



The Recording.

A film about robots, retirement homes,
and our upcoming dystopian future.

Film:

https://media.ed.ac.uk/media/1_hq602e9r

Video Commentary:

https://media.ed.ac.uk/media/t/1_6n8lk2id

Website:

<https://havtstudio.wixsite.com/the-recording>



THE UNIVERSITY
of EDINBURGH

Project Objective

Project Objective :

The main objective of the project is to make a film that explores how our continuous reliance on technology (and AI) could lead to a dystopian future where the aging population is forgotten in nursing and retirement homes.



THE UNIVERSITY
of EDINBURGH

The Story

The Story / Lessons from the first submission

During the first submission, I got feedback that validated that my project lacked clarity and good pacing. I felt that this was mainly because the story threads were too many and the dialogue needed to be polished further.

So the first thing I did was to re-write the story.

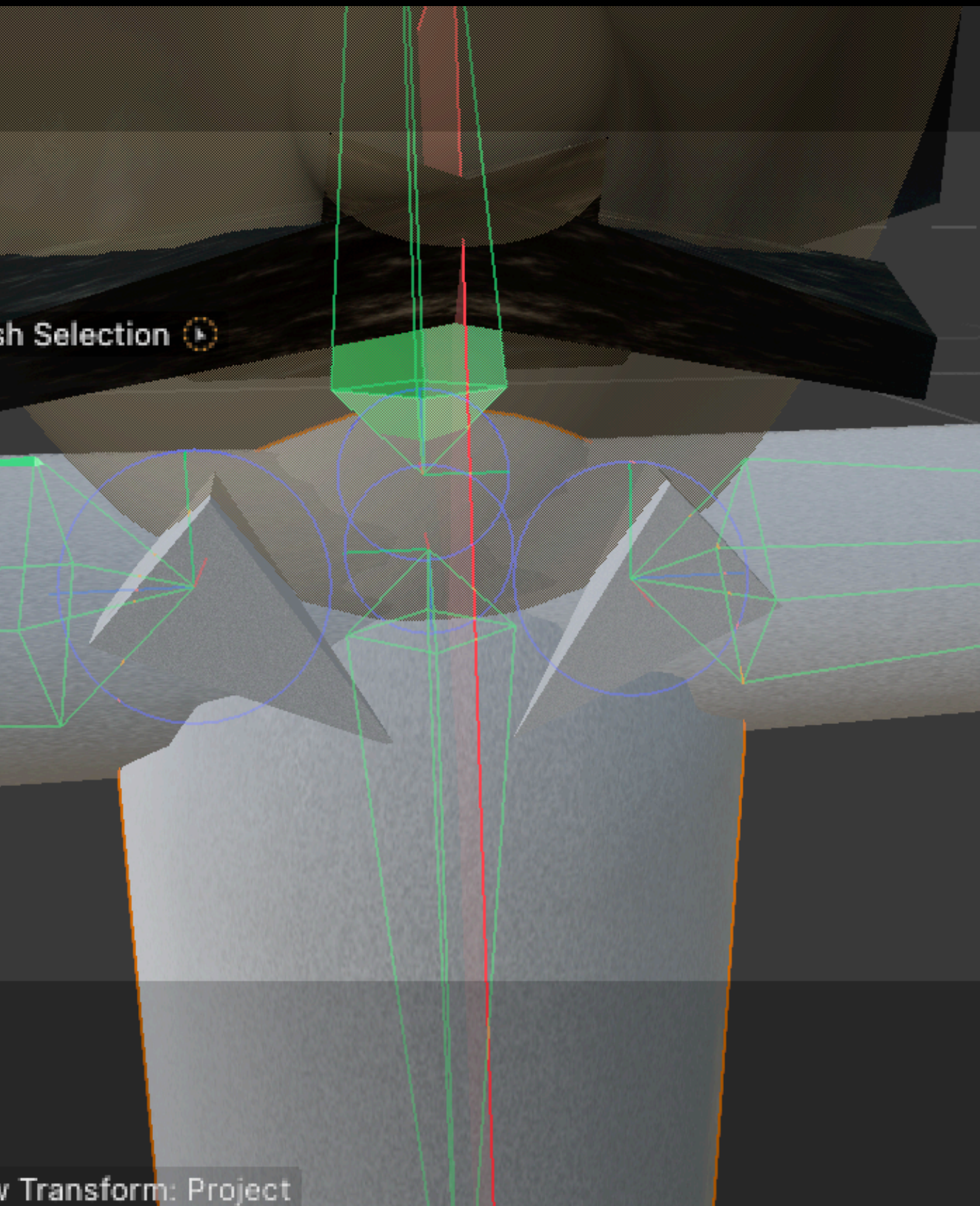
The Story / The Space Station

Even though I received positive feedback about the idea of having the setting being a space station retirement home. I felt that story thread was very hard to explain in the short time my film had and I worried it would detract from the main emotional story I wanted to tell.

At the end, I felt that Alex (previously Wren the robot) was enough to express our reliance on technology. Another big thing I scrapped is having the old person as a half-robot for a plot-twist reveal since that didn't add anything to the story.



The Story / The introduction of “the son”



When thinking about possible new dialogues or scenarios, I felt that the narrative needed a better conflict and story structure. Having an old person rant to a robot wasn't interesting to me anymore (or the viewers). I watched various short films and most of them had a family dynamic.

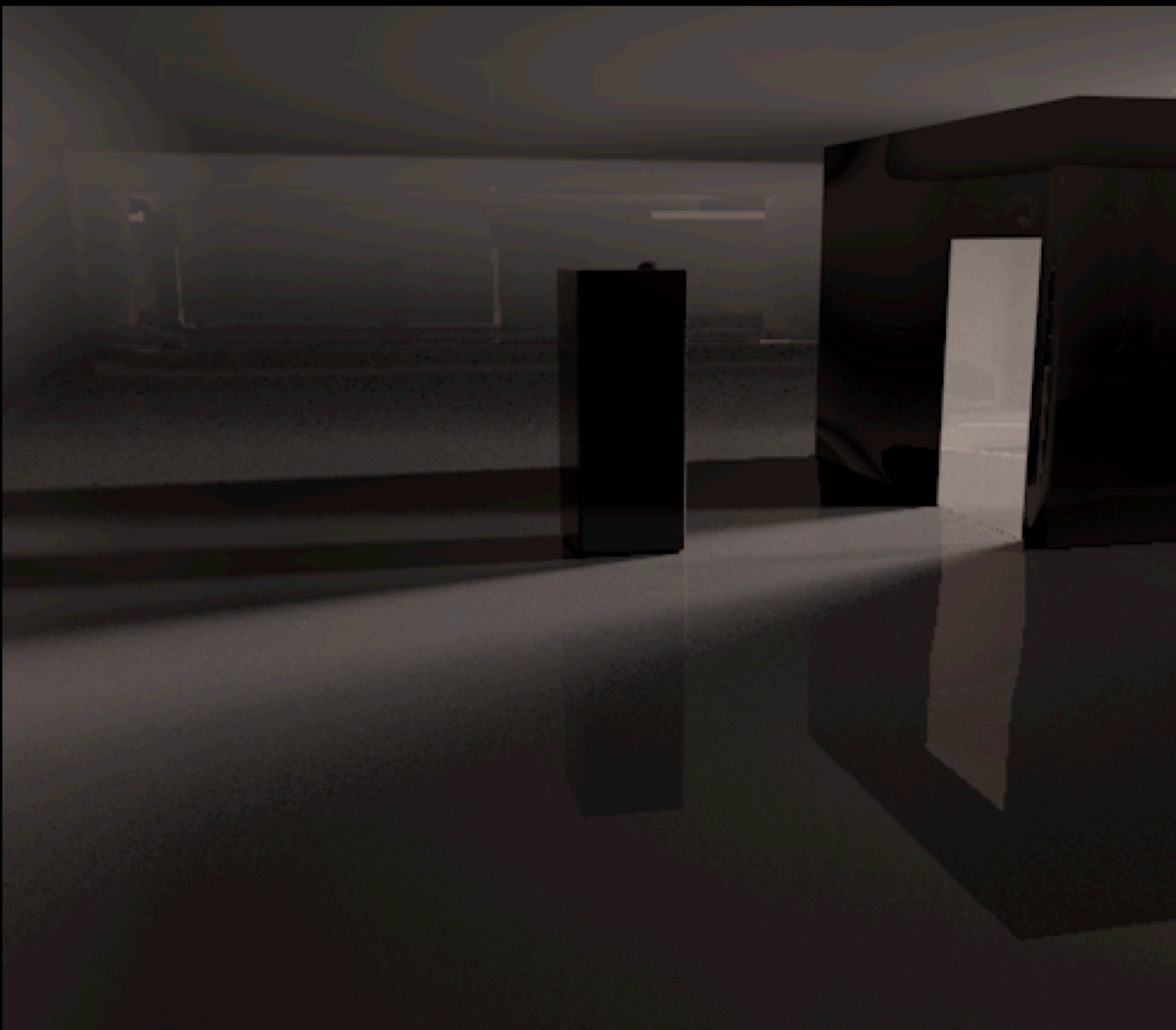
So I figured that having a son was the key to have better dialogue and establish an easier, more relatable connection for the viewer.

The Story / The new script

For the new script, the only thing I had clear was that the son was probably a good idea and that everything still needed to happen in one take so that the film can be translated easily into a VR experience.

A tutorial on YouTube guided me in crafting key story beats and creating a narrative with a plot-twist so that the viewer feels that the video was “worth it”.

(Standard Story Company, 2021)



After watching the video, I remembered that one of my ideas was that everything was that everything was a security footage and that the robot was re-living the last conversation with the old guy in a loop to still care for him (because he was programmed to do so).

But I previously rejected that idea because I felt that was too cumbersome to explain in a short film (specially in one-take).

The Story / The new script

The new decision of adding a son made everything click together. The story would take place in the past via a hologram that the son is playing in the future with the help of the robot. In the future, the son is wearing a suit, implying that his father has recently passed and had his funeral. In this moments with the robot, he's watching the recording regretting not spending the last moments with him.

At the end I added some data about the upcoming old age population crisis and nurses quitting.

(World Health Organization, 2022a) (Yong, 2021)

```
Stuck v3 - Send Off

Retirement Home 6PM

Alex (robot): Good day sir, you have a visitor.

James enters the room.

James: (speaking to the robot)
      Thank you Alex,
      (turns around happy but not overly excited)
      Hey Dad!

Sam (an old guy, ) (very excited):
      Jamie! Oh, it's so good to see you! How are you?

James:
      Good! I-I'm good! Chilly today isn't it?

Sam:
      Oh don't get me started on that, I'm freezing.. come now please,
      take a seat with me son. Do you want

James:
      Oh I, that's ok. I won't be long.

Sam:
      Right, right, you're always in a hurry.

James:
      Right so.. anyway, what's up? are they taking good care of you?

Sam:
      Oh sure, that's all they're programmed to do.

James:
      They still haven't hired anyone?

Sam:
      Of course not, who would want to come to this dump?

James:
      ...

Sam:
      Well but enough about me, how are you, how's work?

James:
```



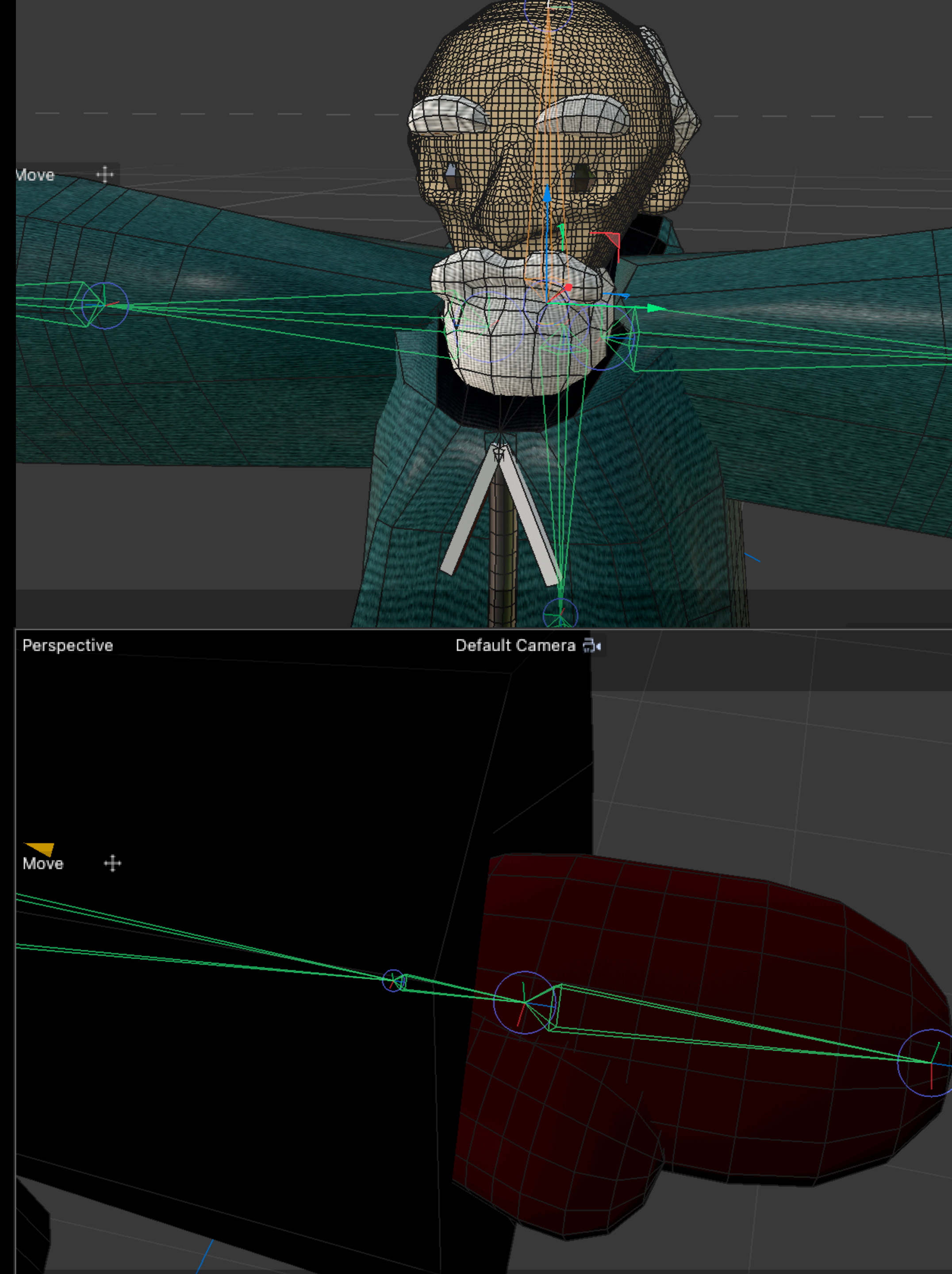
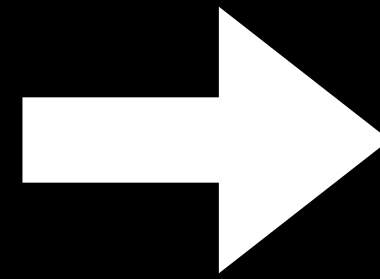

