

“KHOJ”

A Short Animation Film

Project-III Report

April 2017

By

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Supervisor

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Industrial Design Center

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

TITLE

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Animation and Film Design

Guide: Prof. Shilpa Ranade

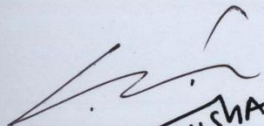
Industrial Design Center

IIT Bombay

Approval Sheet:

The project II titled "KHOJ" a short animation film by Nishant Venketesh is approved in partial fulfilment of the requirement for M.Des. Degree in Animation and Film Design.

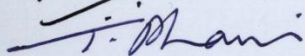
(Guide)



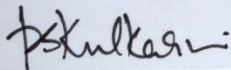
(External Examiner)

MANISHA

(Internal Examiner)



(Chair Person)



Declaration

I declare that this written submission represents my ideas in my own words and where others ideas or words have been included, I have adequately cited and referenced the original source. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the institute and can also evoke penal action from the sources which have thus not been properly cited from whom proper permission has not been taken when needed.

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Introduction

Being a fan of Sherlock Holmes, I was very much keen to make an animation film that revolves around crime and investigation. I had watched other crime fiction movies and knew it was a challenge to create one, especially if it is going to be a short animated film. I was very hazy about the idea and the story of the film at my earlier stages of my story construction. I wanted the crime in the story to be no less than a murder. I wanted my film to have an intense story and a crime such as murder was what I wanted for my characters to get involved in.

Crime stories are usually of two types, one being the Who-done it and the other, How-to-catch-them. Who-done-it stories have a crime that has probably occurred during or before the story and the objective of the protagonist becomes to find the culprit among the suspects. The entire story shows elements of investigation and interrogation and other activities of the sleuth. His acumen and his methods of deduction become the source of entertainment for the audience. But,

in these kinds of story types, the main issue becomes the demand of the script. It would require some time to develop the characters in the movie and then reveal the true identity of one or more characters in the film. And such construction doesn't suffice the demands of a short animated film. A five to ten minute movie with such stories often become predictable.

I wanted the movie to have a protagonist who solves crime cases like jigsaw puzzles and the antagonist who is always a step ahead of the protagonist. The more strength one gives to the antagonist, the more the protagonist struggles and thence his reinforcement and his victory become a thing of interest to watch.

I looked at the other half of the crime fiction stories which come under the 'How-to-catch-them' category. Here, the protagonist and the audience are pretty much aware of the crime that is about to happen but the challenge is to stop the crime from happening. The details are gradually enclosed to the audience as the detective goes deep in his investigation and finds out what's about to happen. These stories, very well suit the structure of a short film.

Research

Secondary Data Collection

I looked for relevant content in the internet and found articles and books worth reading. They talked about different investigation techniques that are investigators to help attain clues and reach up to some conclusion. I found these techniques of investigation really interesting. These were-

- 1) Search Patterns- The investigator has different ways to begin his search for evidence in the crime scene. His movements in the space can be inward or outward spiral, grid, parallel or zone.
- 2) FingerPrint Study- The features of the fingerprints tell us why every finger impression in the world is different from the other.
- 3) Palm Study- Like the fingers, the palm print of every person is unique in this world. The area of the palm is divided into different sections and each of these are studied whether they differ or match from the one found at the crime scene.
- 4) Blood Splatter Characteristics- If blood drops form a circular stain on the wall on any surface, then the angle at which it has fallen is close to 90 degrees. Spines become prominent below 75 degrees. As the angle decreases, it becomes more elliptical.

I also read books and novels based on crime. The short stories written by Agatha Christie helped me in learning how to tell a crime story in a short piece of time. However, movies such as Se7en, The Usual Suspects, Silence of the lambs, Sherlock Holmes(movie and the series) gave a new dimension to my learning. Indian content such as Te3n, Byomkesh Bakshi(movie and the series), Tehkikaat were a fun to watch. Each of these stories turned out to be really good because of the subtle character detailing done for the detective. For example, the character Sherlock Holmes won't keep on standing on the escalator. He would still ascend the steps on the moving escalator showing his enthusiasm for solving the crime case. He doesn't want to be a second late in reaching and searching out for the clues. He enters the cabin of some officer and cracks his computer password just by staying in his room for minutes by observing his cabin for a while. He no more remains a detective but becomes a real hero for the viewers. The audience enjoys watching this stuff now because the characters are made believable through their actions and thoughts and now they can relate to his acumen.

Watching movies and reading books was fine for me but I wanted to make sure that doing so doesn't dilute my style. We love our heroes so much that we want to create one and often end up creating ones pretty similar to them. One should keep it in mind that it doesn't influence our thought directions in such a manner that our characters or stories appear as a subset of the existing ones.

Primary Data Collection

Through my contacts, I was able to get in touch with a criminal lawyer who worked in Bihar. I had a phonetic conversation with him for around half an hour. He talked me about his experiences he had in his career. He told me about a murder case in Bihar where the blame of the murder was taken by the culprit's father. The father was arrested and has under prison for a long time. We had a decent discussion. But,

his inputs didn't help me much. I was still struggling to meet my inspiration for the story.

I also did some research about the disorder owned by the character in the film. He suffers from a neurological disorder called as Brain Split syndrome. It is also known as callosal disconnection syndrome. Here, the connection between the left and right hemisphere of the brain is disrupted. And, as a result the body having "two brains" behaves abnormally. In such cases, the person doing some activity with one hand can be halted or interfered by the other hand which is not under the person's control. I had a talk with a medical student who is a student in Neuroscience and practises in RIMS, Ranchi. He said that the recovery of the patient depends a lot upon his will –power. Complete recovery is not possible in most cases but things can get better with the efforts of the affected person.

Story Ideas

Initially, I was struggling when it came to story creation. Most of the stories that I came up with, were too lengthy to be made into short animated films. Because my inspirations in this genre were more from the feature-length films, my developed stories were also suiting the same format. Gradually, I realized that showing a crime and investigation film in a short film of say, 5 minutes won't be really easy. The establishment of the characters and then revealing their true identity at the end of the film was the most challenging step in my pre-production stages. Again, I had to make sure that the script of the film suits more the animation style and not the live-action one. Animation friendly content is one of the key factors which should be considered while developing the script for an animated film. Although, I enjoy storytelling, I found the process of creating short crime stories to be really tough. I kept on changing stories because they didn't seem to work well with the format and the medium but I could see the gradual refinement in the development of my stories.

Story 1

No circumstances seemed to be favourable for a detective who had been engrossed in three consequent murder cases. After further investigation, he finds out that all of these crimes had been committed by a robot. Hardly had he become familiar with the machine's activities, when he gets to know about a conspiracy which had been planning for an assassination. The victim for the assassins was the Defence Minister who would come to inaugurate the new robot laboratory at some place. However, one of those robots was

programmed to assassinate him. The detective finds it out and reaches the place at the right moment. But a major conflict arises when the robot makes it's resemblance to his late granddaughter. His struggle with his memories and his duty put him in a catch-22 situation. He realizes his responsibility and just before the happening, he shoots the robot and destroys it. He goes through a phase of emotional breakdown and leaves his job.

Strange things had been happening in the city weeks after weeks. The children had been facing health issues and the beds of the city hospitals were falling short in number. The diagnosis could only tell of some hazardous element that was found in their stomachs. But how did that enter, nobody could find it. On the other hand, the women of the same city had been facing problems in their vision. They said their vision had been gradually fading. All of this was adding to the tension of the city and only one person was to be blamed for it. He had concealed his identity and challenged the intelligence bureau to solve it. Nobody but a newspaper seller was able to find the root cause to all of these. The new pencils that were manufactured had some traces of the hazardous sulphur at their tips and because children had a habit of chewing the pencil tips, they were affected. And the women sufferers were the ones who visited beauty parlours, and had the cucumber slices put over their eyes which was infected with some dangerous element at the wholesale processing units.

Story 2

Strange things had been happening in the city weeks after weeks. The children had been facing health issues and the beds of the city hospitals were falling short in number. The diagnosis could only tell of some hazardous element that was found in their stomachs. But how did that enter, nobody could find it. On the other hand, the women of the same city had been facing problems in their vision. They said their vision had been gradually fading. All of this was adding to the tension

Story 3

A murder of a famous magician had taken place and the entire city was shocked to hear this. The reason behind their shock was that an old woman, Mrs. Sink had been found guilty of killing the person. Although it was strange, it was quite believable because the victim died of Potassium Cyanide which was mixed in the dessert. The chemical Potassium Cyanide has a resemblance to sugar and Mrs. Sink mistook it for the sugar. This was the statement of Davis, Matilda and Ryan who were present at the crime scene. Davis was the nephew to Mrs. Sink. Matilda was the magician's brother and Ryan was his friend. The magician was Davis's friend. However, during the investigation, the detective finds out that there was a house few miles away which was of the same design of the existing house. When he intrudes the house at night, he's surprised to see that the interiors of this house was exactly a mirror image of the previous existing one. The arrangement of the objects of the new house was exactly opposite to the ones in the previous house. They were same in design, same curtains, same doors, everything but their arrangement was opposite.

of the city. and only one person was to be blamed for it. He had concealed his identity and challenged the intelligence bureau to solve it. Nobody but a newspaper seller was able to find the root cause to all of these. The new pencils that were manufactured had some traces of the hazardous sulphur at their tips and because children had a habit of chewing the pencil tips, they were affected. And the women sufferers were the ones who visited beauty parlours, and had the cucumber slices put over their eyes which was infected with some dangerous element at the wholesale processing units.

