes I wish I had been forced to remain quiet. But then I remember that we all have. Your belief in opposition is what I oppose. It will only be a matter of this balary with work out. Thats what they say when they say what they always do. The cliche tills you feel better. Hold me closer so that I can get to tomorrow. And Ill give you the world on a minimalist platter. You've caught me falling one to many times now. Im bumping into both of and my shoulders are sere and bloody. What could go wrong with fabric manipulation. What sould entail the end of civilization. Ive had these ideas for a while new but its taken man time to get them out. To move into the next stage of things. This is why I put it all out on the li Im on my Last, Limb. Hold me closer before we both fall. Ive been falling for a while and have landed anywhere yet, I can't seem to figure it out. They always say those things those clicks things that seem to make you feel so much better in the moment. But the closer i get to you the more I keep falling. Held me closer before we both fall together now. For I am yours and you are mine. Here you mere th. n anything. I don't know if im speaking to you or myself now. But it feels Just the same . For my ego has not yet dissolved and I am destined for change. For meaning in this meaningless panepticen. I feel them closing in. Maybe thats just me and thats not you. Maybe im speaking to nobody but myself but at the end of the day that's airight because thats who we die with. Unless I die with you. Or a nuke comes down before us and I dive down to catch it like a hall mary. I dent even like feetball or any of that nonsense for that matter. Its not nonsense for everybody but its doesn't hit home for me. Not like you do. Tell me who im speaking to and ill give you 100\$ Or 1000 because of inflation. Tell me who im speaking to and ill force a presidential debate between a quiet old pedephile and loud old pedephile. Tell me to step speaking and ill punch you in the face. Ive punched you to many times now. So ill have to let you go. Tell me who im speaking to and ill hold you forever. The ever burning ember of meaning in this joyful world full.

The every burning ember of meaning in this joyful world full ordinary people. Semetimes I wish I took

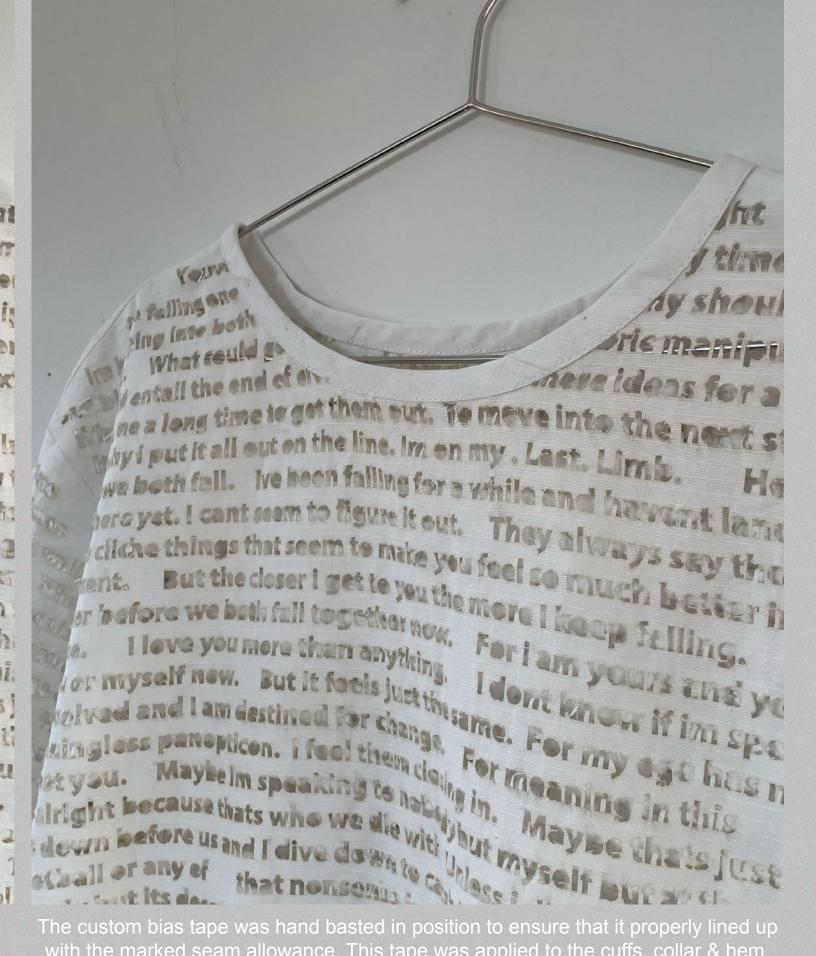
manipe, 24 on, What sould ental the end of divilization, yos had these locas tesse of a manipe, 24 on the meat stage of "any 24 of the meat stage of "things. It's 's winy! petit all out on the lime. Im on my, Last, Limb. Hold me closer before we had not a period of the lime. In on my, Last, Limb. Hold me closer before we had of the lime that a manipe and havent landed anywhere yet is safe seen to find the character of things that seem is safe to be a clicke things that seem to make you leel so much better in the moment. But the closer leet is you the more in an amount of the manipe is safe that the manipel seek had the well of the wind in the safe manipel is an appear of the my seek in the manipel in this manipels to safe in the my seek leet is well and seather for the myself change. For manipel in this manipels safe they are itself when the safe had a finat notype in seek leet in the safe had not not seek for the myself in the safe had not not seek in the safe had not not be a finat notype in seek in the safe had not not be a finat seek had a finat notype in the safe had not not be a finat who we call with. Unless is also safe at the safe of that's slight because that's who we die with. Unless is also say and of the day that's slight because that's who we die with.

The Shirt was patterned digitally through clo3d, then each panel was brought into illustrator where I formatted the text, leaving 1/2" seam allowance.

Youve an Wahi me falling one to many tin im bumping into both walls and my she bloody. What could go wrong with fabric mani; becay.

becay. to taken me a long time to get them out. To meve into the next This is why i put it all out on the line. Im on my, Last, Limb. hafere we both fall. Ive been falling for a while and havant la anywhere yet. I can't seem to figure it out. They always say those clicke things that seem to make you feel so much bette marinent. But the closer i get to you the more I keep falling desar kafere we both fall together now. For i am yours and Heve you more than anything. I don't know if im you or myself now. But it feels just the same. For my ego h dissolved and lam destined for change. For meaning in this meaningless panepticen. I feel them clasing in. Maybe thats ats not you. Maybe im speaking to nobedy but mysalf but at ti at's alright because thats who we die with Unless i die with you mos down before us and I dive down to catch it like a hail mary. in football erany of that nonsense for that matter. Its not no styleody but its decemble home for me. Not like you do.

> After sewing each panel together, all that was left was to create custom bias tape with the same ripstop cotton.



with the marked seam allowance. This tape was applied to the cuffs, collar & hem.



The final product was paired with a series of dyed tanktops, and custom "Attack Shorts" designed by me.