THE UNIVERSITY
of EDINBURGH

Back to Cinema4D

Back to Cinema4D | Samuel

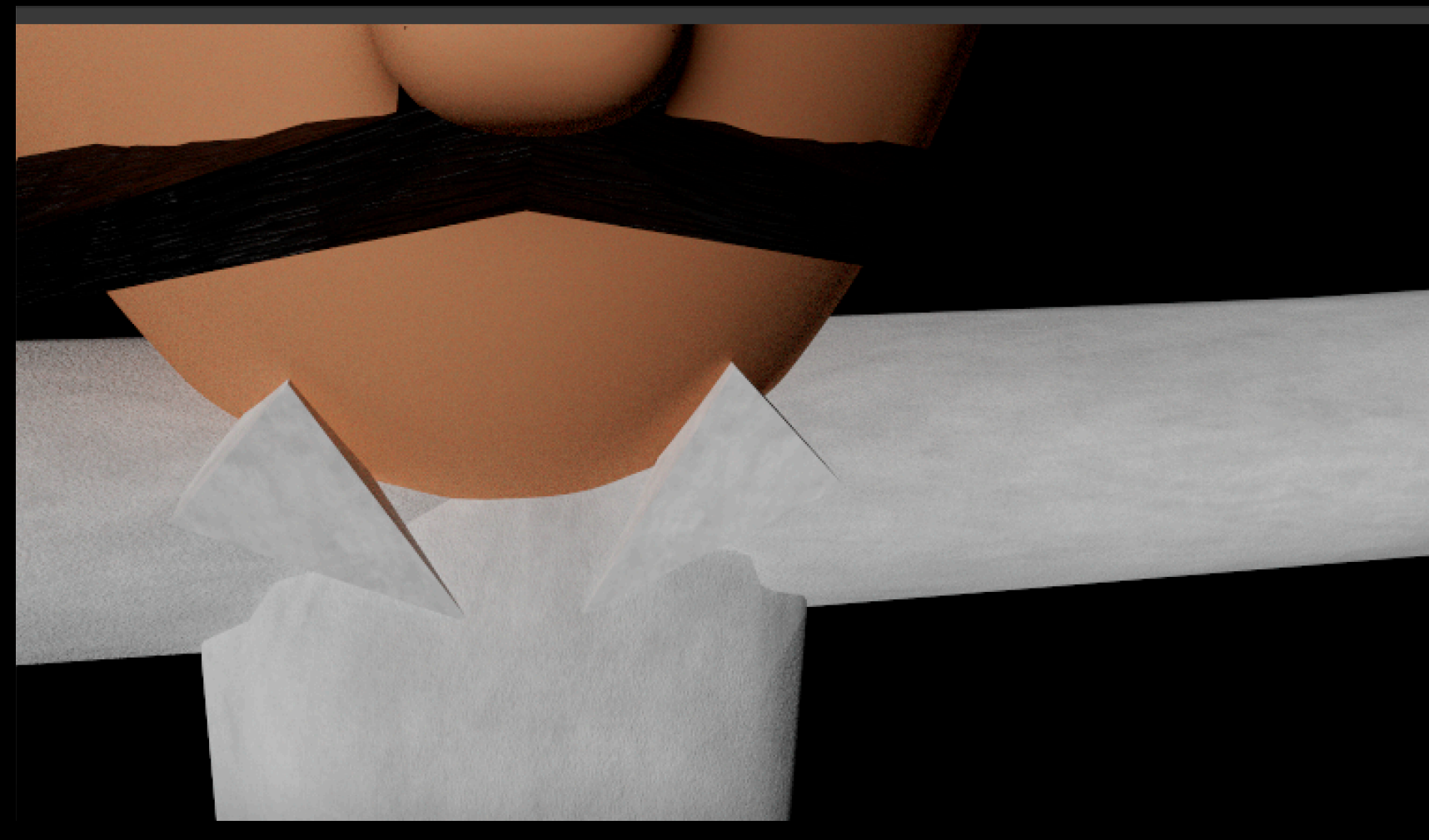
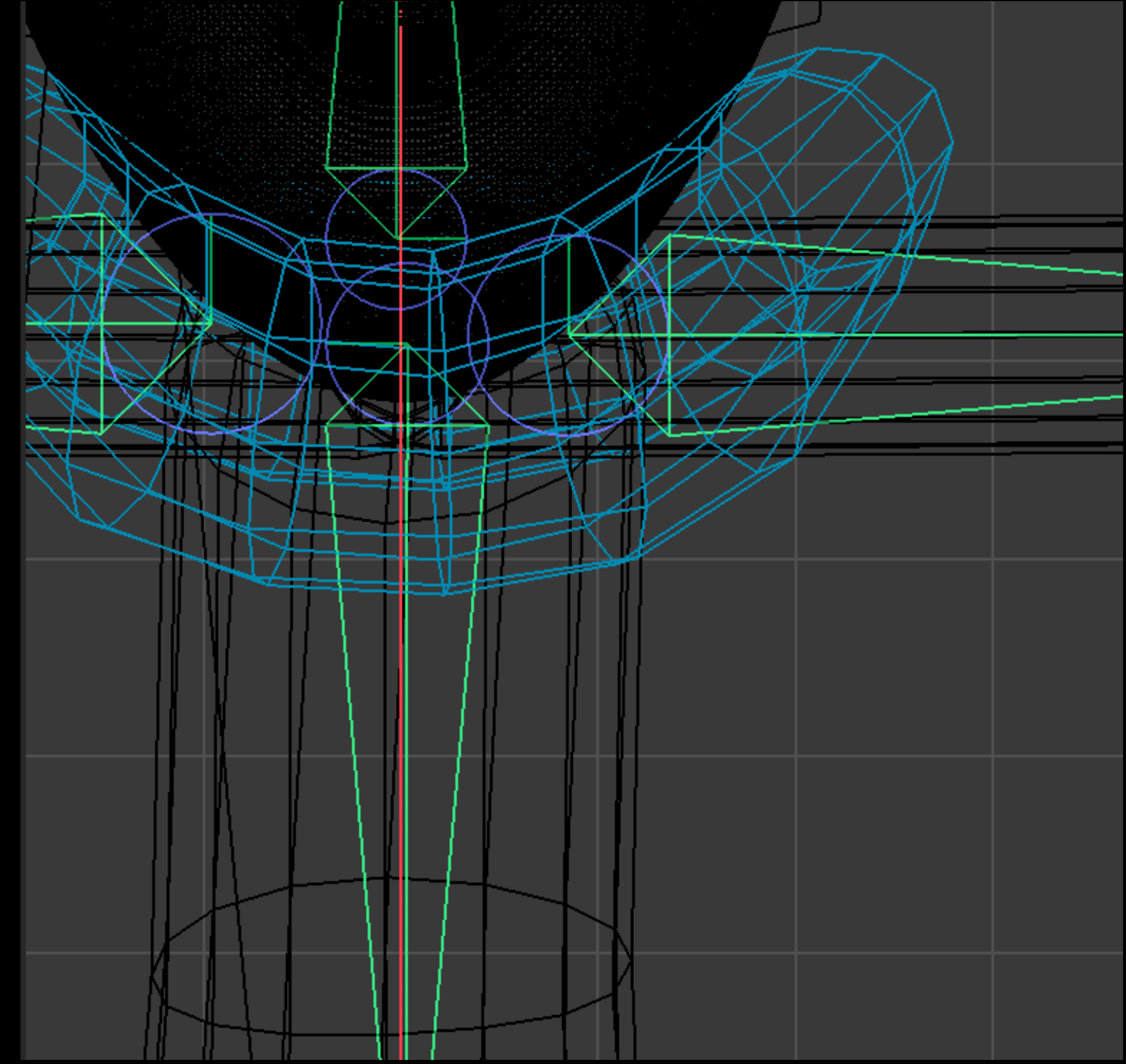
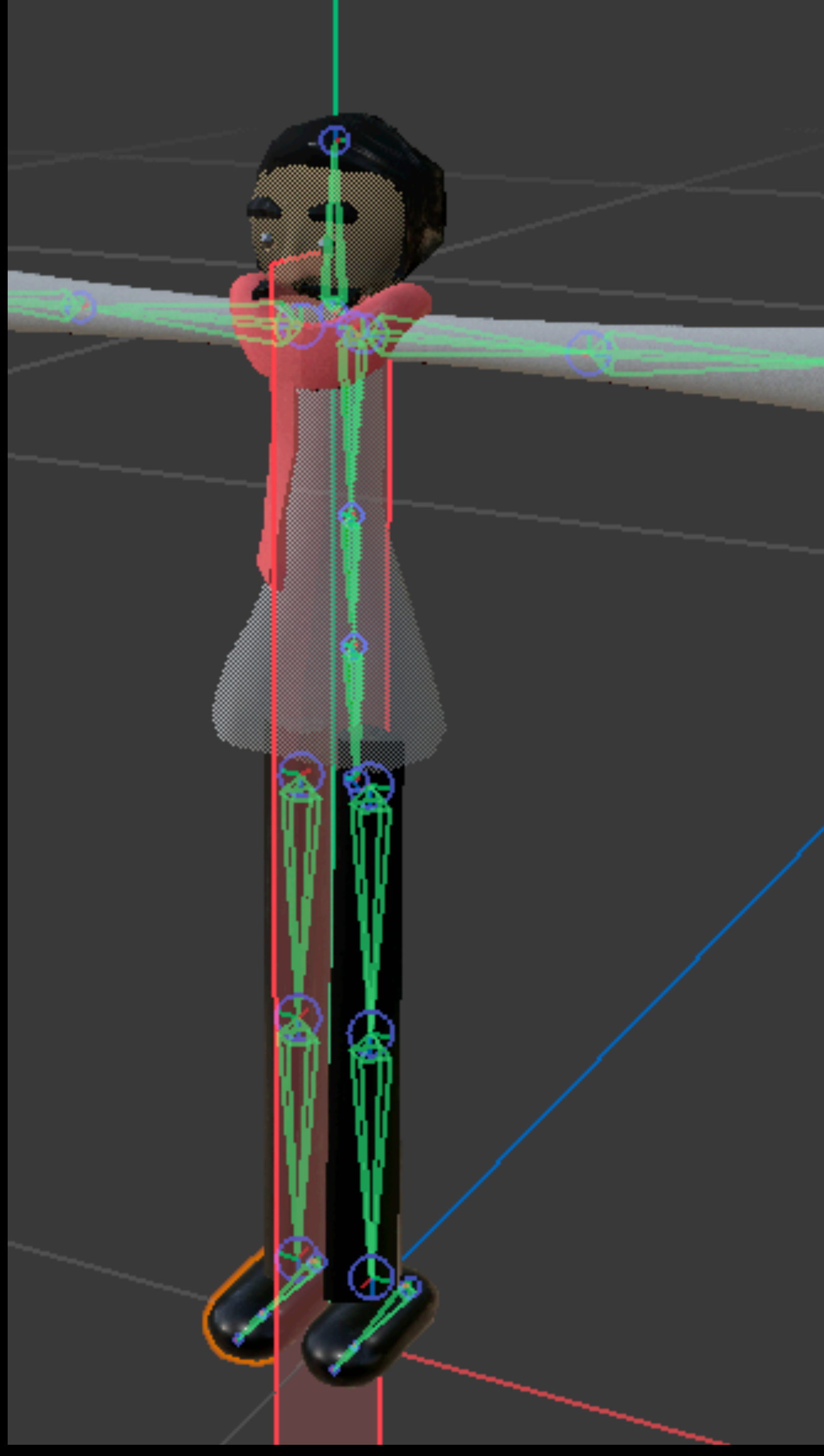
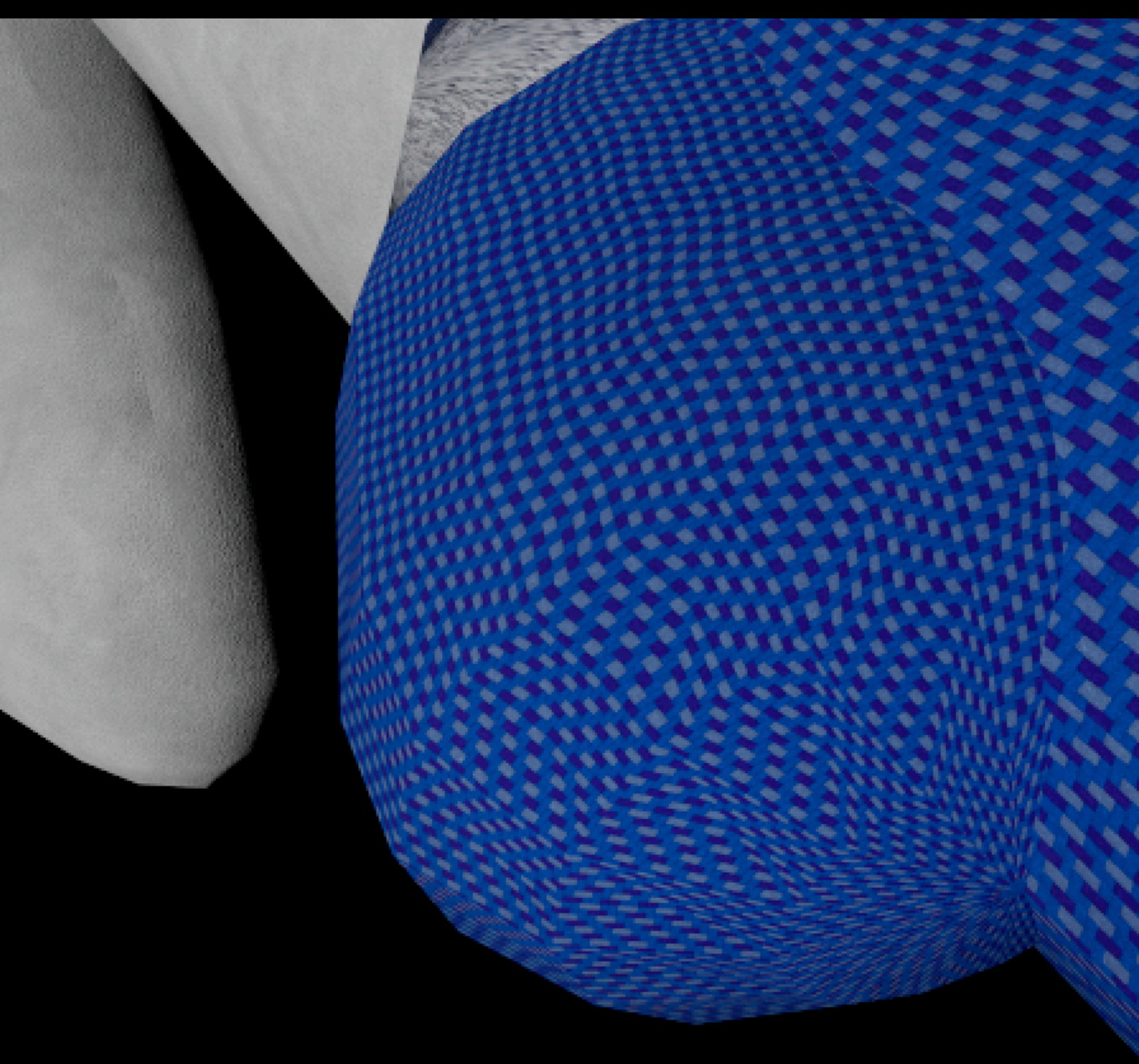
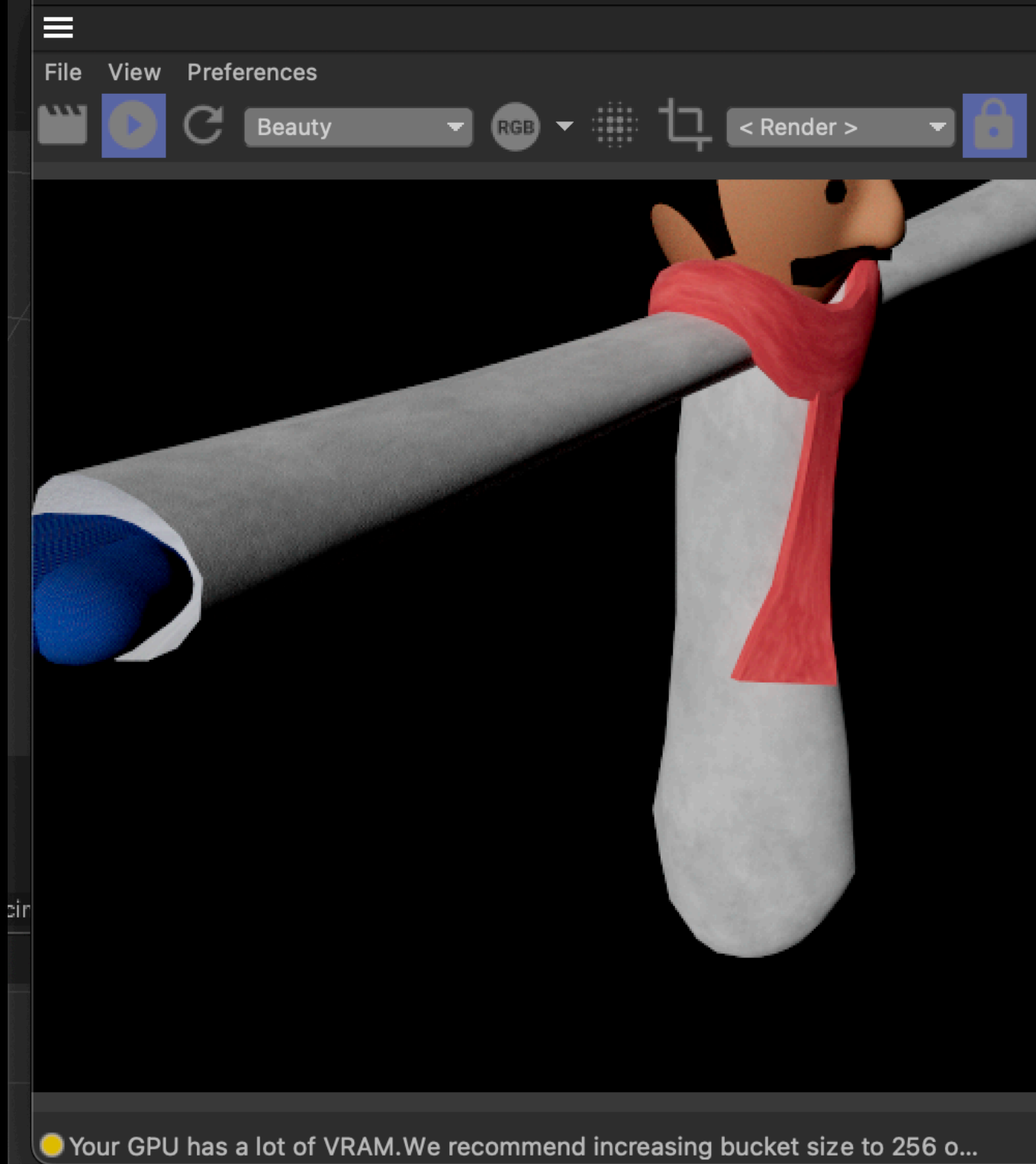
After the script was settled, the first thing I did was to jump back in Cinema4D and re-do Samuel (the old guy), to remove his robot body and give him a sweatshirt and mittens (so that I didn't need to have to model or animate his hands).