It was Davis who had designed the house and that it was his trap for his aunt. With an excuse to meet the doctor once in a week, he would come back and take her to the new house. Mrs. Sink would be so confused but Davis would pretend everything to be alright. He planted confusion in her mind and she mistrusted what her senses showed to her. Davis was a smart designer and he through his designs, was able to create perfect illusions which the naked eye would easily fail to observe. Although, everything was well, her doubts grew into fears and when the situation grew worse, Davis took the advantage of it. The blame for the murder naturally came over his aunt and she was helpless. Even she had been believing that the placing of the chemical Potassium Cyanide (which Davis had brought for her to clean her jewelry) was her mistake and she was responsible for everything. The detective reveals the true face of the murderer Davis who had been trying for years to shape his jealousy.

Story 4

Delhi Conspiracy Case- 1912 (Indian Freedom Movement)

Known Facts- RashBihari Bose was one of the unsung heroes of the Indian Freedom struggle. He along with Basanta Kumar conspired to assassinate the then-vicey of India, Lord Hardinge. In 1912, the British India had decided to shift the imperial capital from Calcutta to Delhi. To mark the arrival of the Viceroy, a procession was taken out. A bomb was thrown at the Viceroy killing his mahout. The Viceroy

Story 5

Harsh Tiwari, the police detective had managed to find one of the criminals who was involved in drugs smuggling for years. He had almost killed the boss during an encounter but he managed to escape. His escape was strange because he could endure the bullet that was fired on his chest which instead would have pierced his heart into pieces. He used to be so engaged in these thoughts that he won't mind shouting at people who disturbed him even a little. Ramesh and Suresh were such persons. Ramesh was a pandit and Suresh was a chaiwala. These two always tried impressing Tiwari with their skills. These two used to be so annoying at times that they would leave the

was injured badly. Basanta Kumar was convicted and executed for the conspiracy role. Later after 2 years of investigation, David Peterson, (Assist. Director of Criminal Intelligence) found RashBihari to be the mastermind of the conspiracy but till then he had escaped to Japan and continued the struggle against British rule from abroad.

But later having discussed with my guide, we arrived to the conclusion of not working on this story. The story has characters and theme of the Indian Struggle for the Freedom. A lot many people, then had contributed for the Freedom and making a humorous animation film won't do justice to the topic. It was a serious involvement from the people then and we felt we should not give a comic dimension to it. So, working on this story was discontinued.

police station only after Tiwari had maximized his vocal strengths to his best.

Tiwari's concerns grew big when he started getting fax messages or sometimes, greeting cards from a stranger. All the envelopes had the same name Mitesh Darpan. He was the guy, the gang leader who had eloped from the clutches of Tiwari. His messages would all be poetry which would serve as clues to Tiwari. Later, Tiwari, in his investigation finds about a medical condition Situs Invertus in which the organs, which are supposed to be on the left side of the body, happen to be on the right side. He finds that to be the reason of Darpan's escape and that his heart was saved from being a target to his shot.

Tiwari's tension was taking new shapes day by day. He got so much engrossed in his work that a minor disturbance would disturb him. One day, a prank from Ramesh made Tiwari slap him hard on his cheek. The walls of the police station roared with the echo the slap made. Ramesh left without saying or expressing anything.

The next morning Tiwari goes to him and asks him for prasad. He apologizes to him. Their talks continue asking about one another when Tiwari receives a message on his phone. The message was from MiteshDarpan asking him to come to the nearest bus stand to the church. For, he wants to meet him alone.

Tiwari stops the conversation and immediately leaves for the place in his jeep alone. While driving, he gets an information that shocks him. The location of the traced mobile number was found to be in the police station. He comes back to find that the criminal in the lockup is already dead and no policeman has an answer to it. The only person to be doubted by his mind was Ramesh. Ramesh pandit. Yeah. But who is he. Why did he do that. The police staff told that the pandit was there an hour before and he had left some prasad for the criminal as well. A message popped up in Tiwari's mobile screen from a new number this time saying "Have a cyanide." (which was an anagram to his previous message- "Have a nice day.")

And the picture became clearer to Tiwari. Ramesh pandit was MiteshDarpan. It was him who had disguised as a pandit and had been

waiting for his best attempt to kill the criminal. The criminal was fed cyanide powder in the form of the prasadladoo. It was important to kill the criminal else he would disclose every matter of his business day by day. He tried winning confidence of the policemen and he succeeded in it. Nothing would have been better than disguising as a pandit. He tonsured his head and shaved off his beard and that made it difficult for even the criminal to recognize him. He never took the risk of being in the vests as the damaged chest could have given him a clue. He made his escape after the murder. He made his every move comfortable by risking his presence in the police station.

"But can't that be a coincidence?" asked the wife.

"No. It can't. Things coincide to an extent of making themselves either a success or a failure. But not such a big failure. A murder. No. Not at all. The people, never mattered to him. After all, what are emotions to a gangster?"

Tiwari sat on his chair gazing at the prison cell just a few metres away from him. The sight of the empty cell with the lights off kept reminding him of his failure every moment and he could do nothing but wait for the sun to come and bring a new morning to their empty world.

Early story development

Behind the story

The stories I came up with, failed to become the plot for my animation film. Some of them were lengthy, some failed in their meaning while some in the expression. The final story was better than the previous ones in many respects. It had less number of characters which as a result was giving enough screen share to all the characters. The characters could express well to the audience. The narration running in the background, thoroughly gives the required display of their thoughts and emotions.

When I had chosen the topic ‘Crime and Investigation’, I had wanted a crime to happen somewhere in the initial minutes of the film and wanted to engage my detective in finding the culprit. The idea of my movie was always to show the mental contest between the protagonist and the antagonist. But, gradually I found five minutes (average length for the animated short) to be too less to find out the criminal. I had to, more or less make the crime happen as early as possible in the film so that the journey of the detective becomes more time-taking and as a result, engaging. But even according to the story results that I came up with, either the story demanded more time or the crime solving became too short-lived. I was unhappy of the fact that investigation of the crime in a film actually demands much more time than I had anticipated. If we talk of the length of the Indian television

episodes, even Byomesh Bakshi took 25 minutes to solve his cases. Sherlock needs an hour to make his cases and culprits reach the dead end. I found five minutes not at all sufficing for the genre. Although, I could create stories which were simple and logical but that was not my prime idea. I didn’t just wanted to create a visual riddle of five minutes. As a student, I had an option of selecting an existing story, but that was not the choice I wanted to make.

Concept for the story

“Not the detective solving the case but the case itself solving the detective...”

The basic idea of the story was to show how a case in the career of a detective changes his pursuit of life. The story has two characters. One being the detective and the other the client. The story loops around the lives of both the people who are upset because of their own reasons. The very idea behind writing this story was to take out a page from the detective’s diary and share it to the people. The character has issues with his health but I purposely didn’t want to make name the health issue in the film. I don’t want to misguide the audience and make it believe that the solution I provide to the character in the film is the only possible solution out. Hence I didn’t name anywhere what the disorder is all about. It is a fictional story after all and the very idea behind the story was to provide the audience not an informative story but an entertaining story.

The final story

I sit in a corner and watch these two play it for me. The game goes on with their wrestle and I play the referee. Sometimes, the ring. Yeah, it's hard to believe that the left half and the right half of the same body can be rivals. But, yeah that's true. My body never obeys my mind. Mental peace is like Nirvana to me.

My moves are all calculations. I ensure maintaining an equilibrium between the two. Between the two. Always.

"Sir, are you alright?" asked the client

"Oh, yes! I'm fine. You see...so, can I have a picture of your son..?"

"Yeah. But it won't help. "

"Why?"

" He is missing since 30 years, Sir. This picture would be very different from how he looks now.." "it's a 30 year old photograph. I haven't seen him since then.."

I replied "Give me your number. I will contact you soon.."

"Not to worry, Sir. I am a paying guest now just below your floor...Sir, I will move only after everything's settled.."

I lacked so much clarity in this investigation that I didn't know where to start from. This was a case absurd in a way that it made difficult for the solver to have even a starting point. I am not supposed to show empathy in my profession. I am a detective and my duty becomes to simplify complicated matters through logic and deduction. But I feel bad for him.

"Everything relies on you, Sir. Only you can do it ". These words kept ringing in my ears.

He had begun living as a paying guest just below my floor.

People are objects of emotion and they all get driven by sentiments. They forget that a detective is merely a human being. He is not a super-hero. He can make efforts to save lives but he can't make a promise for the same. The max he can do for his clients is help them but not everything's under his control.

"How can you be so sure that he is alive..?" I asked hesitatingly.

"I am a father, Sir. And I never got any bad news either. I'd like to believe he's alive...he just went missing.."

It was even hard to imagine what he had been believing so far. When one associated sentiments with the matter, the truth becomes hazy. The logic tends to fail. For 30 years, he had been hoping that his son could return but he could not manifest the perceived truth.

I was struggling in the process and what should I tell a man who had so high hopes on me. He seriously felt that the case could be solved with just one tool, hope. Although, I was pretty much sure that no relevant evidences could be procured now, I kept searching for the better. A week had passed and no progress had made me irksome. I had not touched the other pending cases for a week. I knew I was spending my time on something which won't yield results, if any. I had other pending cases to work on. I could not keep on chasing the path of infinity knowing it would lead me to a dead end someday. "This is it. I am done."

I made up my mind not to work on this case anymore. I stopped searching for any evidences and clues and instead was preparing myself for the answers. The answer that I felt I should give him before his false hopes kept piling over my struggles.

I was lying on my bed for 3 hours. I was not able to sleep. The fact that I was going to say a 'no' to him kept pinching me. All in my career, I had never done this to any of my clients but this case had no ends.

I looked at the clock when the doorbell rang. It was 12:30 a.m. I opened the door and I could see him panting. He was almost out of breath. "I think I've found him."

I was taken aback for a moment. Before I could begin calculations of the could-nots and the could-bes, I immediately made up my mind to go with him and in no time, we reached the place. I was astound at where our car was made to stop. We had stopped in the middle of the road and made our way to the thick dense forest by the roadside. The darkness had layered it's covers over the sky and our torches became eyes to us. There was a steep slope downwards and we had to cross it carefully for a safe landing. We stopped and looked at one another. The warmth in his eyes lent me courage to face the situation. We descended down the rocky slope safely. Only the slippery mud gave us some bruises. The beam of our torches had begun scattering all over the place. It was a wall. The wall of a tunnel.

I was leading the team of two and his footsteps from behind suggesting me to make further moves. The lit torches had a narrow beam so the ambience was still dark. It was getting a bit scary for us to get in but getting to our destinations became more important. The long silence was now broken by a word.

"Son"

I turned back. The torch and my eyes failed to see anyone. I was too scared to imagine anything. His absence was bothering me but now I was more curious to know why the light from the other end had stopped to appear. The noise that echoed in the tunnel, gave me shivers. I had not anticipated a train coming from the other end and I was stuck standing in the middle of the tunnel. I ran in the opposite direction to the best of my energy. I accelerated my motion in so less time. I had not anticipated a train from the other end and I had not expected myself to run this fast either. I reached the end before the train and made an immediate dive towards the left. I plunged into a marsh and had fallen into a deeper trouble. With the train passing at a tremendous speed, I could experience the air for a few seconds. I knew the bog was waiting to digest me as fast as it could. I knew panic was only going to worsen it. I took deep breaths to calm the self and for the first time, I feel I coordinated my moves properly. My body that had split itself into two, had now become a single entity in saving it's own life. The coordination of the body movements, I felt were remarkable and I could see the body escaping from the clutches. Not only from the clutches of the marsh but also from painful grip of my beliefs. Patience helped me in getting out of the predicament after an hour. I kept cursing the man the entire day. I looked for him in his house but by then, he had left. I had understood that he had wanted to kill me and that he must have been some criminal from my solved cases.

But the very next morning, the strangest thing happened. I woke up all of a sudden from my sleep. I looked at the mirror and I could see a new man today. I tried to figure out what exactly had happened. I had an issue with my body after I had met with a road accident. A

road accident that happened 30 years ago. I lost everything in the name of family. And the loss had given me a shock that lasted all these years. I was unable to coordinate the body movements. My physical imbalance was a result of the shock that I experienced during my loss. I had failed in my mind and didn't make an effort to revive anything. I kept obeying the body and stopped following the mind.

I had stopped believing in myself. I considered this to be my pursuit of life and continued living in this manner for years. I never made an effort. All these years, I never saw any hope in me but he saw it. The client. The man. The case was never his. It was mine.

“Everything relies on you, Sir. Only you can do it “

“I will move only after everything's settled..”

I had literally failed in my investigation then because there was really no one with the same identity. It was indeed his construction of my

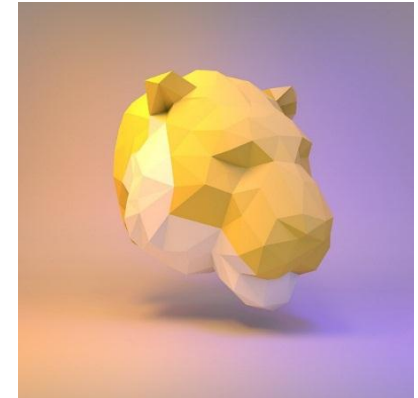
image. The name and everything. A new character he thought was born out of me and he made it a point to find him and more importantly, save him.

All these years, I kept aside my weaknesses and kept on working for a living. The brain had compromised but the mind had lost. I looked for evidences, clues and what not but I never efforted to look within. To look within the self. I have a reason to celebrate the journey now that I have been shown the path. I searched about him a lot but in vain. I also cannot imagining a human being escaping from the tunnel in seconds. Was he special. Was he different. I don't know. I only believe now. Case no. 149 shall always stay with me. It shall continue to persist within me. It taught me to realize the essence of life and how to flavour every day of it with value and taste. I have grown old I know but it's never late for a new beginning. I might have the same strength but the weaknesses have been conquered. The game has just resumed to a new level now.

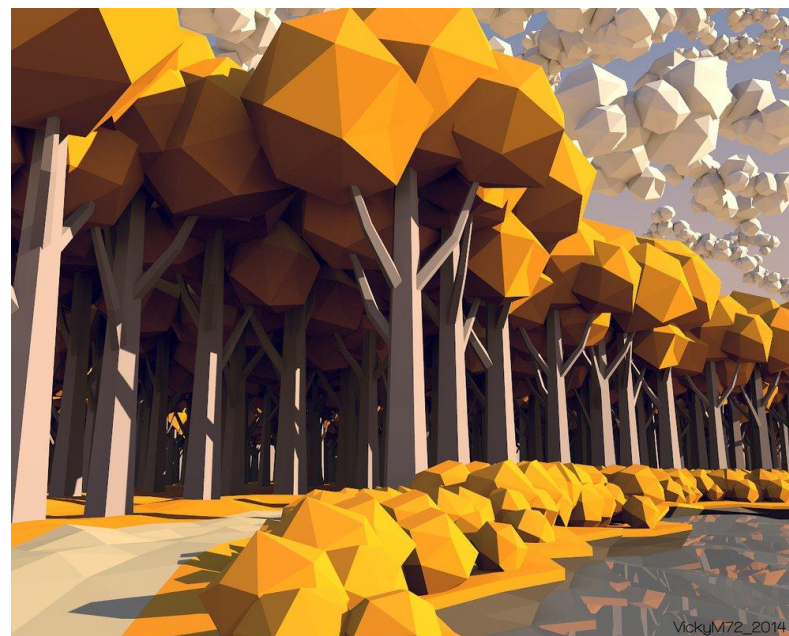
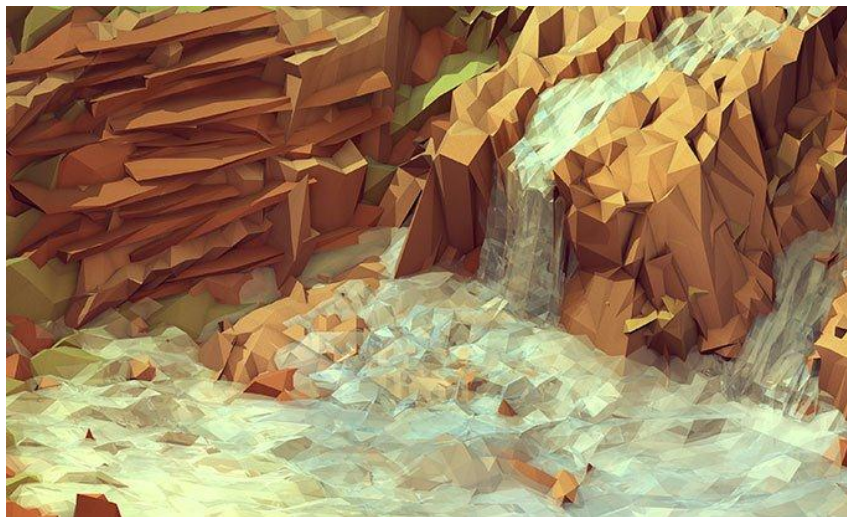
Inspirations

I enjoy browsing illustrations in the web whenever I find myself free. Websites like pinterest, artstation, and deviantart are my favourite browsing places. It helped me in finding the crafts and illustrations on low polygon. I had been into sculpting but I had never tried this style before. The idea of incorporating the low poly style into my film actually inspired me to keep on giving my best even when the storyboards for my film were not finalized at several stages.

The style of low poly reminds me of the origami craft which I used to practise in my childhood days. Even in my sketches, most of the time I draw my characters geometric. So, this style of low poly, I thought would give me a new dimension in my own styling of work. Low poly amazes me because it gives the required visual information of the object without much details. I find it more or less, to be a 3d form of minimalism.







Initial concept sketches

I tried different versions of the characters and the likeable features from different versions, made combinations for the final look of the character.

I prepare the character design from two orthographic angles i.e, the front and the right hand side. Using these pictures as a reference, I created a 3d model in the software.