Back to Cinema4D | Samuel



Back to Cinema4D | James

After Sam, the next thing to model was James (the son). With the mittens staying, I felt that it was only logical to give him a sweater and a scarf to match. After some early tests I changed his hair from black to red in the hope that more people recognize him at the final shot (when he's wearing the funeral suit in the future).



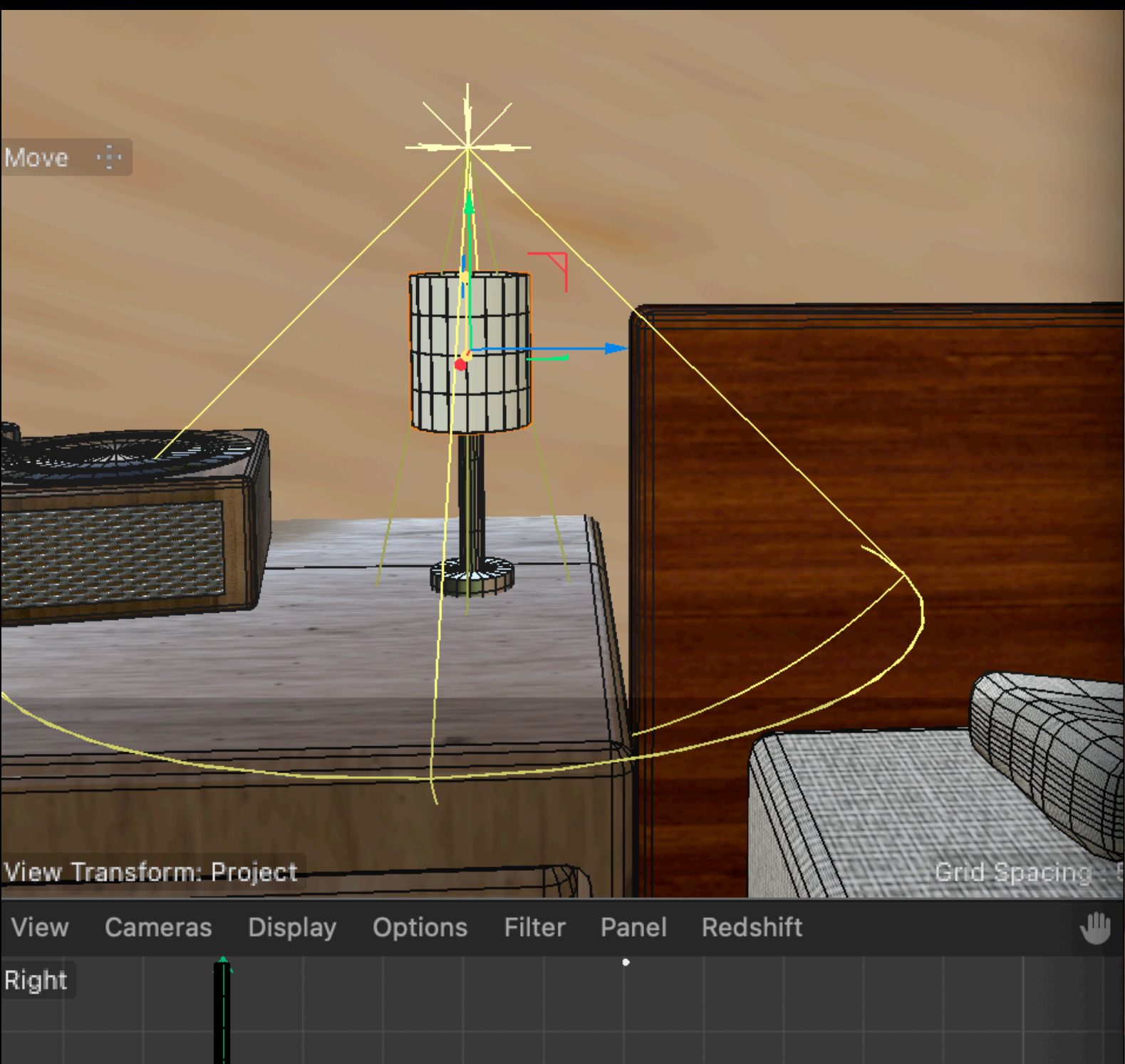
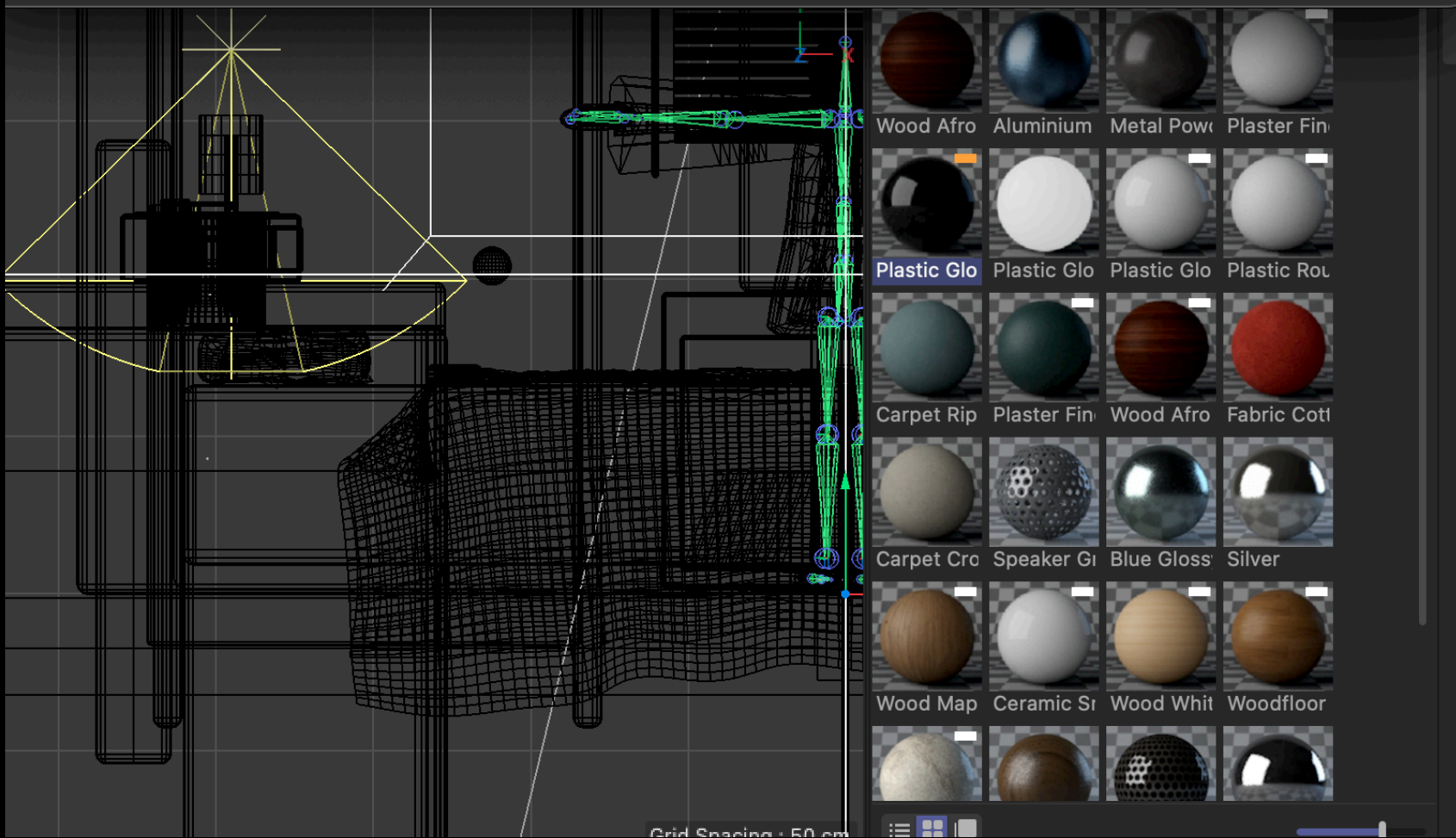
Back to Cinema4D / The Room

The room was the next big thing that I focused on, making the setting feel more like a normal retirement / nursing home so that the viewer can relate to it in VR and also for hologram twist to be even more unexpected (but possible because of the presence of the highly advanced robot).

After removing assets that I didn't model , I based some of the furniture off of my own using a lot of wooden materials that I felt looked good in that setting.



Frame 559: 2023-04-19 09:03:15 (16.95s)



Frame 0: 2023-04-18 18:50:58 (10.64s)



Frame 559: 2023-04-19 08:42:09 (26.50s)

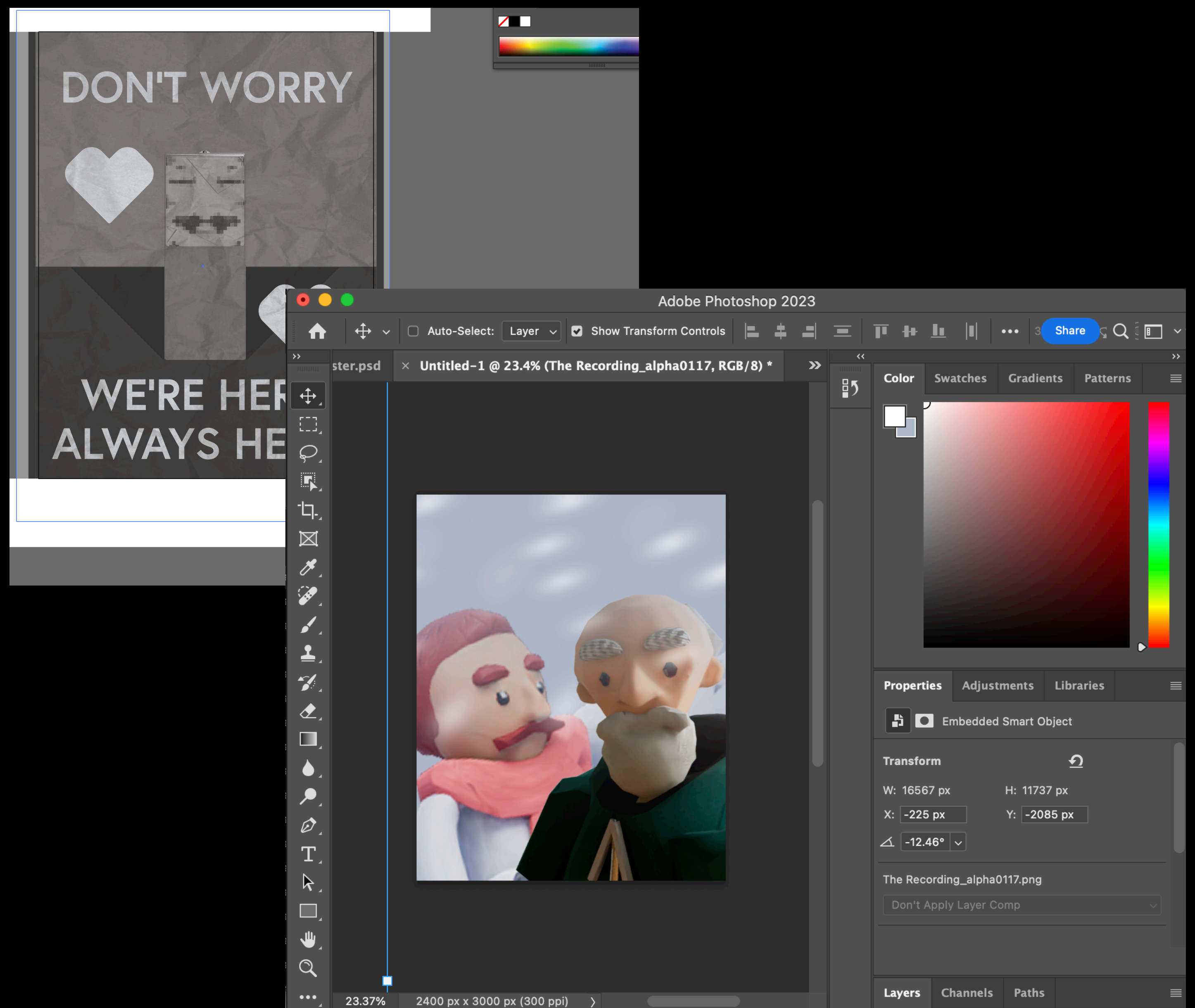
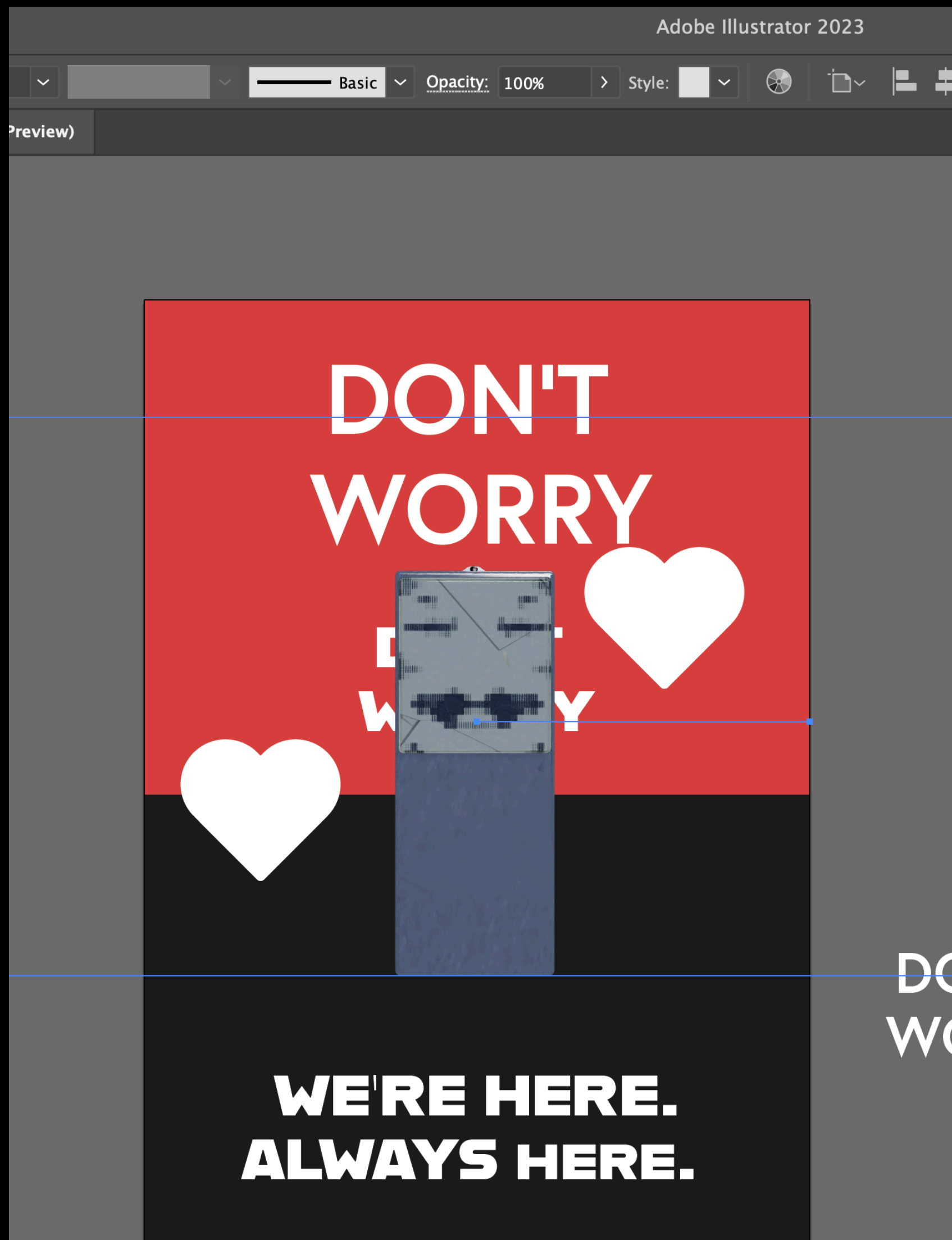


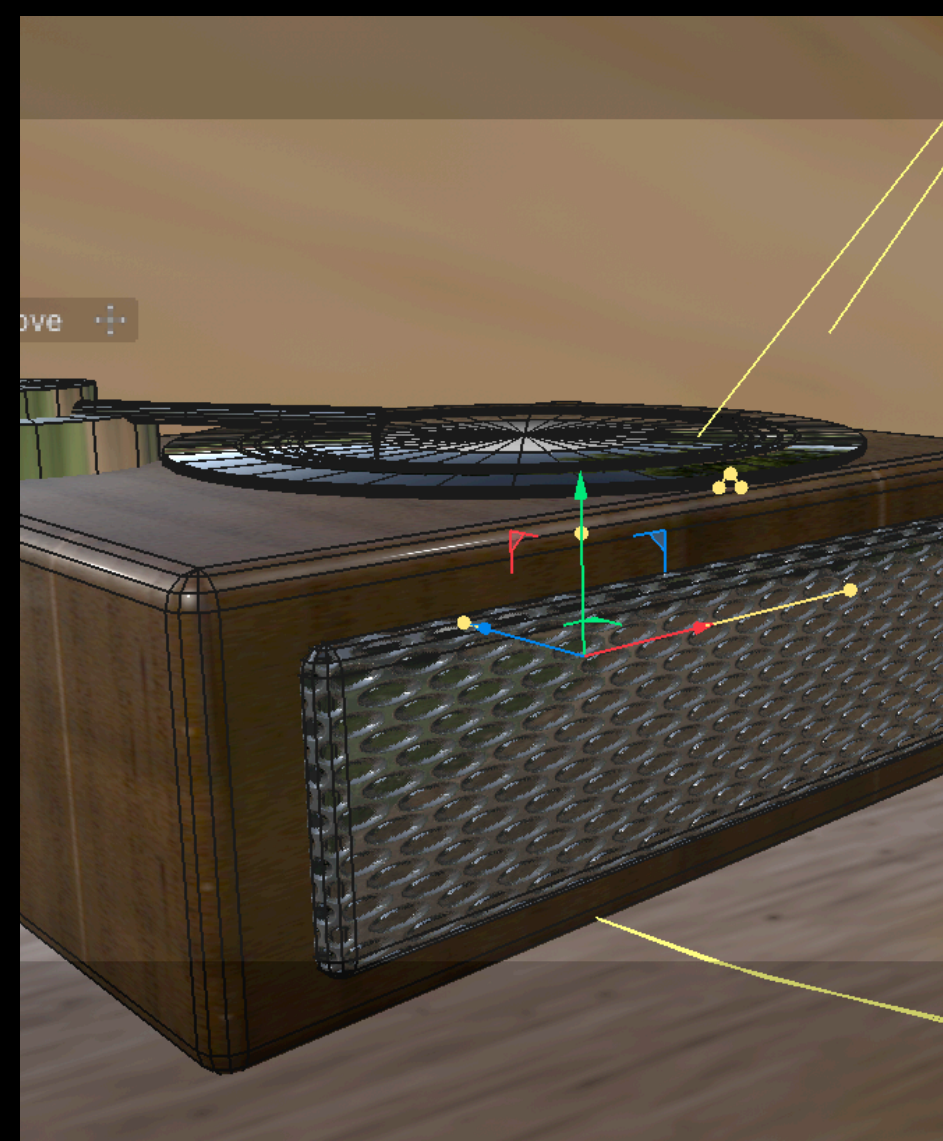
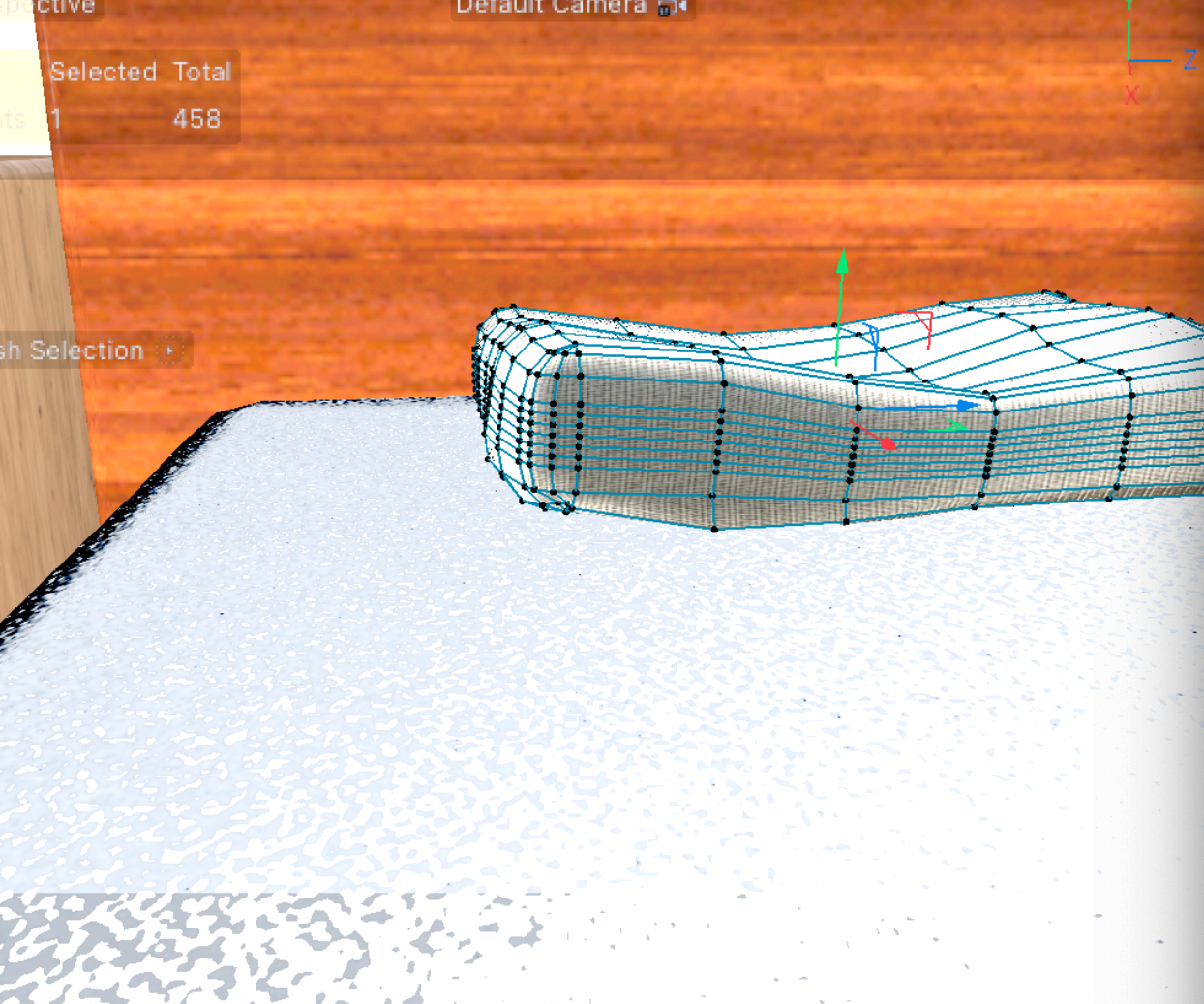
Frame 52: 2023-04-18 20:23:16 (19.98s)

Back to Cinema4D | The Room

I kept the vinyl because it still is a nod for the “recording” title. I then added a photo of the father and son (made in Adobe Photoshop) to show a hint of the father caring for his son and that he’s the only one in his life now.

Finally I added a poster of the robot (made in Adobe Illustrator) aids trying to be helpful but giving off a heartless (added the hearts icons for irony/ and to show them trying too hard) gray vibe in the otherwise colorful place.



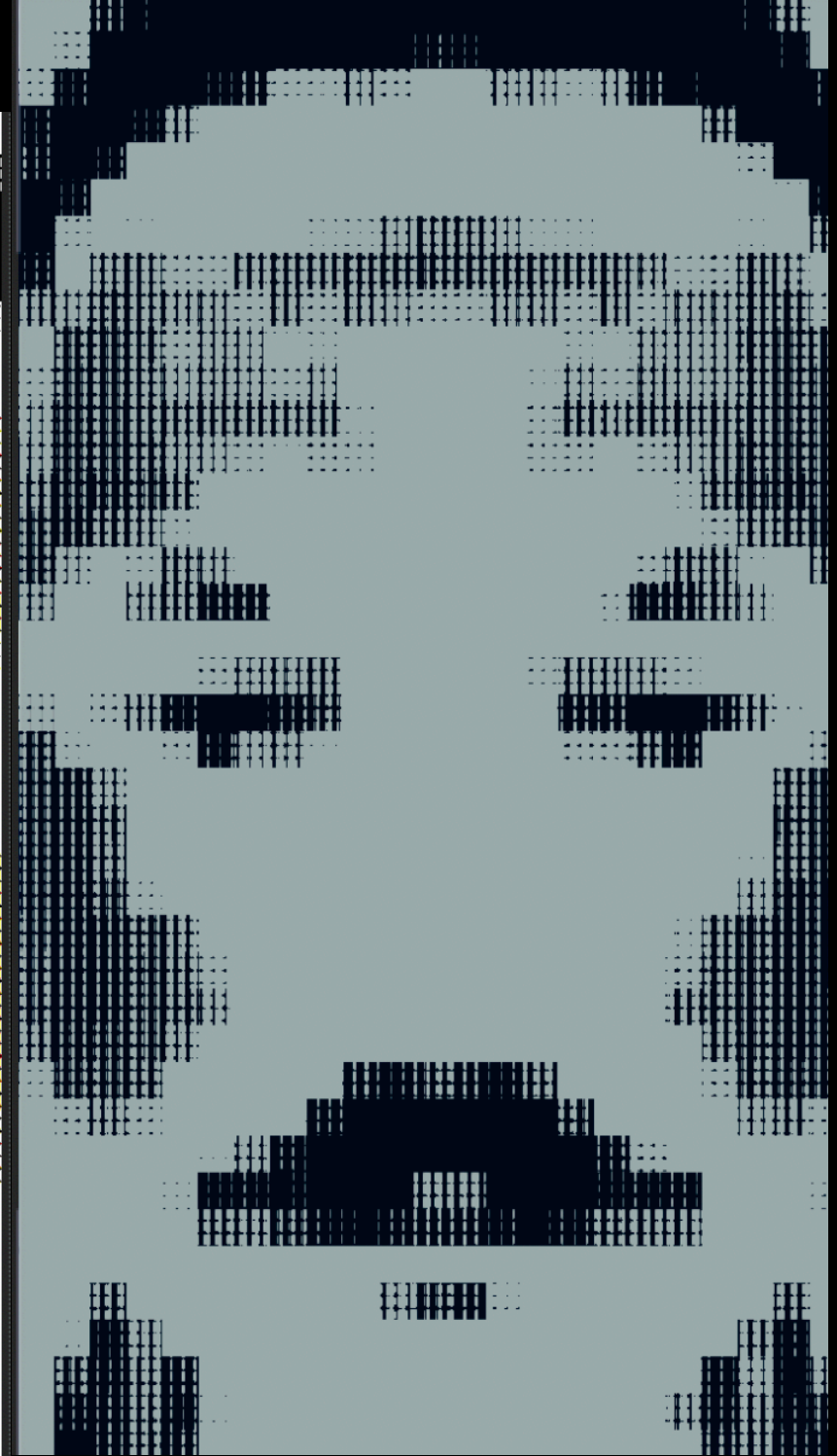
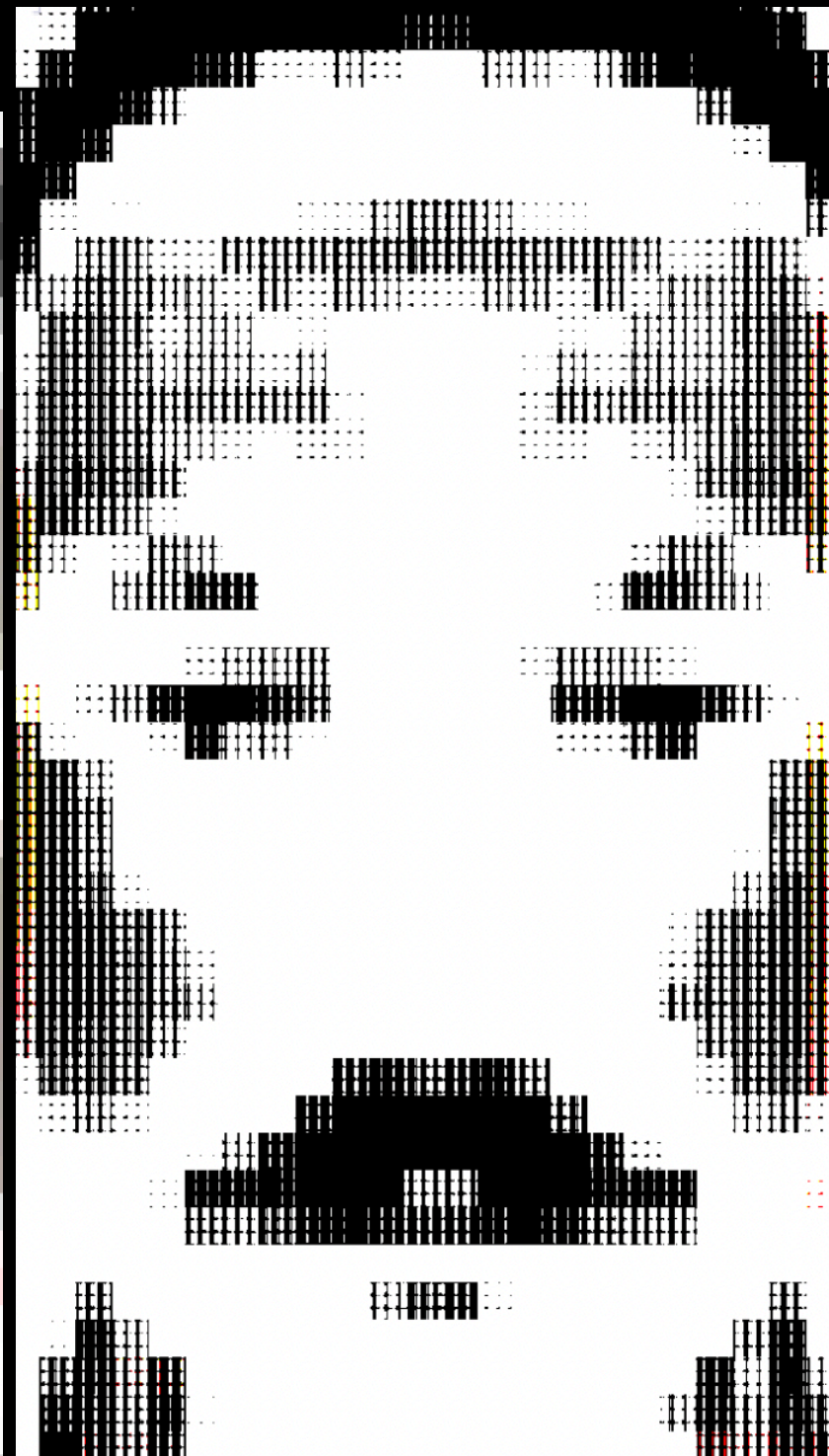