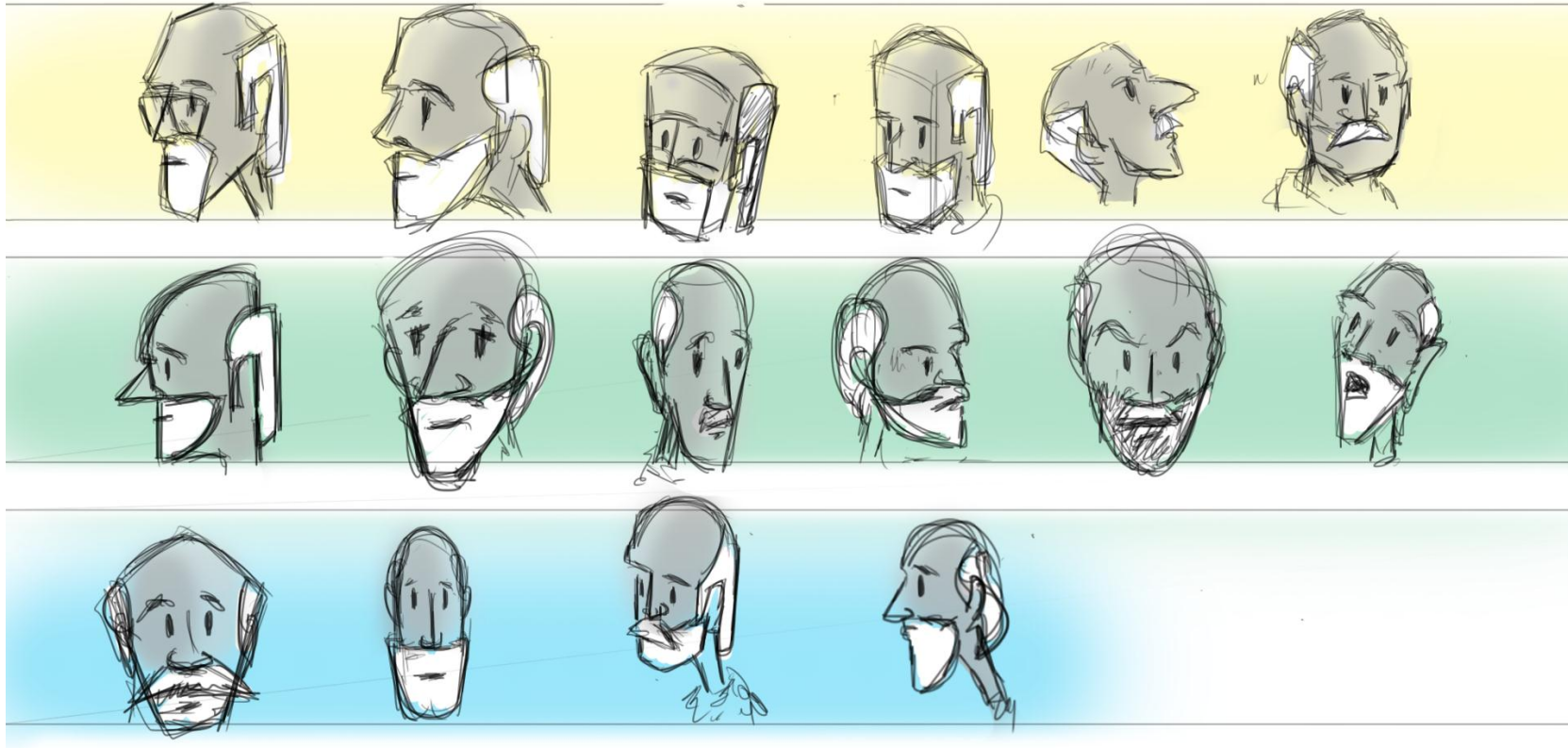




Fig: the detective



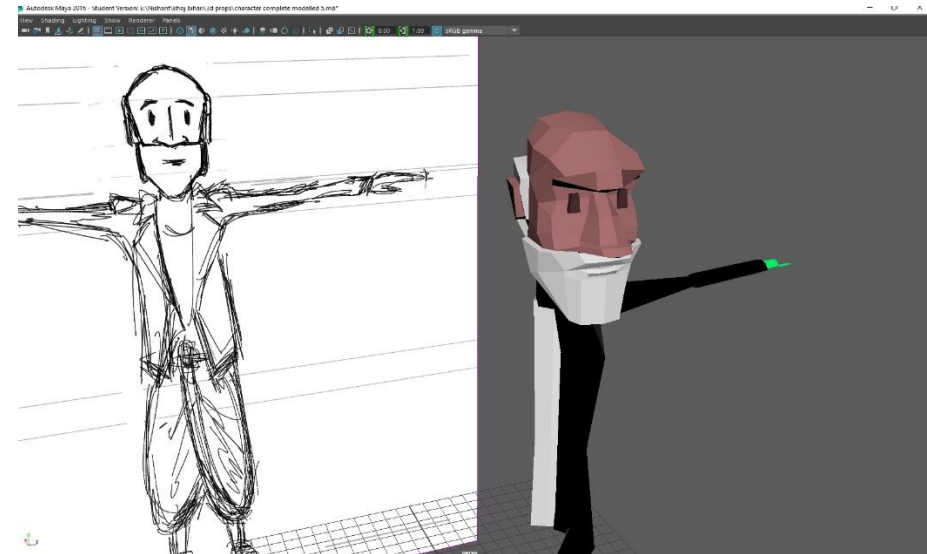
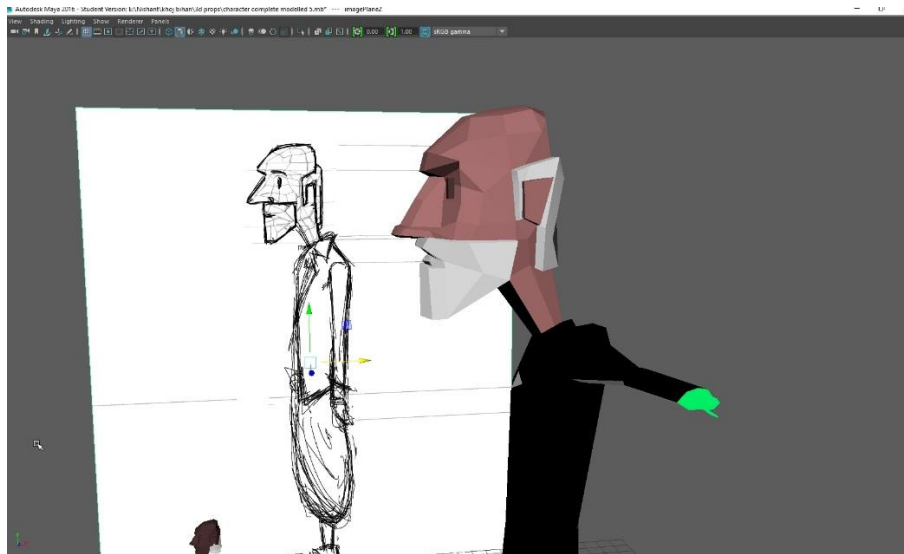
Fig: the client

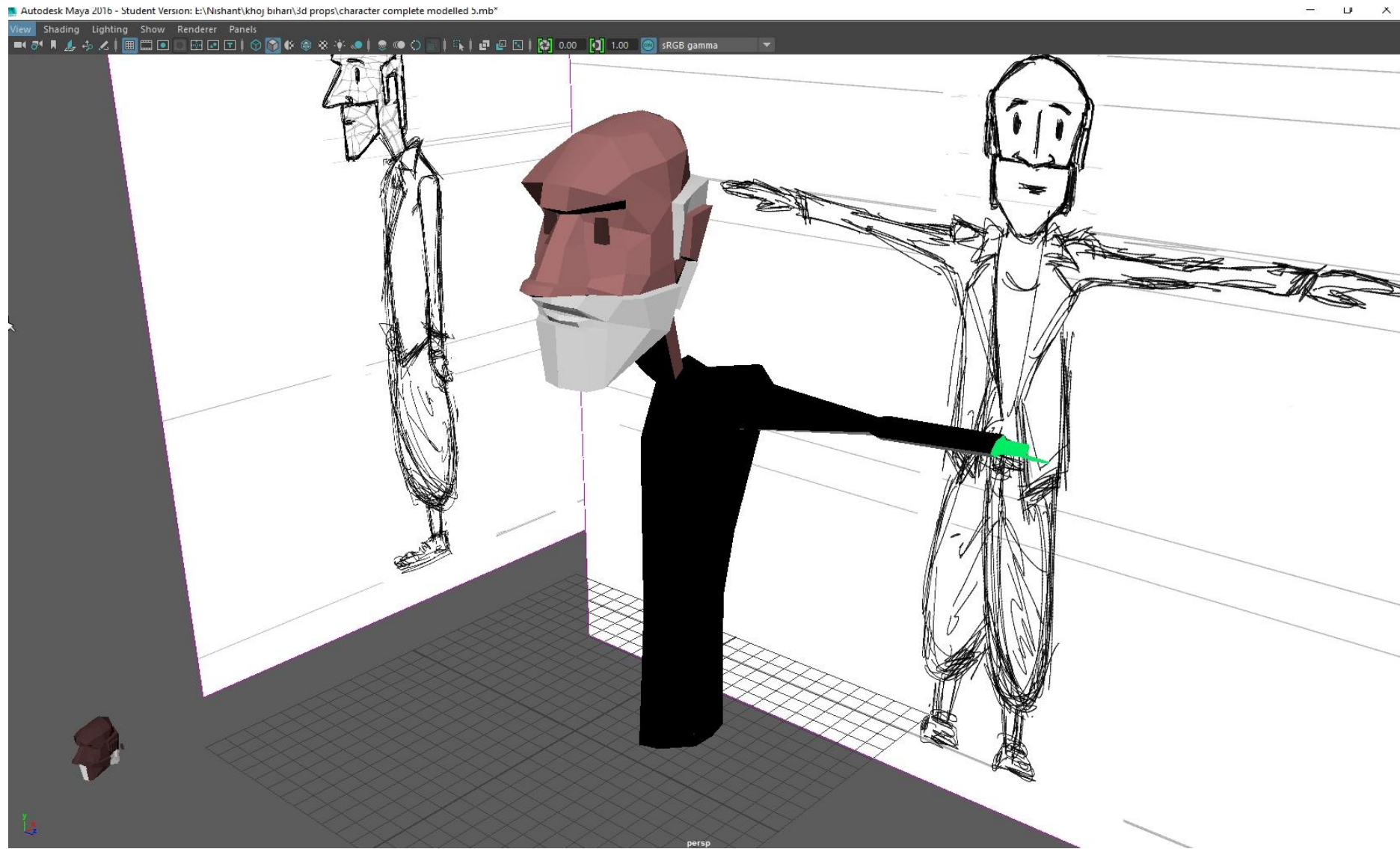
The evolving of the 3d models and the technique