Back to Cinema4D | Alex

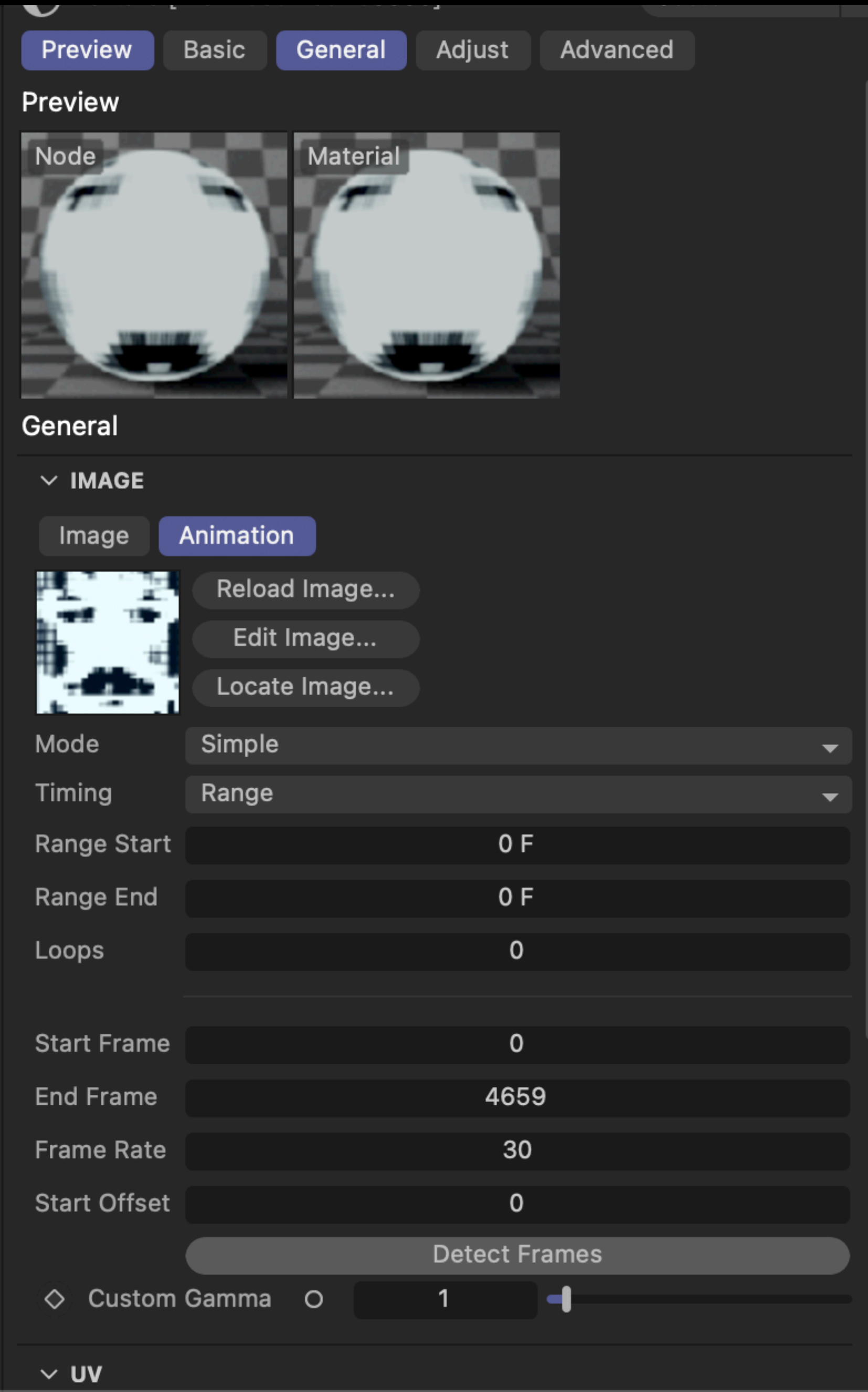
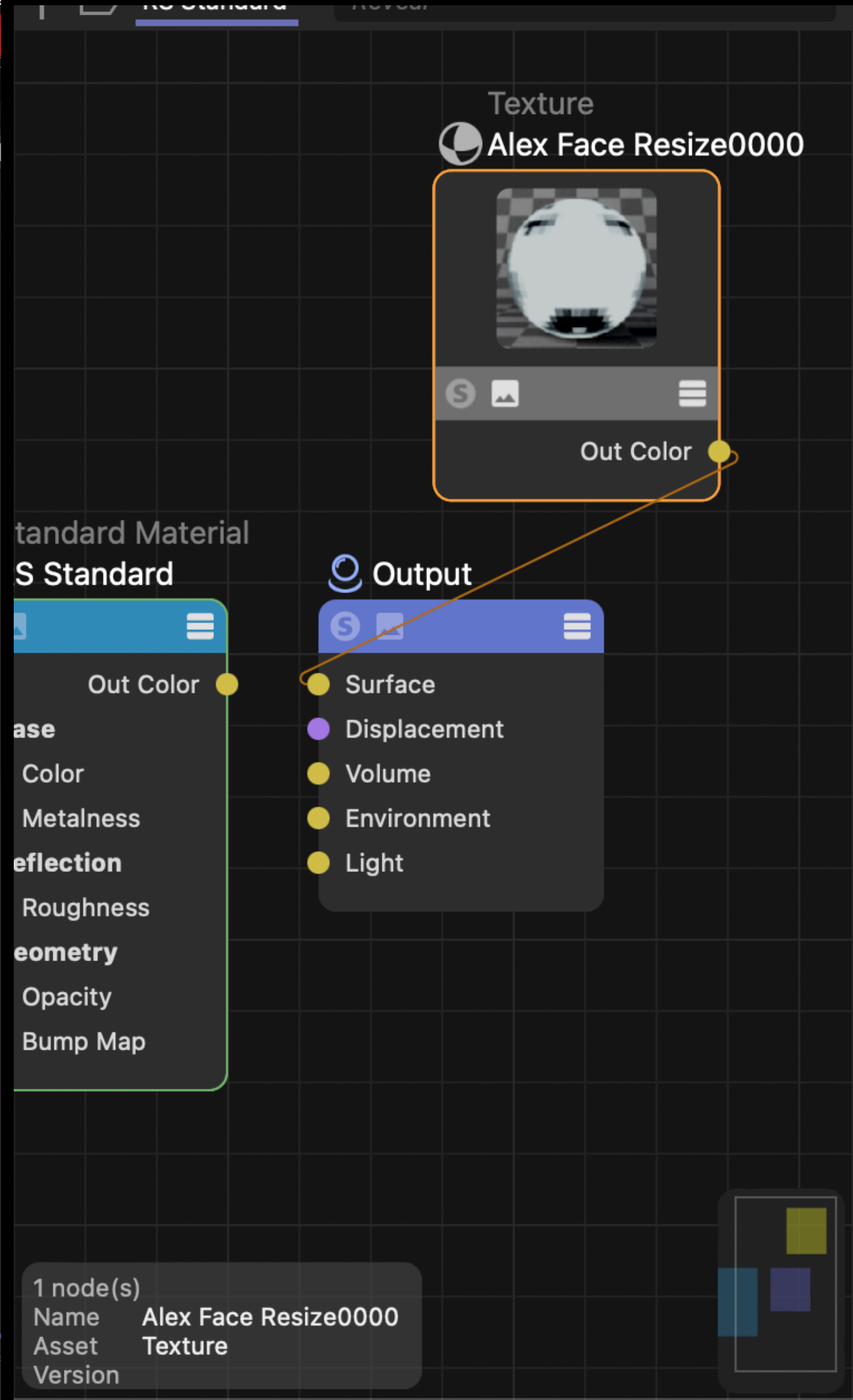
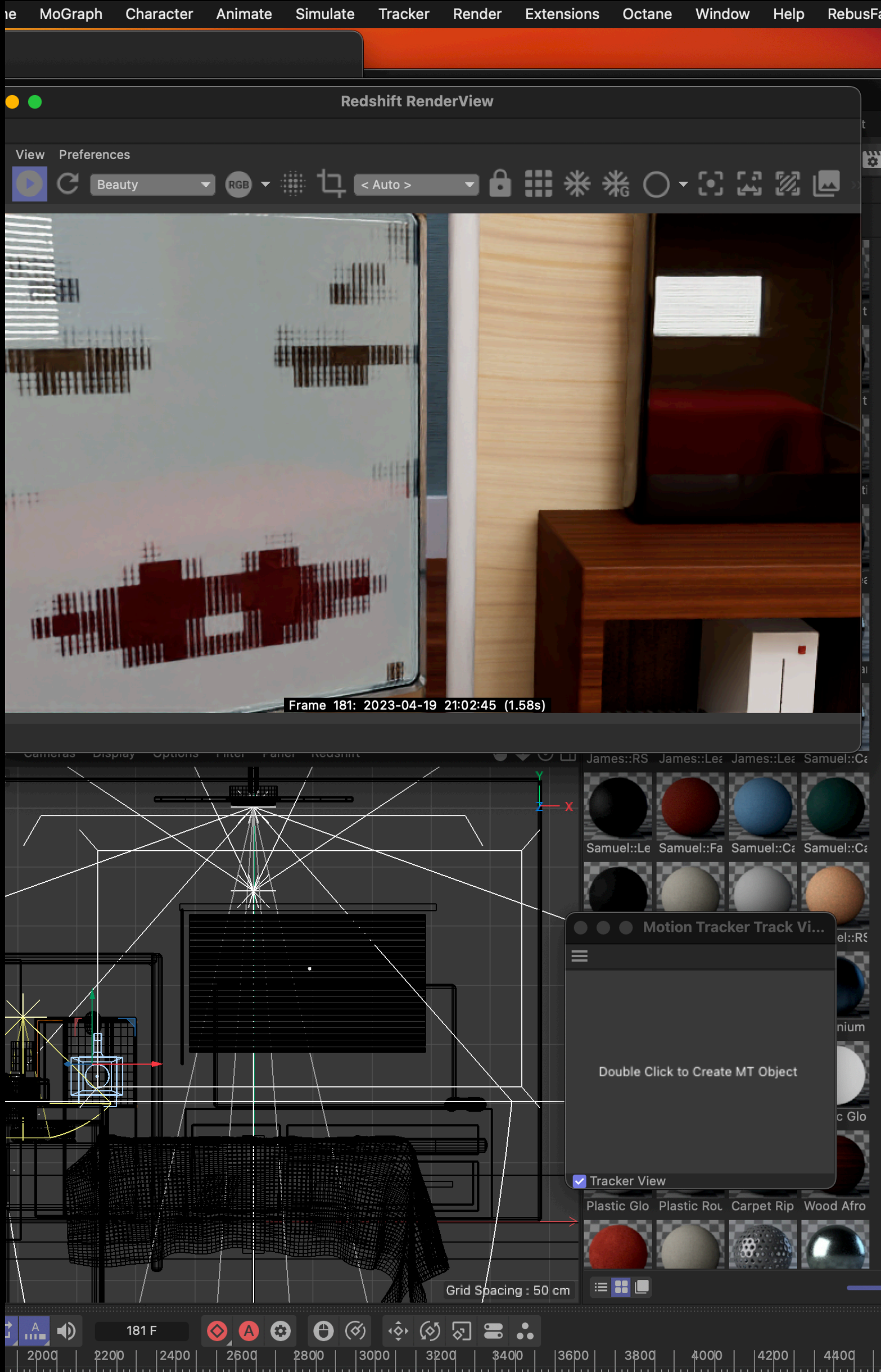
Alex was the only model that didn't change, however with the new face recordings made for the new dialogue I could create a more realistic look to contrast the cartoony look of the other characters. I also learned about nodes and adding animated texture on Cinema4D.

(Texturelabs, 2023) (Emma Nuel, 2023)





			Layer Name	Mode	T	Track Matte						Parent & Link		Render Time	
			1	CC Toner	Normal		No Matte						None	3ms	
			2	Glow	Normal		No Matte						None	5ms	
			3	Wide Time	Normal		No Matte						None	3ms	
			4	Pixelate Pattern	Hard Mix		No Matte						None	9ms	
			5	Levels	Normal		No Matte						None	3ms	
			6	Pixelate Mosaic Control	Normal		No Matte						None	5ms	
			7	[Pixelate Displacement Reference]	Normal		No Matte						None		
			8	Pixelate Displacement Effect	Normal		No Matte						None	6ms	
			9	Glow	Normal		No Matte						None	6ms	
			10	Colorize	Normal		No Matte						None	11ms	
			11	[IMG_9133.MOV]	Normal		No Matte						None	4ms	
			12	[IMG_9133.MOV]	Normal		No Matte						None	18ms	





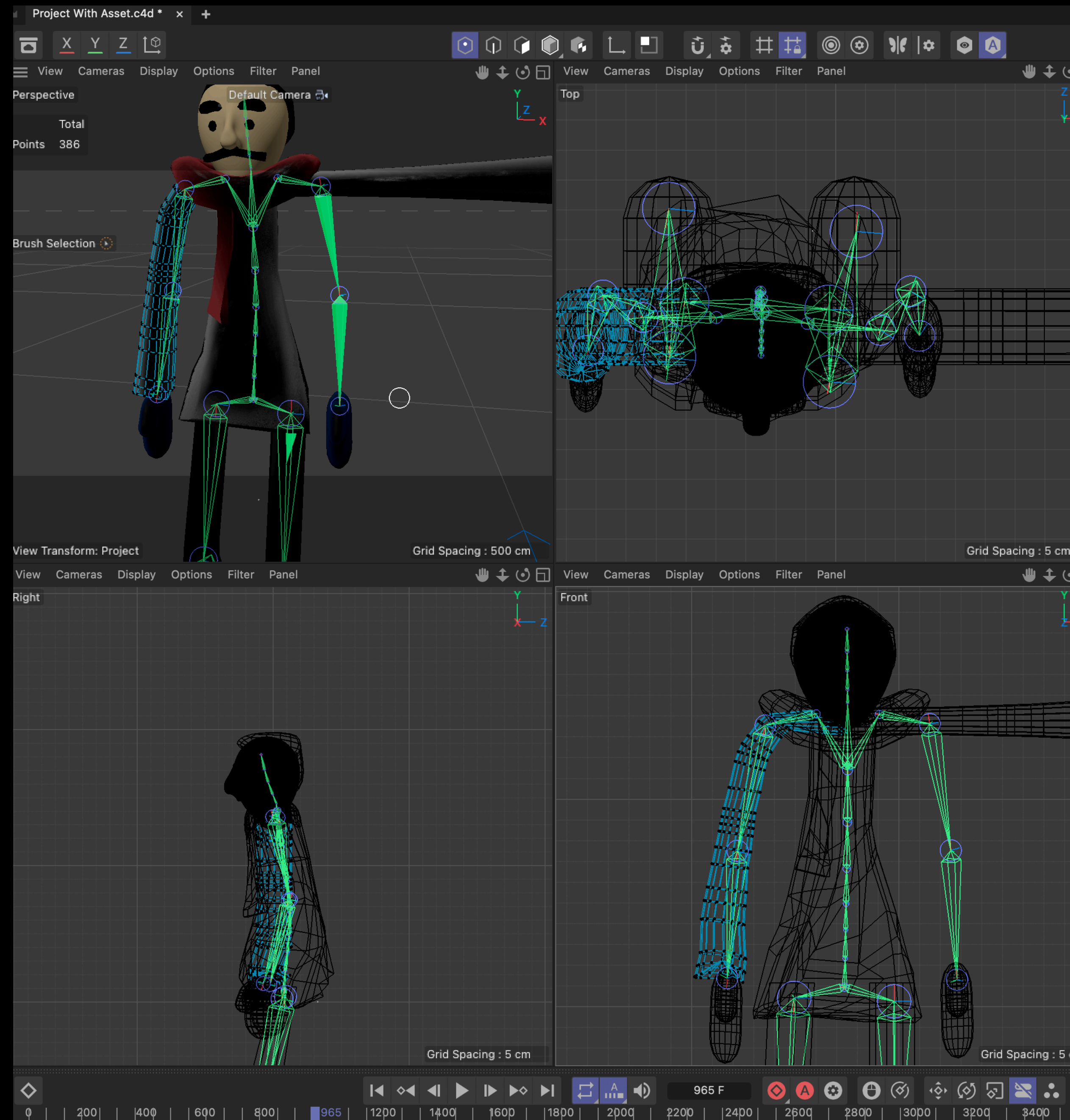
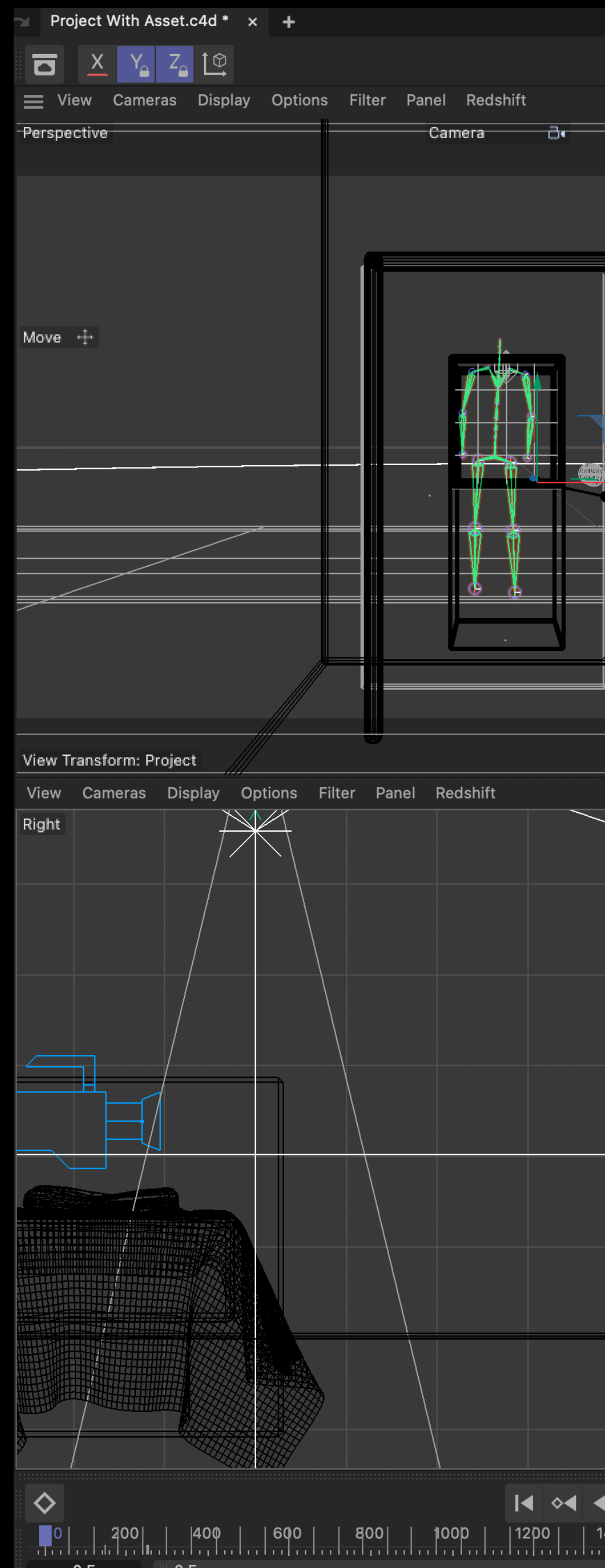
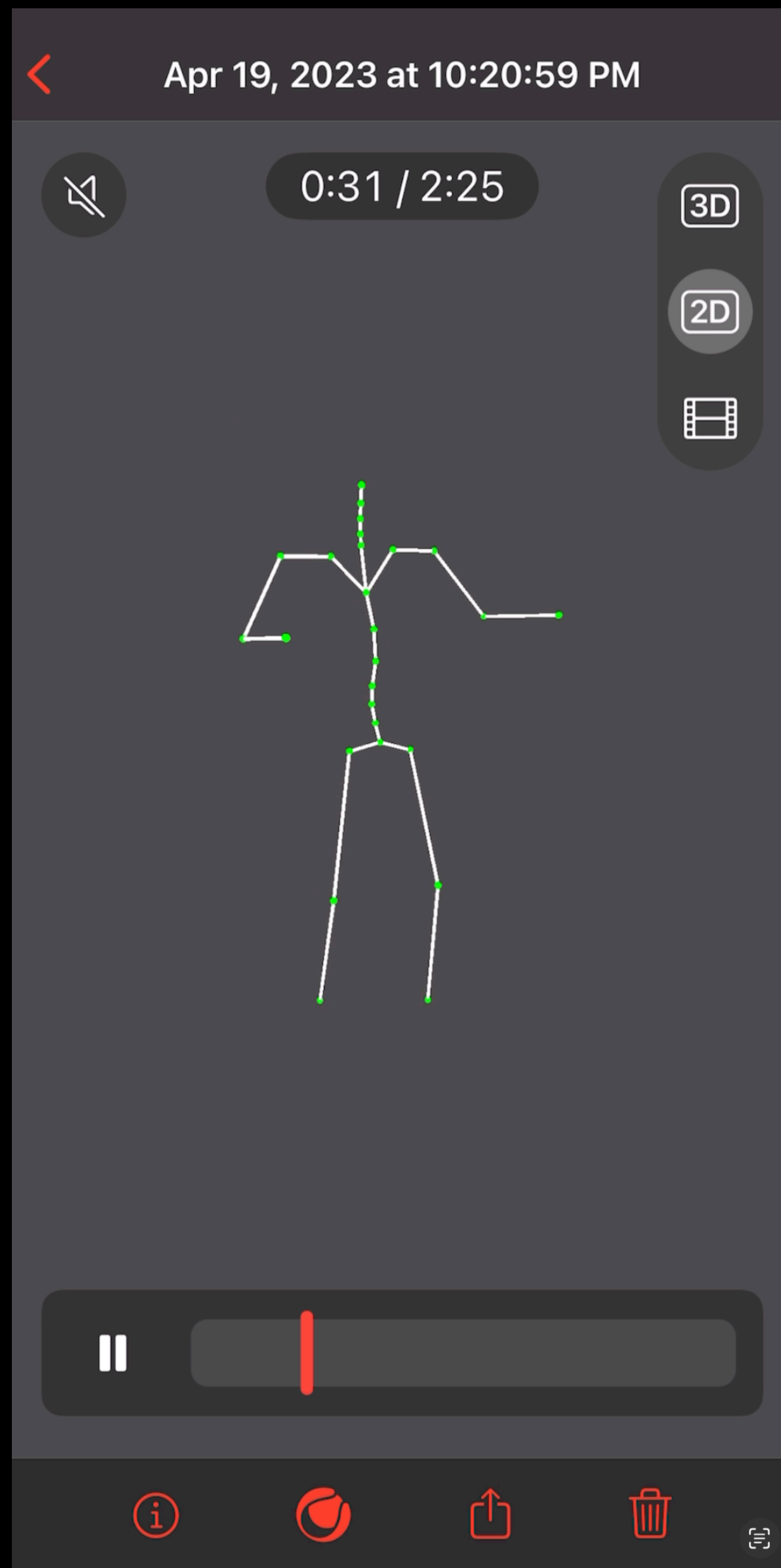
THE UNIVERSITY
of EDINBURGH

Joints, animation & Mo-cap

The first thing I did after the character models were done, was to learn about joints following a YouTube tutorial, and record the lines to figure out pacing and movements. (*QuickVFX*, 2013)

After carefully rigging my characters, I made the motion capture for the character mostly using Maxon's "Moves" iPhone app while playing the recording in the background.

I then figured that a faster way to have the joints and the motion capture match was to remove my previous skeleton and just use the motion capture joint system as it was imported originally. I then matched my motion capture footage with the audio inside Cinema4D (except for future James which was animated manually with the original joint system)





THE UNIVERSITY
of EDINBURGH

Final touches

Final Touches / After Effects

After the main render in Cinema4D was done, I added the intro, outro, color effects, the hologram (effects and sounds) along with some other general edits for the final render.

Adobe After Effects 2023 - /Users/hugovillarreal/Documents/The Recording.aep *

Project

The Recording

The Recording

used 1 time

1920 x 1080 (480 x 270) (1.00)

Δ 0;04;35;10, 29.97 fps

Scan Lines

The Recording Master 720

Title

Wind Atmosphere

The Rec..._[0000-2320].png

Solids

The Recording

The Recording_3D

The Recording_Final

Submission 2_Cover.001.jpeg

Submission 2.001.jpeg

The Rec...alpha[0000-2320].png

logo_edinburgh white.png

logo.png

The Recording_3D_0000.png

The Recording_alpha1537.png

Composition The Recording


Footage (none)

Layer mixkit-cinematic-glitch-trailer-1021.wav

The Recording_Final

The Recording

Main Footage



(80.4%)

Quarter

32 bpc

0;01;46;26

Info

Preview

Effects & Presets

Libraries

Paragraph

Character

Abril Titling

SemiBold

36 px

Auto px

Metrics

0

- px

100 %

100 %

0 px

0 %

T T TT T T¹ T₁

Ligatures

Hindi Digits

The Recording

Holograms

Alpha_Footage

The Recording_Final

Title

The Recording_3D

Outro 3D

Holograms 3D

Alpha_Footage 3D

Wind Atmosph

0:01:46:26

03204 (29.97 fps)

#	Layer Name	Mode	T	Track Matte	Parent & Link	Render Time	Stretch
1	Re-Color	Normal	⊙	No Matte	⊙ None	11ms	100.0%
2	Auto Contrast	Normal	⊙	No Matte	⊙ None	2ms	100.0%
3	Sharpen	Normal	⊙	No Matte	⊙ None	1ms	100.0%
4	Vignette	Normal	⊙	No Matte	⊙ None	2ms	100.0%
5	Gaussian Blur	Normal	⊙	No Matte	⊙ None	1ms *	100.0%
6	Denoiser	Normal	⊙	No Matte	⊙ None	48ms	100.0%
7	Outro Black and White 2	Normal	⊙	No Matte	⊙ None		100.0%
8	Outro Black and White	Normal	⊙	No Matte	⊙ None		100.0%
9	Intro Black and White	Normal	⊙	No Matte	⊙ None		100.0%
10	[Outro]	Normal	⊙	No Matte	⊙ None		100.0%
11	[Title]	Normal	⊙	No Matte	⊙ None		100.0%
12	[Wind Atmosphere]	Normal	⊙	No Matte	⊙ None	0ms	100.0%
13	[mixkit-elegant-door-announcement-224.wav]				⊙ None		100.0%
14	[The recording.mp3]				⊙ None		100.0%
15	[mixkit-technological-futuristic-hum-2133.wav]				⊙ None		129.0%
16	[mixkit-cinematic-glitch-trailer-1021.wav]				⊙ None		100.0%
17	[mixkit-cinematic-glitch-trailer-1021.wav]				⊙ None		100.0%
18	[mixkit-cinematic-glitch-trailer-1021.wav]				⊙ None		100.0%
19	[mixkit-cinematic-glitch-trailer-1021.wav]				⊙ None		100.0%
20	[mixkit-technological-futuristic-hum-2133.wav]				⊙ None		103.0%
21	[mixkit-technological-futuristic-hum-2133.wav]				⊙ None		103.0%
22	[mixkit-technological-futuristic-hum-2133.wav]				⊙ None		65.0%
23	Holograms 2	Screen	⊙	No Matte	⊙ None	0ms *	100.0%
24	Holograms	Normal	⊙	No Matte	⊙ None	0ms *	100.0%
25	[Main Footage]	Normal	⊙	No Matte	⊙ None	70ms	200.0%
26	[The Recording_Normal_0000.png]	Normal	⊙	No Matte	⊙ None		100.0%

Frame Render Time 135ms

I decided for the VR experience to work without the need for input and one that had a fixed angle view. That resulted in a 3D experience in which the viewers can immerse themselves and focus on the story without worrying about what to do or where to look. After I searched for tutorials on how to create the experience natively in Cinema4D using 3D-cameras, I then duplicated the camera I had and reworked most of the effects and edits I made in Adobe After Effects. Finally, after some testing I added a timer at the start for the user to place his/ her headset.

(New Tech Tutorials, 2019)

Project Effect Controls mixkit-cinematic-

The Recording_3D ▾

1920 x 1080 (480 x 270) (1.00)

Δ 0;04;35;10, 29.97 fps

Name

Comment

Scan Lines

The Recording Master 720

Title

Wind Atmosphere

The Rec...[0000-2320].png

Solids

The Recording

The Recording_3D

The Recording_Final

Submission 2_Cover.001.jpeg

Submission 2.001.jpeg

The Rec...alpha[0000-2320].png

logo_edinburgh white.png

logo.png

The Recording_3D_0000.png

The Recording_alpha1537.png

Composition The Recording_3D

Footage (none)

Layer mixkit-cinematic-glitch-trailer-1021.wav

The Recording_3D < Outro 3D

Info

Preview

Effects & Presets

Libraries

Paragraph

Character

Abril Titling ▾

SemiBold ▾

T 36 px ▾

Auto px ▾

V/A Metrics ▾

0 ▾

- px ▾

100 % ▾

100 % ▾

0 px ▾

0 % ▾

T T TT TT T¹ T₁

☐ Ligatures

☐ Hindi Digits

32 bpc

(77.6%) ▾ (Full) ▾

0:00;09;08

The Recording Holograms Alpha_Footage The Recording_Final Title The Recording_3D Outro 3D Holograms 3D Alpha_Footage 3D Wind Atmosph

0:00;09:08

00278 (29.97 fps)

			#	Layer Name	Mode	T	Track Matte						Parent & Link	Render Time	Stretch	
			1	Re-Color	Normal ▾		No Matte ▾						None ▾	6ms	100.0%	
			2	Auto Contrast	Normal ▾		No Matte ▾						None ▾	18ms	100.0%	
			3	Sharpen	Normal ▾		No Matte ▾						None ▾	7ms	100.0%	
			4	Vignette	Normal ▾		No Matte ▾						None ▾		100.0%	
			5	Gaussian Blur	Normal ▾		No Matte ▾						None ▾	10ms *	100.0%	
			6	Denoiser	Normal ▾		No Matte ▾						None ▾	326ms	100.0%	
			7	Outro Black and White 2	Normal ▾		No Matte ▾						None ▾		100.0%	
			8	Outro Black and White	Normal ▾		No Matte ▾						None ▾		100.0%	
			9	Intro Black and White	Normal ▾		No Matte ▾						None ▾		100.0%	
			10	[Outro 3D]	Normal ▾		No Matte ▾						None ▾		100.0%	
			11	[Outro 3D]	Normal ▾		No Matte ▾						None ▾		100.0%	
			12	3D Guides	Normal ▾		No Matte ▾						None ▾		100.0%	
			13	3D Guides	Normal ▾		No Matte ▾						None ▾		100.0%	
			14	[Title]	Normal ▾		No Matte ▾						None ▾		100.0%	
			15	[Title]	Normal ▾		No Matte ▾						None ▾		100.0%	
			16	[Wind Atmosphere]	Normal ▾		No Matte ▾						None ▾	0ms	100.0%	
			17	[mixkit...oor-announcement-224.wav]									None ▾		100.0%	
			18	[The recording.mp3]									None ▾		100.0%	
			19	[mixkit...cal-futuristic-hum-2133.wav]									None ▾		129.0%	
			20	[mixkit...atic-glitch-trailer-1021.wav]									None ▾		100.0%	
			21	[mixkit...atic-glitch-trailer-1021.wav]									None ▾		100.0%	
			22	[mixkit...atic-glitch-trailer-1021.wav]									None ▾		100.0%	
			23	[mixkit...atic-glitch-trailer-1021.wav]									None ▾		100.0%	
			24	[mixkit...cal-futuristic-hum-2133.wav]									None ▾		103.0%	
			25	[mixkit...cal-futuristic-hum-2133.wav]									None ▾		103.0%	
			26	[mixkit...cal-futuristic-hum-2133.wav]									None ▾		65.0%	
			27	Holograms 2	Screen ▾		No Matte ▾						None ▾		100.0%	
				Transform										Reset		
				Anchor Point										640.0, 360.0		

Frame Render Time 409ms

Final Touches / The website

The last part of the project was to add everything inside a website using the Wix platform, this is made for the intention of presenting everything to a viewer in a complete and interactive package.

Final Touches / The website

The website is divided in 4 pages:

Home...

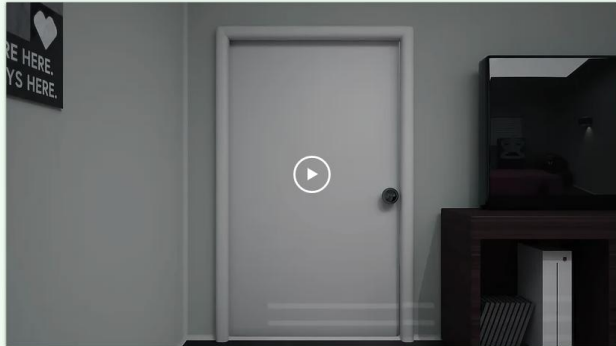
The Recording.

A student film about robots, nursing homes, and the upcoming dystopian future.

By Hugo Villarreal

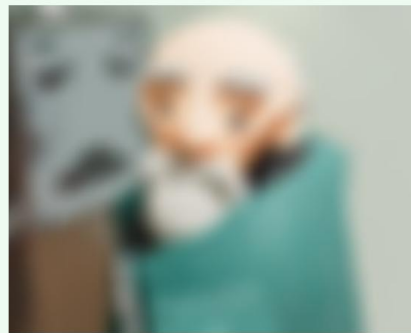


Watch the film:



Project Objective:

The main objective of the project is to make a film that explores how our continuous reliance on technology (and AI) could lead to a dystopian future where the aging population is forgotten in nursing homes.