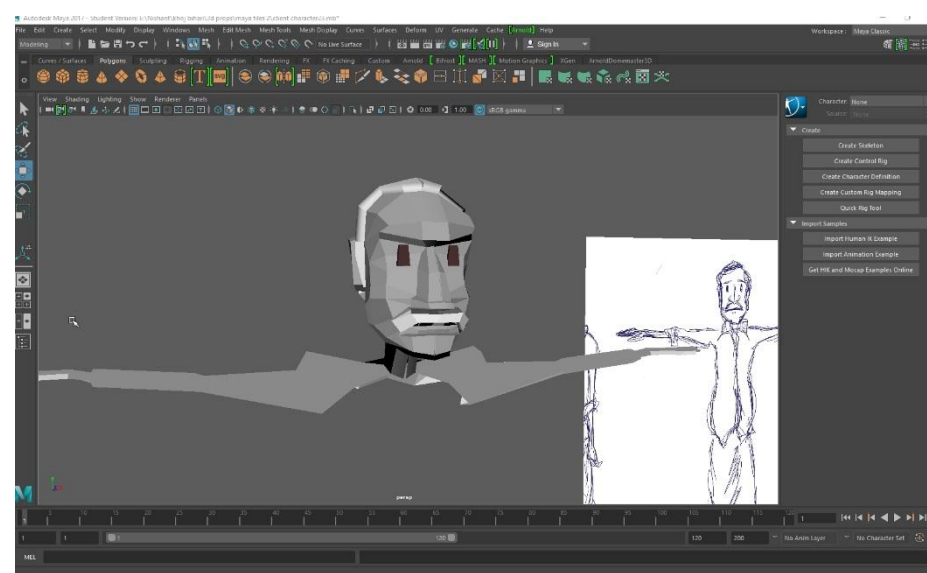
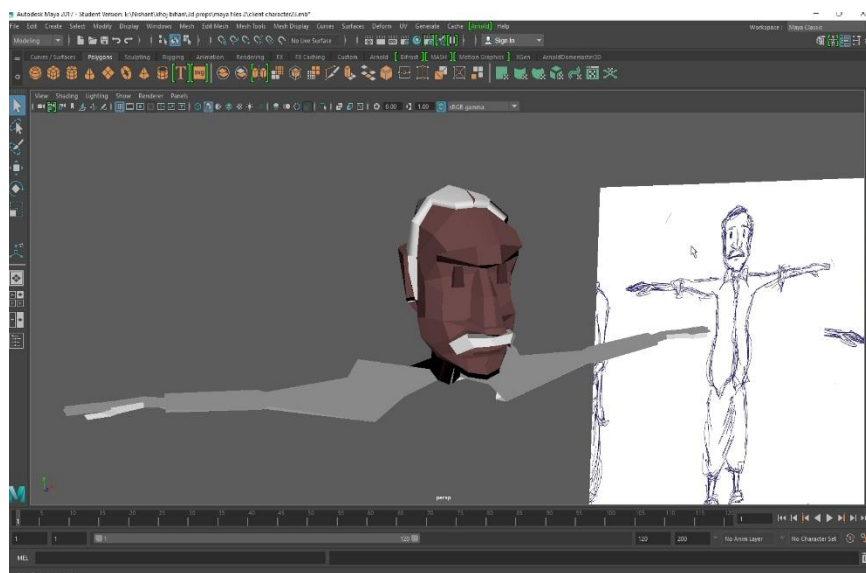
The style of the film is low poly. Low polygon means less number of polygons constituting to form the three dimensional object. I was fascinated by this style but the challenge was to make it the way I had visualized the 2d image of the characters. It was difficult for me as I was not much into 3d before and the question of accomplishing the final look was always there in the mind because I had faced the very same issue with the previous story. The 3d characters I created for the previous story were not complete look alike of the 2d drawings.

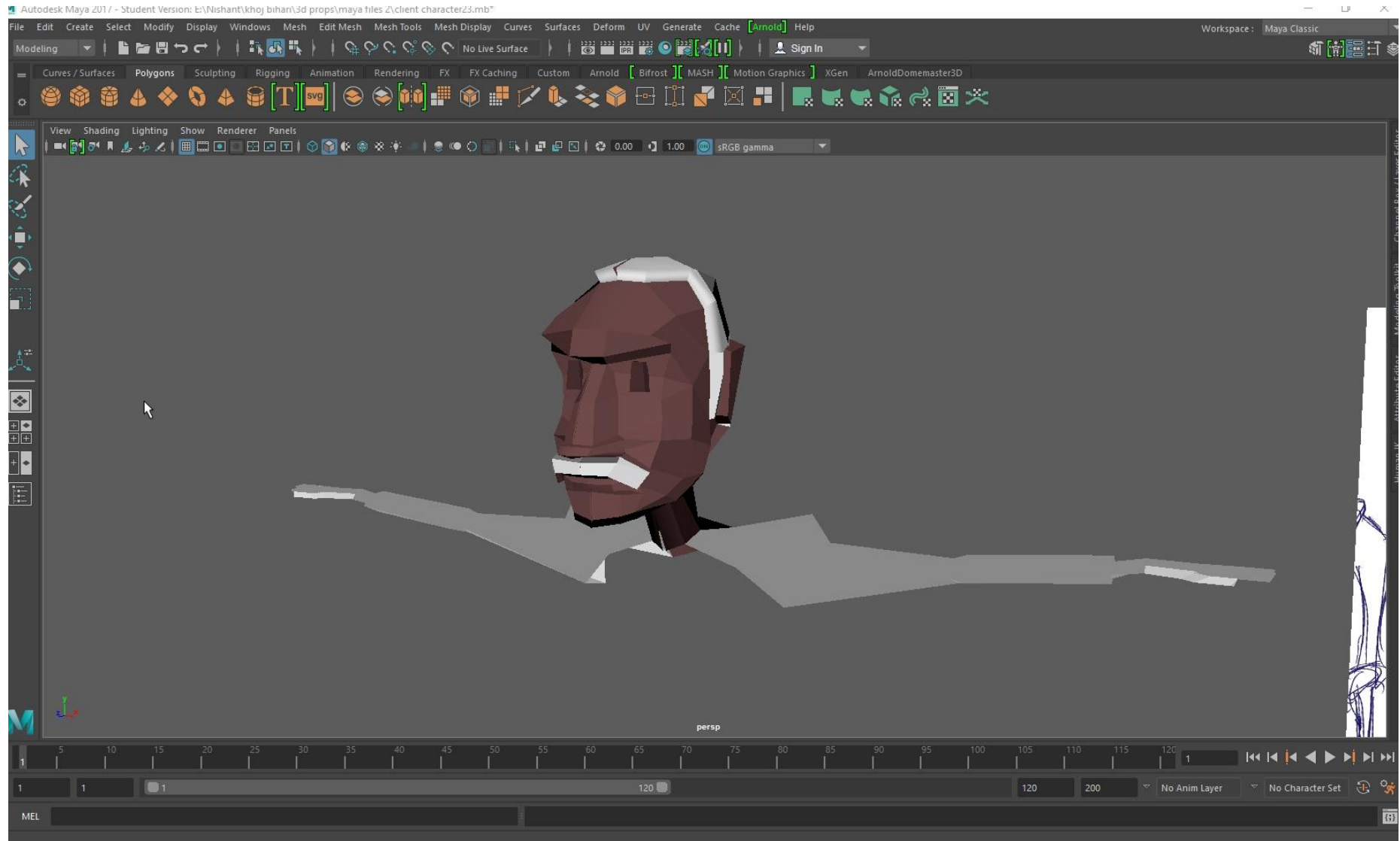
I tried understanding the facial and other features of the low poly characters I browsed on the web. It is the addition of the smallest details that differentiates the different versions of the low poly. I

didn't want to make the character extremely low poly because then it would be difficult to animate the entire thing. I started the entire process of character creation using a simple flat surface and then gradually began with extruding the edges one by one to form different planes. I changed the dimension of these planes according to the need and I always had the 2d drawings as backgrounds to refer to. I was stuck to the idea of doing the entire film in 3d. Not only because I wanted to learn 3d but also that I wanted to create my own style in 3d. I did not want the film to have a usual look. I searched for low poly style animation films in the internet and was surprised that there were not much in number. So although there was not much material to refer to, I was still excited of the fact that the low poly style for an animation film was something which not many people in the industry have tried out.







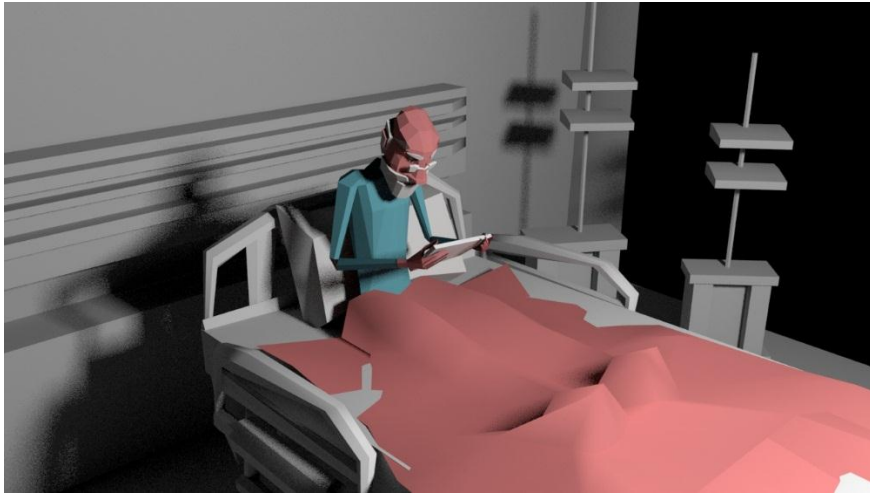


Light and colour references



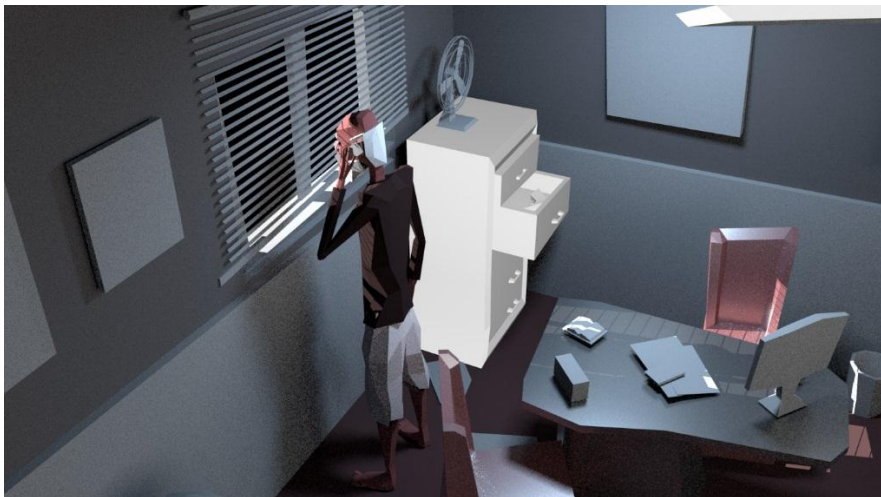
Try outs with light and shadow

I didn't want to compromise with the look and feel of the film. It took me time to get the first proper image which showed the desirable look



and feel. But, once I made it, playing with lights became an experiment and I enjoyed doing it throughout the entire film.