There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

By Hugo Villarreal

Why is there a need to tell this story?

Want to learn more about this project?

Watch the video commentary



Watch the film:



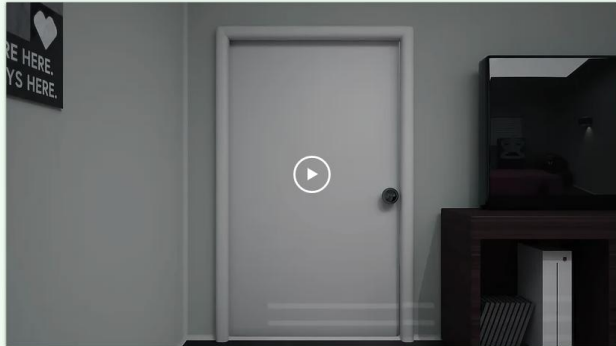
The Recording.

A student film about robots, nursing homes, and the upcoming dystopian future.

By Hugo Villareal



Watch the film:



Project Objective:

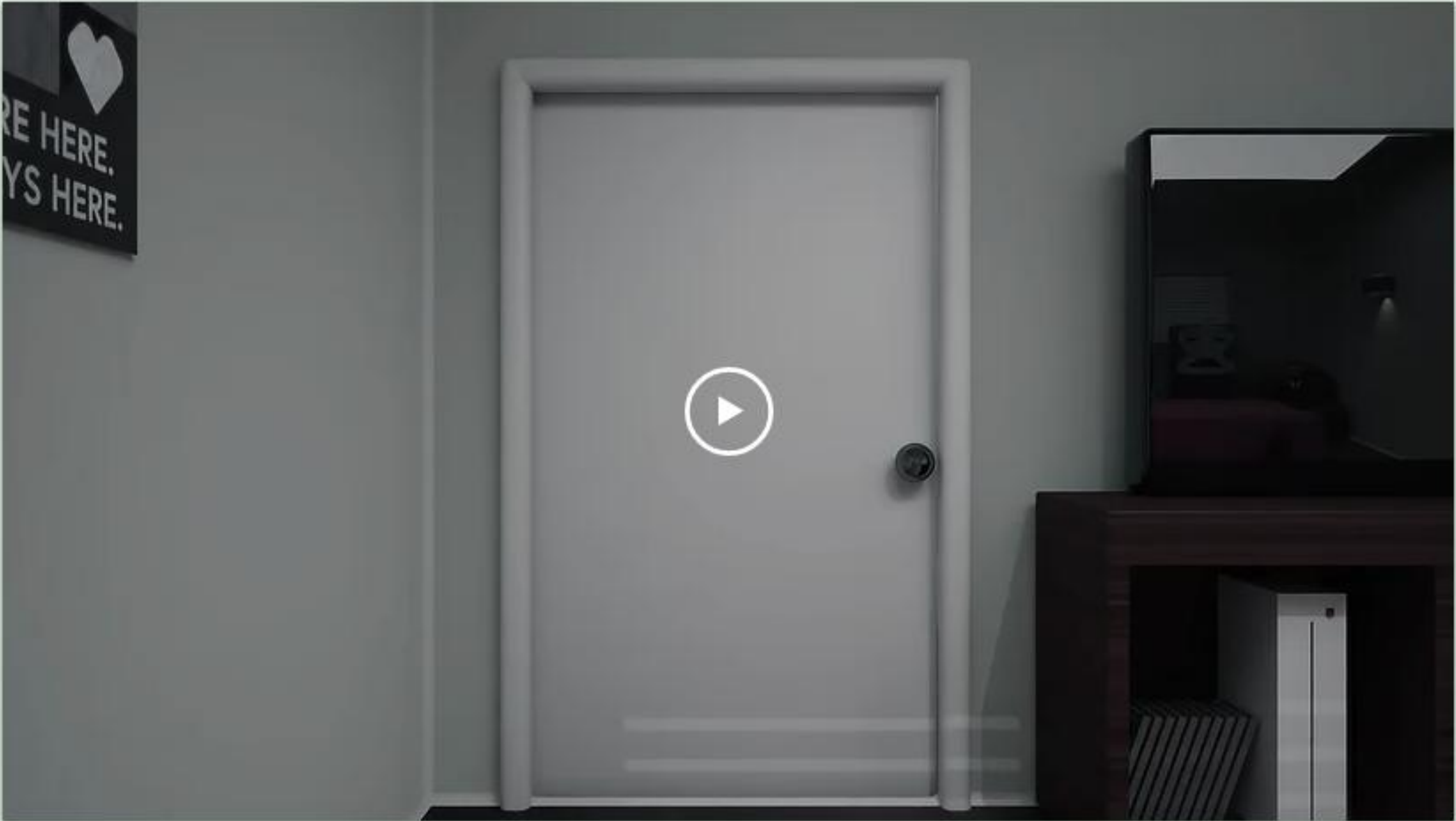
The main objective of the project is to make a film that explores how our continuous reliance on technology (and AI) could lead to a dystopian future where the aging population is forgotten in nursing homes.



There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

Watch the film:



Why is there a need to tell this story?

Want to learn more about this project?

Watch the video commentary



Project Objective:



Final Touches / The website

...3D Experience...

3D Experience

Watch "The Recording" film in 3D via Google Cardboard or similar equipments.



Experience the film:



About the 3D Experience

I decided for the VR experience to work without the need for input and one that had a fixed angle view. That resulted in a 3D experience in which the viewers can immerse themselves and focus on the story without worrying about what to do or where to look. After I searched for tutorials on how to create the experience natively in Cinema4D using 3D-cameras, I then duplicated the camera I had and reworked most of the effects and edits I made in Adobe After Effects.

Finally, after some testing I added a timer at the start for the user to place his/ her headset.



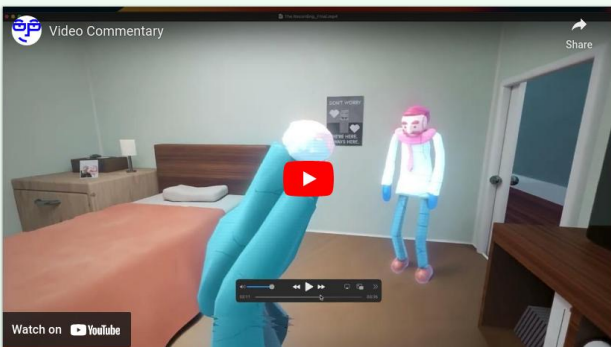
There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

Why is there a need to tell this story?

Want to learn more about this project?

Watch the video commentary



The Recording
info@bugvillarreal.com



About the 3D Experience

I decided for the VR experience to work without the need for input and one that had a fixed angle view. That resulted in a 3D experience in which the viewers can immerse themselves and focus on the story without worrying about what to do or where to look. After I searched for tutorials on how to create the experience natively in Cinema4D using 3D-cameras, I then duplicated the camera I had and reworked most of the effects and edits I made in Adobe After Effects.

Finally, after some testing I added a timer at the start for the user to place his/ her headset.



There is an upcoming demographic shift. It is

predicted that 1 in 6 people in the world will

3D Experience

Watch "The Recording" film in 3D via Google Cardboard or similar equipments.



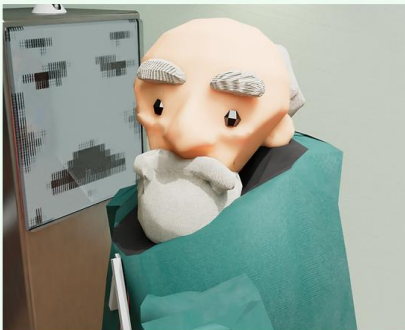
Experience the film:



About the 3D Experience

I decided for the VR experience to work without the need for input and one that had a fixed angle view. That resulted in a 3D experience in which the viewers can immerse themselves and focus on the story without worrying about what to do or where to look. After I searched for tutorials on how to create the experience natively in Cinema4D using 3D cameras, I then duplicated the cameras I had and reworked most of the effects and edits I made in Adobe After Effects.

Finally, after some testing I added a timer at the start for the user to place his/ her headset.



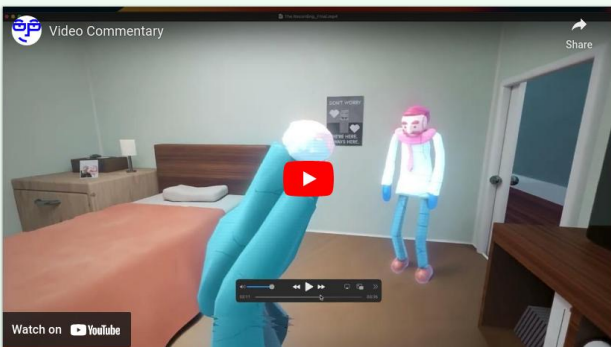
There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

Why is there a need to tell this story?

Want to learn more about this project?

Watch the video commentary



The Recording

info@bugvillarreal.com



There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

Why is there a need to tell this story?

○ ● ● ● ● ●

3D Experience

Watch "The Recording" film in 3D via Google Cardboard or similar equipments.



Experience the film:



About the 3D Experience



I decided for the VR experience to work without the need for input and one that had a fixed angle view. That resulted in a 3D experience in which the viewers can immerse themselves and focus on the story without worrying about what to do or where to look. After I searched for tutorials on how to create the experience natively in Cinema4D using 3D cameras, I then duplicated the cameras I had and reworked most of the effects and edits I made in Adobe After Effects.

Finally, after some testing I added a timer at the start for the user to place his/ her headset.



There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030.

World Health Organization, 2022

Why is there a need to tell this story?

Want to learn more about this project?

Watch the video commentary



The Recording

info@hugovillarreal.com

Want to learn more about this project?

Watch the video commentary



The Recording

info@hugovillarreal.com

Final Touches / The website

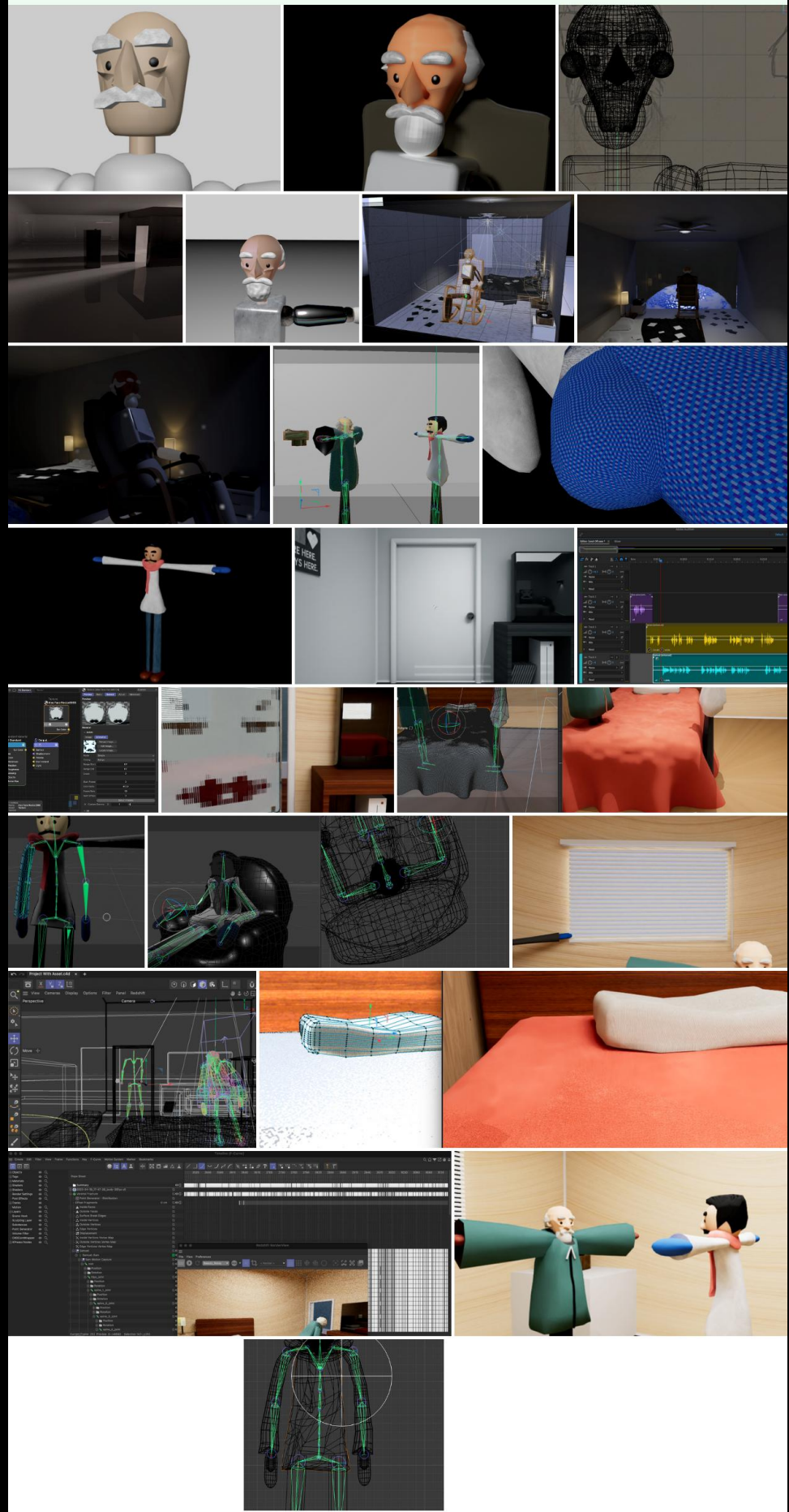
...Documentation...



Documentation

Honestly, this project's took a while to take form.
The ideas were all over the place. The story was changing constantly from a noir detective film, to a two-hander play where the main setting was a space retirement home. At the end, I decided to focus on a human story that could express some very real concerns about the upcoming future. Who are we going to be with when we die?

In any case, here are some pictures and videos taken during the making of this film.



Download the reports

Because this was a student project made for University of Edinburgh, there were two reports made for the class. These document the project's journey completely. Click to download.



Submission 1



Submission 2



Documentation

Honestly, this project's took a while to take form.

The ideas were all over the place. The story was changing constantly from a noir detective film, to a two-hander play where the main setting was a space retirement home. At the end, I decided to focus on a human story that could express some very real concerns about the upcoming future. Who are we going to be with when we die?

In any case, here are some pictures and videos taken during the making of this film.

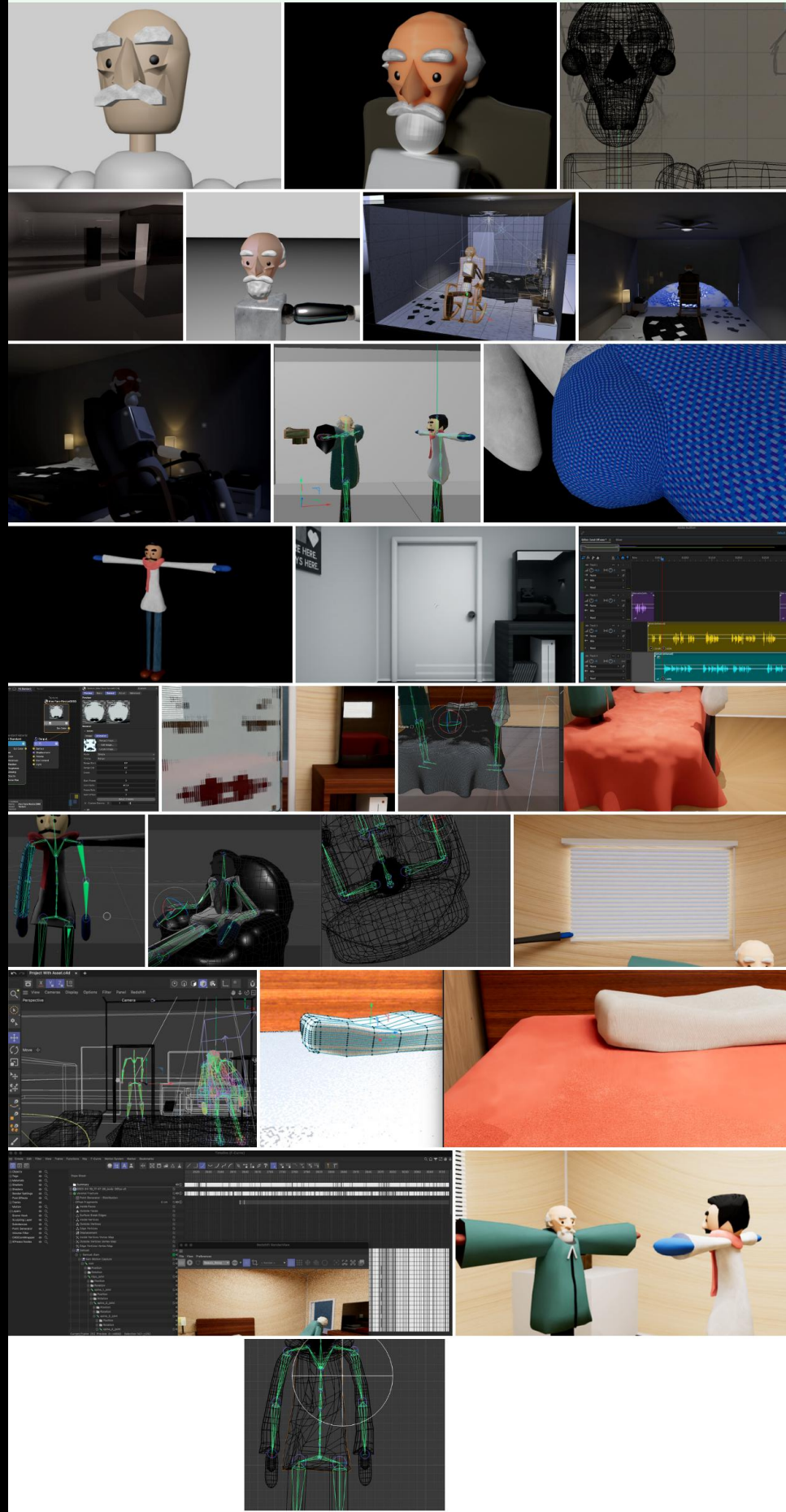




Documentation

Honestly, this project's took a while to take form. The ideas were all over the place. The story was changing constantly from a noir detective film, to a two-hander play where the main setting was a space retirement home. At the end, I decided to focus on a human story that could express some very real concerns about the upcoming future. Who are we going to be with when we die?

In any case, here are some pictures and videos taken during the making of this film.



Download the reports

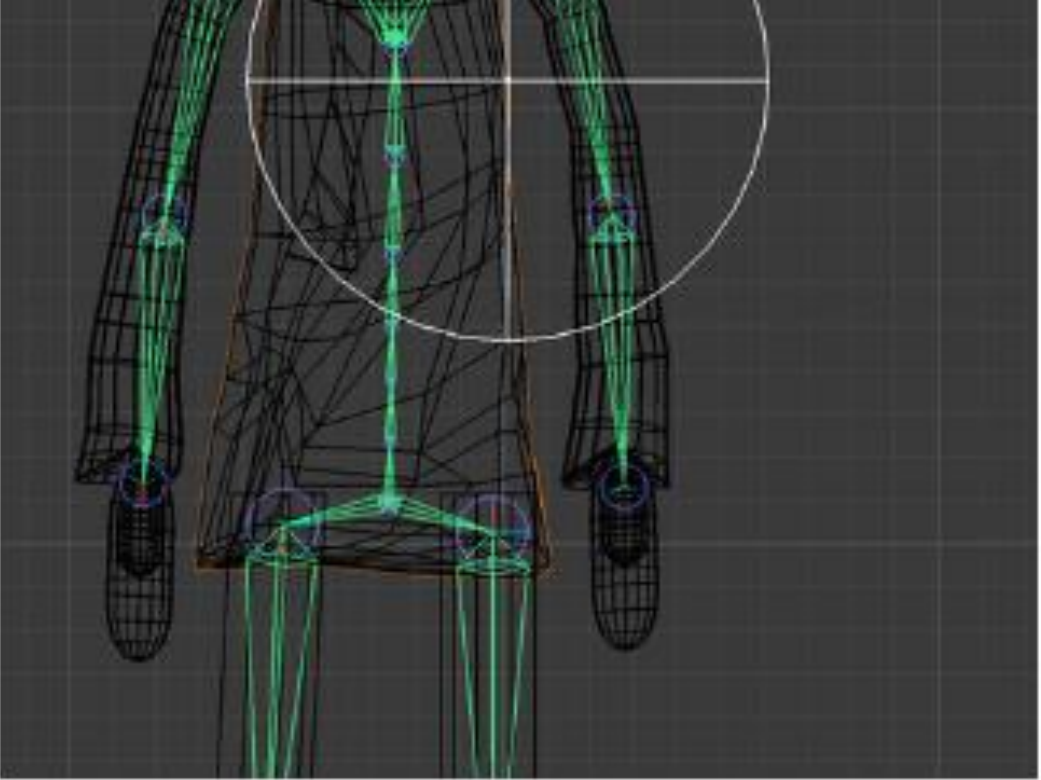
Because this was a student project made for University of Edinburgh, there were two reports made for the class. These document the project's journey completely. Click to download.



Submission 1



Submission 2



Download the reports

Because this was a student project made for University of Edinburgh, there were two reports made for the class. These document the project's journey completely. Click to download.



Submission 1



Submission 2

Final Touches / The website

and References.

References

The following are the references used for this website, the video or in another part of the proyect.

Articles and Studies

AlZamil, A., Alhoqail, R. and Alodhayani, A.A. (2019) "Barriers and attitudes of family and internal medicine residents toward geriatric patients: a cross-sectional analytical study," Advances in Medical Education and Practice, Volume 10, pp. 585–590. Available at: <https://doi.org/10.2147/amep.s171376>

Brent, B.J. (2022) "Life expectancy in nursing homes," Applied Economics, 54(16), pp. 1877–1888. Available at: <https://www.tandfonline.com/doi/epdf/10.1080/00036846.2021.1983138>

Cohen-Mansfield, J. and Brill, S. (2020) "Regrets of family caregivers in Israel about the end of life of deceased relatives," Aging & Mental Health [Preprint]. Available at: <https://doi.org/10.1080/13607863.2019.1709154>.

E. Broadbent, R. Tamagawa, N. Kerse, B. Knock, A. Patience and B. MacDonald, "Retirement home staff and residents' preferences for healthcare robots," RO-MAN 2009 - The 18th IEEE International Symposium on Robot and Human Interactive Communication, Toyama, Japan, 2009, pp. 645-650, doi: 10.1109/ROMAN.2009.5326284.

Pastor-Barriuso, R. et al. (2020) "Social engagement within the facility increased life expectancy in home residents: a follow-up study," BMC Geriatrics, 20(1). Available at: <https://doi.org/10.1186/s12877-020-01876-2>.

World Health Organization: WHO (2022a) "Ageing and health," www.who.int [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.

World Health Organization: WHO (2022b) "Abuse of older people," www.who.int [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/abuse-of-older-people>.

Yong, E. (2021) "Why Health-Care Workers Are Quitting in Droves," The Atlantic, 18 November. Available at: <https://www.theatlantic.com/health/archive/2021/11/the-mass-exodus-of-americas-health-care-workers/620713/>.

Courses / Tutorials

Brandon Fate (2021) Star Wars Hologram Effect Tutorial - AFTER EFFECTS. Available at: <https://www.youtube.com/watch?v=EQakxRJJsVI>.

New Tech Tutorials (2019) How to make a 360 VR motion graphic video using Cinema 4D, After Effects, for Youtube. Available at: <https://www.youtube.com/watch?v=NtlorayJc4o>.

QuickVFX (2013) Cinema4D Tutorial: Intro to Joints and Skinning (Beginner). Available at: <https://www.youtube.com/watch?v=O6UGaKC79KE>.

Standard Story Company (2021) How to Make Your First Short Film: A Crash Course. Available at: https://www.youtube.com/watch?v=8QCK_qEp_PL.

Texturelabs. (2023, February 3). Advanced After Effects // Analogue Retro-Futuristic Monitor [Video]. YouTube. <https://www.youtube.com/watch?v=-8eDk8aCJIY>

Emma Noel (2023) Animated textures in Cinema 4D and Redshift. Available at: <https://www.youtube.com/watch?v=SiOGrSVmaWU>.

Sounds and Graphics

Mixkit (2023) mixkit-elegant-door-announcement-224.wav <https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-technological-futuristic-hum-2133.wav <https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-cinematic-glitch-trailer-1021.wav <https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-storm-wind-atmosphere-1735.wav <https://mixkit.co/free-sound-effects>

Photos Public Domain (January 11, 2012) Crumpled olive green paper. This is a photo of crumpled or wrinkled olive green colored paper. https://commons.wikimedia.org/wiki/File:Crumpled_olive_green_paper.jpg

References

The following are the references used for this website, the video or in another part of the proyect.

Articles and Studies

AlZamil, A., Alhoqail, R. and Alodhayani, A.A. (2019) "Barriers and attitudes of family and internal medicine residents toward geriatric patients: a cross-sectional analytical study," Advances in Medical Education and Practice, Volume 10, pp. 585–590. Available at: <https://doi.org/10.2147/amep.s171376>

Brent, R.J. (2022) "Life expectancy in nursing homes," Applied Economics, 54(16), pp. 1877–1888. Available at: <https://www.tandfonline.com/doi/epdf/10.1080/00036846.2021.1983138>

Cohen-Mansfield, J. and Brill, S. (2020) "Regrets of family caregivers in Israel about the end of life of deceased relatives," Aging & Mental Health [Preprint]. Available at: <https://doi.org/10.1080/13607863.2019.1709154>.

E. Broadbent, R. Tamagawa, N. Kerse, B. Knock, A. Patience and B. MacDonald, "Retirement home staff and residents' preferences for healthcare robots," RO-MAN 2009 - The 18th IEEE International Symposium on Robot and Human Interactive Communication, Toyama, Japan, 2009, pp. 645-650, doi: 10.1109/ROMAN.2009.5326284.

Pastor-Barriuso, R. et al. (2020) "Social engagement within the facility increased life expectancy in home residents: a follow-up study," BMC Geriatrics, 20(1). Available at: <https://doi.org/10.1186/s12877-020-01876-2>.

World Health Organization: WHO (2022a) "Ageing and health," www.who.int [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.

World Health Organization: WHO (2022b) "Abuse of older people," www.who.int [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/abuse-of-older-people>.

In these pages, the user can watch the film and 3D experience, learn about the data , the process behind the project and even download the reports made for the class. Hopefully this will give the viewers a much better experience to watch the film and learn more about the topic.



THE UNIVERSITY
of EDINBURGH

**Why this
story?**

Why this story? / Upcoming demographic shift

There is an upcoming demographic shift. It is predicted that 1 in 6 people in the world will be aged 60 years (or over) by 2030. (*World Health Organization, 2022a*)

It is possible that AI will care for a big portion of this population because of the perceptions of the two main groups involved.

Why this story? / The two sides

On one hand, nurses (which are the most suited caregivers) are not only lacking in interest but also in training for geriatric medicine. *(AlZamil, A., 2019)*

For the elders, the prospect of having humans as caregivers is frightening because there is some data suggesting that more than half of the older people have experienced some form of abuse in their community settings. *(World Health Organization, 2022b)* And although the main people who committed the abuse are not nurses specifically, it's likely that the incidents will still lead to overall distrust to human caregivers.

Final Touches / What about nursing homes?

The rise of nursing homes is also something that is worth thinking and being careful about. Although it would seem that it is the best option for longer life, it actually can decrease the life expectancy by around 40 months. *(Brent, R.J., 2022)*

Final Touches / A possible solution

But just as I found out that the son was key to solve my narrative problem for this story, there is some research indicating that the family (which is usually overlooked in this conversation) is at least part of the solution by providing social engagement that can increase the life expectancy of the nursing home residents.
(Pastor-Barriuso, R. , 2020)

Final Touches / Conclusion

Although these are heavy topics, I feel that this type of stories need to be told because it's very common for family members to feel regret after the end of the life of their loved ones. I hope that with these stories in mind, we can take better decisions and spend more time with our families before it's too late. *(Cohen-Mansfield, J. 2020)*



THE UNIVERSITY
of EDINBURGH

References

References / Articles and studies

- AlZamil, A., Alhoqail, R. and Alodhayani, A.A. (2019) “Barriers and attitudes of family and internal medicine residents toward geriatric patients: a cross-sectional analytical study,” *Advances in Medical Education and Practice*, Volume 10, pp. 585–590. Available at: <https://doi.org/10.2147/amep.s171376>
- Brent, R.J. (2022) “Life expectancy in nursing homes,” *Applied Economics*, 54(16), pp. 1877–1888. Available at: <https://www.tandfonline.com/doi/epdf/10.1080/00036846.2021.1983138>
- Cohen-Mansfield, J. and Brill, S. (2020) “Regrets of family caregivers in Israel about the end of life of deceased relatives,” *Aging & Mental Health* [Preprint]. Available at: <https://doi.org/10.1080/13607863.2019.1709154>.
- E. Broadbent, R. Tamagawa, N. Kerse, B. Knock, A. Patience and B. MacDonald, "Retirement home staff and residents' preferences for healthcare robots," RO-MAN 2009 - The 18th IEEE International Symposium on Robot and Human Interactive Communication, Toyama, Japan, 2009, pp. 645-650, doi: 10.1109/ROMAN.2009.5326284.
- Pastor-Barriuso, R. *et al.* (2020) “Social engagement within the facility increased life expectancy in home residents: a follow-up study,” *BMC Geriatrics*, 20(1). Available at: <https://doi.org/10.1186/s12877-020-01876-2>.
- World Health Organization: WHO (2022a) “Ageing and health,” *www.who.int* [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
- World Health Organization: WHO (2022b) “Abuse of older people,” *www.who.int* [Preprint]. Available at: <https://www.who.int/news-room/fact-sheets/detail/abuse-of-older-people>.
- Yong, E. (2021) “Why Health-Care Workers Are Quitting in Drove,” *The Atlantic*, 18 November. Available at: <https://www.theatlantic.com/health/archive/2021/11/the-mass-exodus-of-americas-health-care-workers/620713/>.

References | Courses / Tutorials

Brandon Fate (2021) *Star Wars Hologram Effect Tutorial - AFTER EFFECTS*. Available at: <https://www.youtube.com/watch?v=EQakkxRJsVI>.

New Tech Tutorials (2019) *How to make a 360 VR motion graphic video using Cinema 4D, After Effects, for Youtube*. Available at: <https://www.youtube.com/watch?v=NtIorayJc4o>.

QuickVFX (2013) *Cinema4D Tutorial: Intro to Joints and Skinning (Beginner)*. Available at: <https://www.youtube.com/watch?v=O6UGaKC79KE>.

Standard Story Company (2021) *How to Make Your First Short Film: A Crash Course*. Available at: https://www.youtube.com/watch?v=8QCK_qEp_PI.

Texturelabs. (2023, February 3). *Advanced After Effects // Analogue Retro-Futuristic Monitor* [Video]. YouTube. <https://www.youtube.com/watch?v=-8eDk8aCJlY>

Emma Nuel (2023) *Animated textures in Cinema 4D and Redshift*. Available at: <https://www.youtube.com/watch?v=S1oGrSVmaWU>.

References / Sound and Graphics

Mixkit (2023) mixkit-elegant-door-announcement-224.wav
<https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-technological-futuristic-hum-2133.wav
<https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-cinematic-glitch-trailer-1021.wav
<https://mixkit.co/free-sound-effects>

Mixkit (2023) mixkit-storm-wind-atmosphere-1735.wav
<https://mixkit.co/free-sound-effects>

Photos Public Domain (January 11, 2012) *Crumpled olive green paper. This is a photo of crumpled or wrinkled olive green colored paper.*
https://commons.wikimedia.org/wiki/File:Crumpled_olive_green_paper.jpg

References / Software & websites used

Adobe Inc. *Adobe Illustrator* (27.4.1) . [Software] . [Accessed April 2023]

Adobe Inc. *Adobe Photoshop* (24.3.0) . [Software] . [Accessed April 2023]

Adobe Inc. *Adobe After Effects* (24.3.0) . [Software] . [Accessed April 2023]

Adobe Inc. *Adobe Audition* (24.3.0) . [Software] . [Accessed April 2023]

Adobe Inc. *Adobe Enhance Speech* (podcast.adobe.com/enhance) . [Website] . [Accessed April 2023]

Maxon Computer GmbH. 2023. *Cinema4D* (2023.2.0) . [Software] . [Accessed April 2023]

Maxon Computer GmbH. 2023. *Redshift* (3.5.14) . [Software] . [Accessed April 2023]

Maxon Computer GmbH. 2023. *Moves* (2023.0.3) . [Software] . [Accessed April 2023]

Wix.com Ltd . *Wix* (wix.com) . [Website] . [Accessed April 2023]



**Thank
you.**