The characters

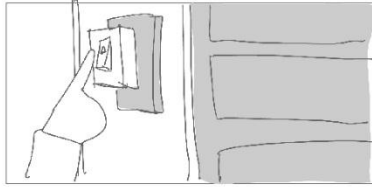
I wanted my characters to be simple in appearance. They were made of less polygons and it was adding to my advantage because the rendering time as a result for the computing machine becomes much

less. Less the polygon count, less the rendering time. Because I was trying to develop a style in my 3d animated film, I didn't want too much variations in both these characters. Both the characters are old and more or less almost of the same age. So, I tried to bring out the differences in their smaller details i.e. the hair, beard, or the skin tone.





Storyboards



Sound: The doorbell rings (radio music playing along)
 Camera: Zoom in to the door
 Dialogue:



Sound: The radio music playing in the background
 Camera: Bird's eye
 Dialogue: Client_ Sir kuch pata chala kya



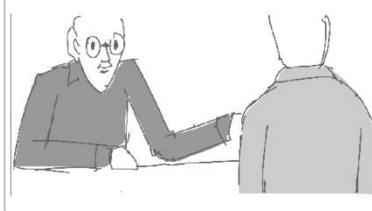
Sound: The radio music
 Camera: Mid to long shot
 Dialogue: Detective_ It isn't this easy, Krishna ji. Aapka beta laapata hai. Samajhte hain. I understand.



Sound: Radio music
 Camera: Close up
 Dialogue: Detective_ Par yeh bhi toh dekhiye ki woh bees saal se laapata hai.



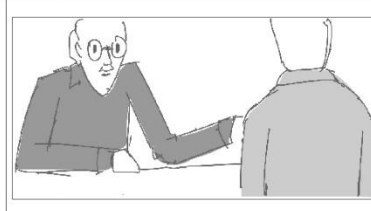
Sound: Radio music
 Camera: Close up shot
 Dialogue: Detective_ Ee purana photo leke kaise dhoondenge, bataiye aap ?



Sound: Radio Music
 Camera: Medium shot
 Dialogue:



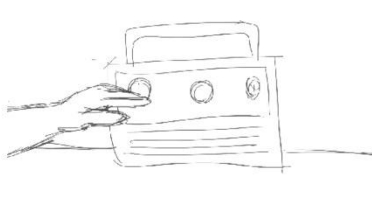
Sound: Radio music
 Camera: Close up
 Dialogue: Client_ Koshish kijiye, Sir



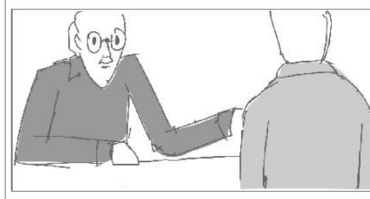
Sound: Radio music
 Camera: Medium shot
 Dialogue: Detective_ Haan, par aap daily daily mat aa jaiye



Sound: Radio music
 Camera: Medium shot
 Dialogue:



Sound: Radio music stopped, button sounds
 Camera: Close up
 Dialogue: Detective_ Yeh sentiments joh hain na.



Sound: Low foley for the noise coming from the window
 Camera:
 Dialogue: Detective_ They will weaken you. They won't take you anywhere, Krishna ji.



Sound: Low foley for the noise coming from the window
 Camera:
 Dialogue: Client_ But hope will..



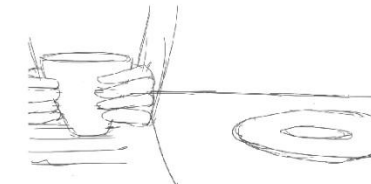
Sound: Low foley for the noise coming from the window
 Camera: Mid to close shot
 Dialogue:



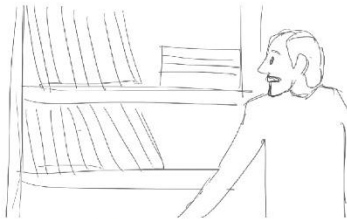
Sound: Music getting louder with beats
 Camera: Close up
 Dialogue: Detective_ Waise Prateesh Yadav naam ke lag bahut hain



Sound: Music running fast to arise the tension
 Camera: Close up
 Dialogue: Detective_ Par aapke bete jitne umar ke nahin



Sound: Music running fast
 Camera: Close up
 Dialogue:



Sound: Music with beats
Camera: Medium shot
Dialogue:



Sound: Music with beats
Camera: Medium shot
Dialogue: Client_ Aap koshish jari rakhiye, Sir. Humra Prateesh mil jayega.



Sound: Music beats
Camera: Medium shot
Dialogue:



Sound: Music beats
Camera: Medium shot. posterior
Dialogue:



Sound: Music beats
Camera: Long shots
Dialogue: Detective_ Mushkil hai Krishna ji



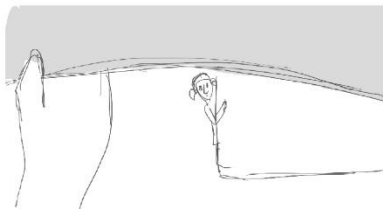
Sound: Music lowering. Phone effect of voice over
Camera: Medium shot
Dialogue: Detective_ We don't even know ki woh zinda hai bhi ya nahi



Sound: Phone effect of voice over
Camera: Medium shot
Dialogue: Client_ Is this your 100 percent, Tiwari ji?



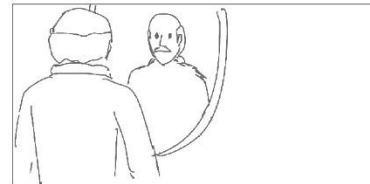
Sound: Echo of client's voice
Camera: Closeup shot
Dialogue: Client_ Yehi agar aapka baccha hota toh..



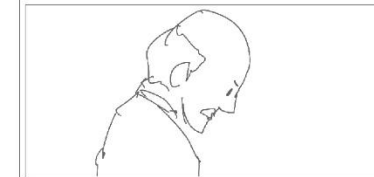
Sound: Echo of daughter's voice
Camera: Long shot
Dialogue: Daughter_ No cheating Papa..no cheating na.. aap dhoondoge toh main mil jaongi na Papa.



Sound:
Camera: Medium shot
Dialogue: Client_ Aap dhoondoge toh humra Prateesh mil jayega



Sound:
Camera: Medium shot
Dialogue: Detective_ People forget that a detective is merely a human being.



Sound: Beats
Camera: Close up shot
Dialogue: Detective_ He can make efforts to save lives but can't make a promise for the same



Sound:
Camera:
Dialogue: Detective_ I think I should just speak out to him before his false hopes keep piling over my struggles



Sound:
Camera:
Dialogue: Detective_ Baaki kaam bhi nahi ho paa rahe is chakkar mein. Na bolde beta Tiwari, Bol de na ho payega



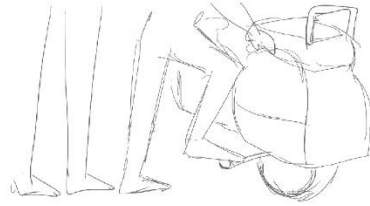
Sound: Doorbell rings
Camera: Long shot
Dialogue:



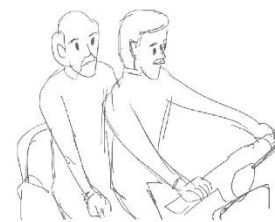
Sound: Client panting
Camera: Long shot
Dialogue: Client_ Sirjee, lagta hai woh mil gaya.



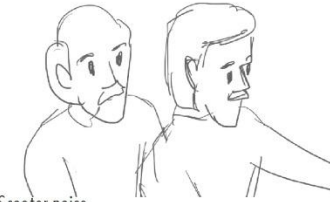
Sound: Scooter noise
Camera: Closeup
Dialogue:



Sound: Scooter noise
Camera:
Dialogue:



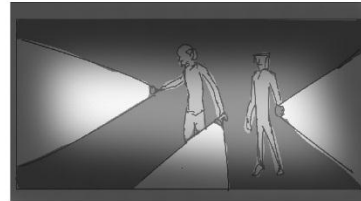
Sound: Scooter noise
Camera:
Dialogue:



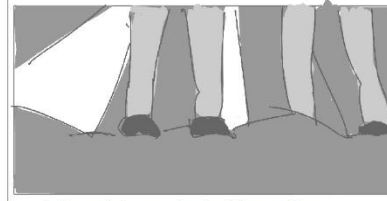
Sound: Scooter noise
Camera:
Dialogue: Wife_ dekhna yeh scooter humari sari problems door kar dega. School, market sab nazdeek lagne lagenge.



Sound: Forest foley sounds of crickets and insects
Camera: Long shot
Dialogue:



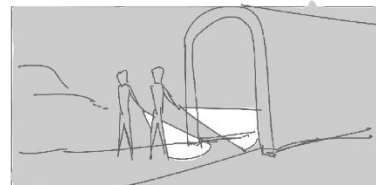
Sound: Forest foley sounds of crickets and insects
Camera: Long shot
Dialogue:



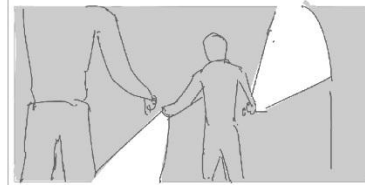
Sound: Forest foley sounds of crickets and insects
Camera: Close up
Dialogue:



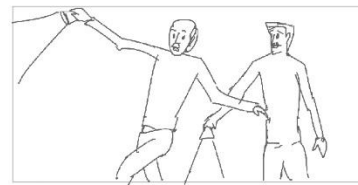
Sound: Forest noises and footsteps
Camera: Long shot
Dialogue:



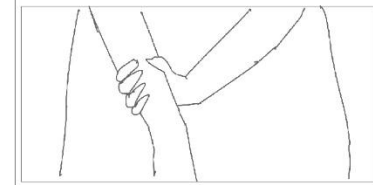
Sound: Forest noises and footsteps
Camera: Long shot (posterior)
Dialogue:



Sound: Forest noises and footsteps
Camera: Medium shot
Dialogue:



Sound: Forest noises
Camera: Medium shot
Dialogue:



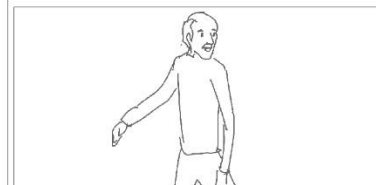
Sound: Forest noises
Camera: Closeup shot
Dialogue: Client_ sambhalke. Yahaan dal dal bahut hai



Sound: Echoe of sounds
Camera: Closeup shot
Dialogue: Client_ Son



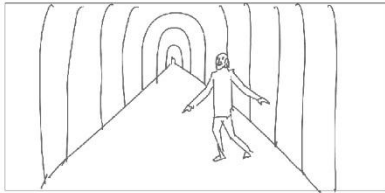
Sound: Echoe of sounds
Camera: Closeup shot
Dialogue:



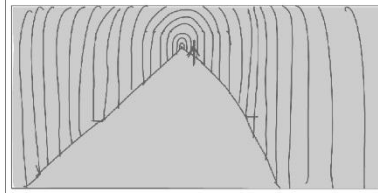
Sound: Sound echoes
Camera: Medium shot
Dialogue:



Sound:
Camera: Closeup shot
Dialogue:



Sound: Silence
Camera: Zoom out
Dialogue:



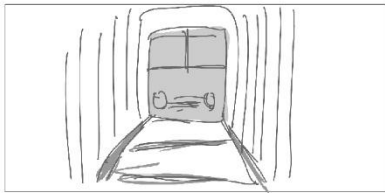
Sound:
Camera: Zoom out
Dialogue:



Sound: Horn from the train
Camera: Very long shot
Dialogue:



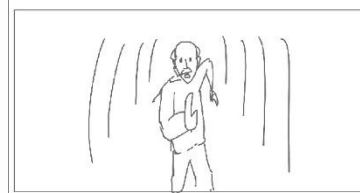
Sound:
Camera: Closeup shot
Dialogue:



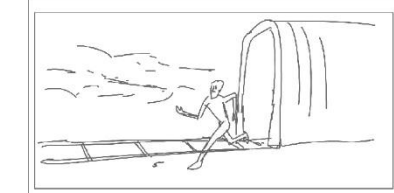
Sound: Train sounds
Camera: Medium shot
Dialogue:



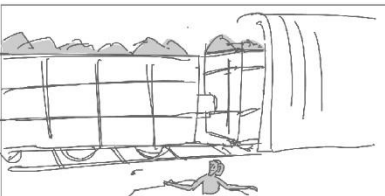
Sound: Panting
Camera: Long shot
Dialogue:



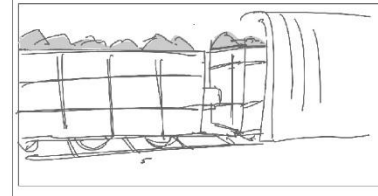
Sound: Running feet and panting noisily
Camera: Medium shot
Dialogue:



Sound:
Camera: Mid to long shot
Dialogue:



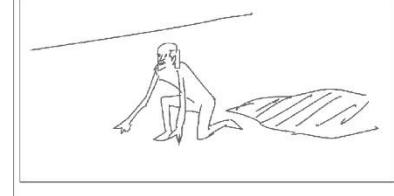
Sound: Train sounds
Camera: Long shot
Dialogue:



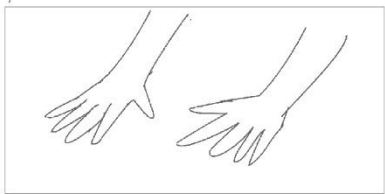
Sound: Train sounds
Camera: Long shot
Dialogue:



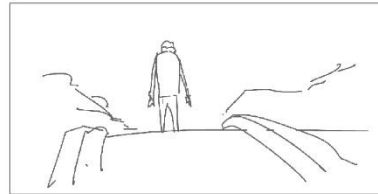
Sound: train sounds
Camera: Medium shot
Dialogue:



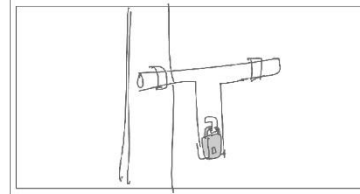
Sound: Music with loud beats
Camera: Medium shot
Dialogue:



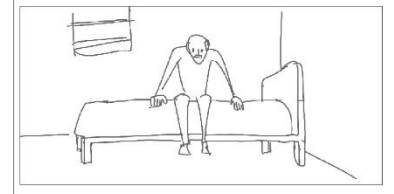
Sound: Music with beats
Camera: Closeup shot
Dialogue:



Sound:
Camera: Long shot
Dialogue: Client_ I kept cursing the man the entire night.



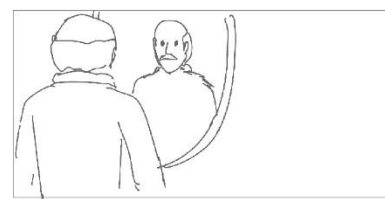
Sound:
Camera: Close up
Dialogue: But the next morning, I found myself gifted with a cure.



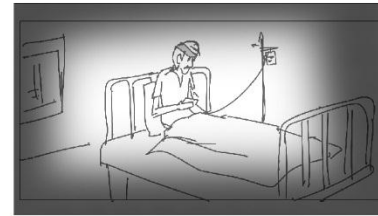
Sound:
Camera: Medium shot
Dialogue:



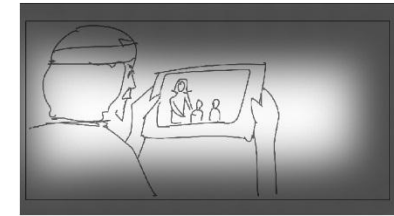
Sound: Piano sound
Camera: Mediums shot
Dialogue: A cure for my disorder.



Sound: Piano music
Camera: Medium shot
Dialogue:



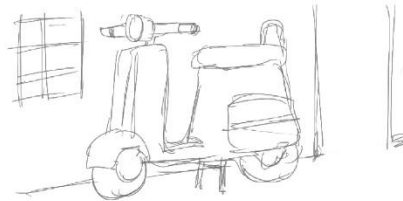
Sound: Piano music
Camera: Long shot
Dialogue: Detective_ I had met with an accident 20 years ago. My physical imbalance resulted in a shock.



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ The shock of losing everything



Sound: Piano music
Camera: Medium shot
Dialogue: Sentiments and disorder never allowed me to drive again



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ And I sold my scooter..



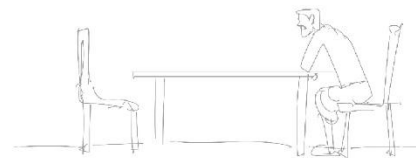
Sound: Piano music
Camera: Long shot
Dialogue: Detective_ All these years I never saw any hope in me but he saw it. The client. The man.



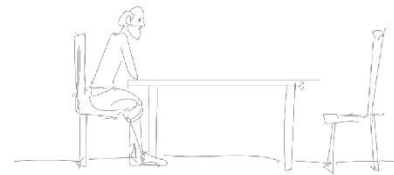
Sound: Piano music
Camera: Long shot
Dialogue: Detective_ The case was never his. It was mine



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ Some disorders cure by punishment.



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ some by reward.



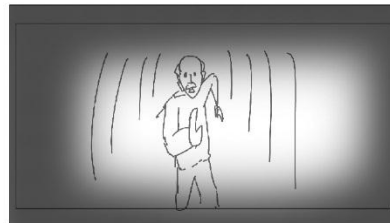
Sound: Piano music
Camera: Medium shot
Dialogue: He had put me into a state of danger.



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ And my body hat had split itself into two, became a single entity in saving it's own life



Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ I searched him a lot but in vain.



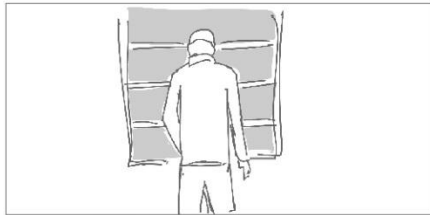
Sound: Piano music
Camera: Medium shot
Dialogue: Detective_ I also cannot imagine a human being escaping from the tunnel in seconds.



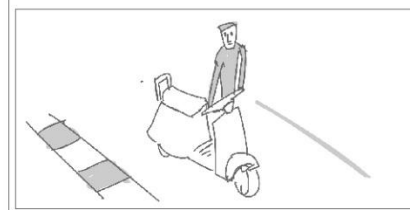
Sound: Piano music
Camera: Medium shot
Dialogue:



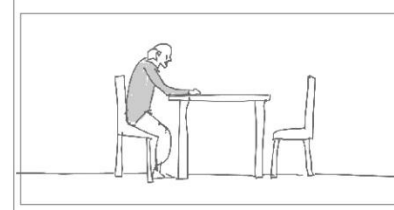
Sound: Piano music
Camera: Close up
Dialogue: Detective_ why did a young man call me his son



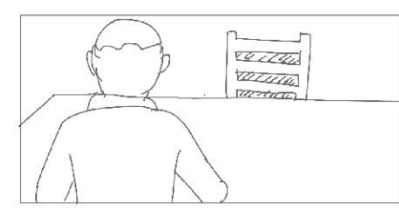
Sound: Piano music
 Camera: Long shot
 Dialogue: Detective__ I don't know. I only believe.



Sound: Piano music
 Camera: Long shot
 Dialogue: Detective__ That instead of searching for clues and evidences, it taught me to look within.



Sound: Piano music
 Camera: Long shot
 Dialogue: Detective__ to give that little extra which always matters.



Sound: Piano music
 Camera: Medium shot
 Dialogue: Detective__ Woh zara si koshish. Haan thodi aur koshish.

Shot Breakdown

FILEHOMEINSERTPAGE LAYOUTFORMULASDATAREVIEWVIEWnovaPDF									
Clipboard		Font		Alignment		Number		Cells	
P6									
	A	B	C	D	E	F	G	H	I
1	Audio	Visuals (shots)	duration	Charact	Charac	Object modelled	Scene set up (the place)		Shot category
2		disorder plus proper timelapse							
3	radio music going on	Title of the film							
4	Bell ring	door and name plate. Door opens and hand of client				door-nameplate-bell	house exterior wall		
5	"Sir kuch pata chala?"	top view of room. With fan not moving							
6	pause								
7	"It isn't this easy, title ji. Aapka beta laapata hai.	radio to the hand stopping another. Pan to disorder				radio			
8	Samajhte hain. I Understand.	His face expression.							
9	par yeh bhi toh dekhiye ki who bees saal se laapata hai	pushes the radio button. Top view again							
10	ee purana foto leke kaise dhoondenege. Baitaye aap	Detective pointing at the client's hands..picks cup				cup and saucer			
11	koshish kariye zara	The client's sad face..his crossed fingers (in tension)							
12	haan par aap daily mat aa jaiye	He after having a sip, puts cup in confused state							
13	he gets sad	he drops it on paper and not on the saucer				papers and files			
14	"yeh sentiments jo hain na. they'll weaken u.	posterior side of detective..the front face of client							
15	they won't take u anyw here, title ji	his looking down..the client	drinking cup of coffee						
16	but hope will	his watch tapping on left hand..with sweat tying knots or laces				watch			
17	waise__naam ke log bahut hain.	Searching the shelves.. Front view of books. Face hidden				shelves	different offices and locations		
18	par aapke bete jitne umra ke nhi	names on files..shoulder shot				files			
19	aap koshish jari rakhiye, sirjee	searching on computer.				computers			
20	humra __mil jayega	searching continously				papers			
21	timelapse	searching. Investigating.				records on computer interface			
22	mushkil hai, title ji. We don't even know who zinda h bhi ya n	His talk on phone..he thinking on chair..eyes closed				phone- bending chair			
23	is dis ur 100 percent effort title ji	his investigation at places					client's room		
24	yahi agar aapka bachcha hota toh	his investigation at places..closed eyes zoom							
25	no cheating papa. No cheating naa.	his walking feet.. little vision...				cloth pieces on eyes	daylight in house		
26	dhoondoge toh me mil jaongi na papa	..he opening his eye covers..and puts it back.							
27	aap dhoondoge toh mera __mil jayega..pause for 4 seco	he wakes up in a shock and gets sad..looks down							
28	people forget that a detective is merely a human being	he closes the file and takes out the laces				file and the strings			
29	he can effort to save lives but cant make a promise	he does some tie up and the result not a good one							
30	I think I should speak out to him before his false hopes	his eyes looking at table							
31	keep piling over my struggles.	large files and books kept over small ones				books files and stationery			
32	baki kaam bhi nhi ho paa rhe is chakkar me	his shelf and his face side closeup				shelf and case files	toilet		
33	na. bolde, beta tivari. Bolde na ho payega	pan from top to front. He sitting on comode							
34	kaun..flush sound..	clock time				wall clock			
35		he goes and opens door							

Methods of production

I used the student version of the software Autodesk Maya 2017 for working on my project. Unlike other versions of Maya, where we had render engines like mental ray, the new 2017 version is compatible with the Arnold Renderer. The Arnold renderer is comparatively faster than mental ray in terms of rendering the files. The new version also has added features like fixed camera, quick rig, render sequence. The fixed camera tool makes the camera fixed on the desired coordinates. The quick rig tool helps in developing the controls and the rig step by step. But, still it requires a lot of time and effort in correcting the rig using paint weights. The paint weights tool is a time taking process because here the relation of every skeleton is checked with the relevant binded skin. But the demerit with the quick rig tool is that it doesn't generate rig structures for the fingers. As a result, I had to create a rig structure for the fingers in another copy of the same model. I generated the images of the render files using render sequence. The render sequence helps generating images of the render and generates a sequence to preview the same. There are many other useful additions to this version but I used these tools frequently.

I was also dependent on the post production for the development of the shots. Because some shots needed correction in terms of lighting and addition of new elements like the stickiness of the marsh for example. I used Adobe Photoshop and After Effects for the correction of some of the shots.

Music

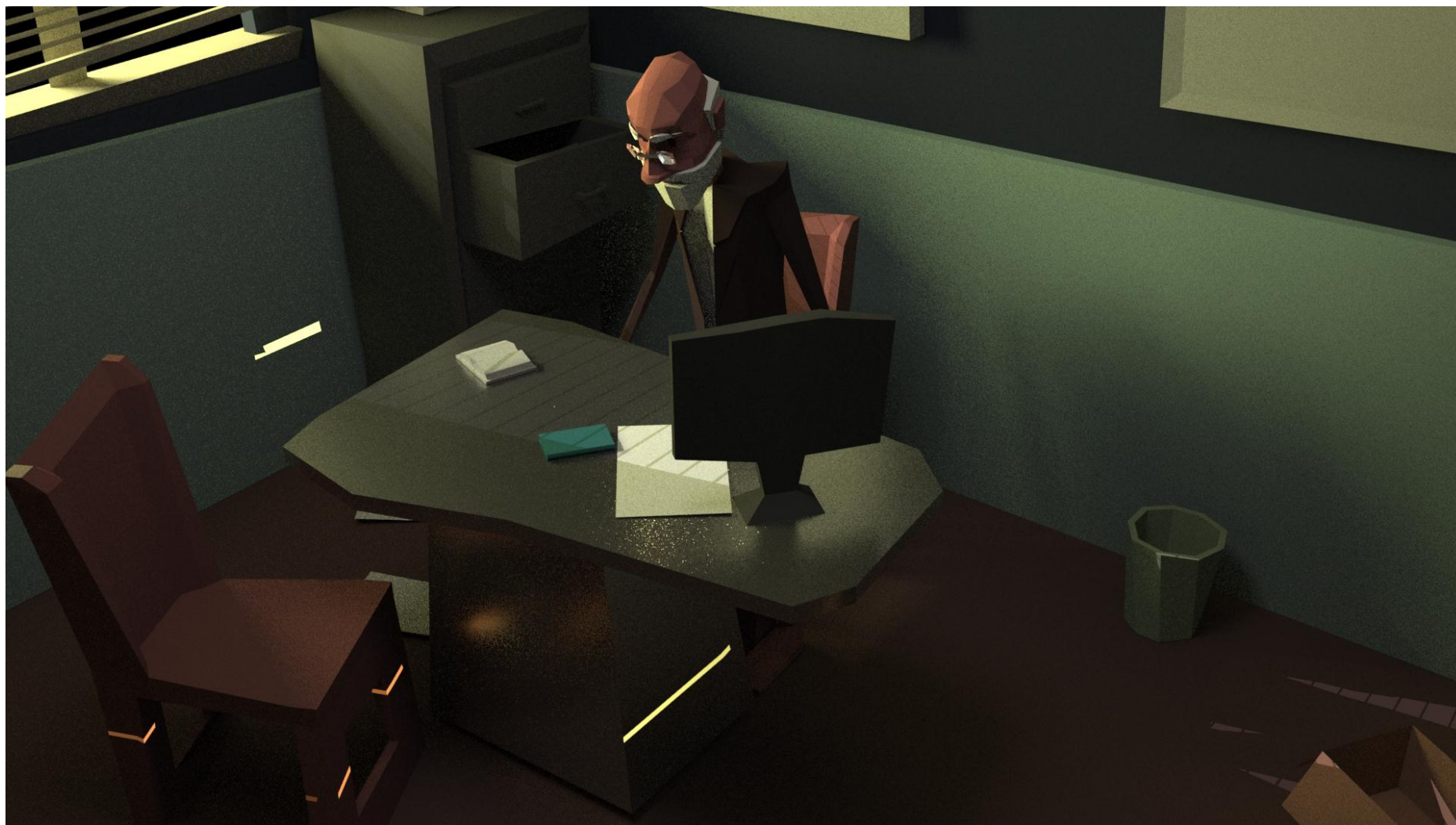
Because my film has a voice over of the protagonist in the film, I didn't had to rely too much on music of the film. I had to make sure the music at a particular time syncs with the dialogues that go in parallel. I found a particular piece of piano music interesting. I had found it on youtube. But before using the music piece, I took confirmation from the composer of that musical piece and he agreed to it. His name is Michael Ortega and has his own channel on youtube.

Voice over and dialogues

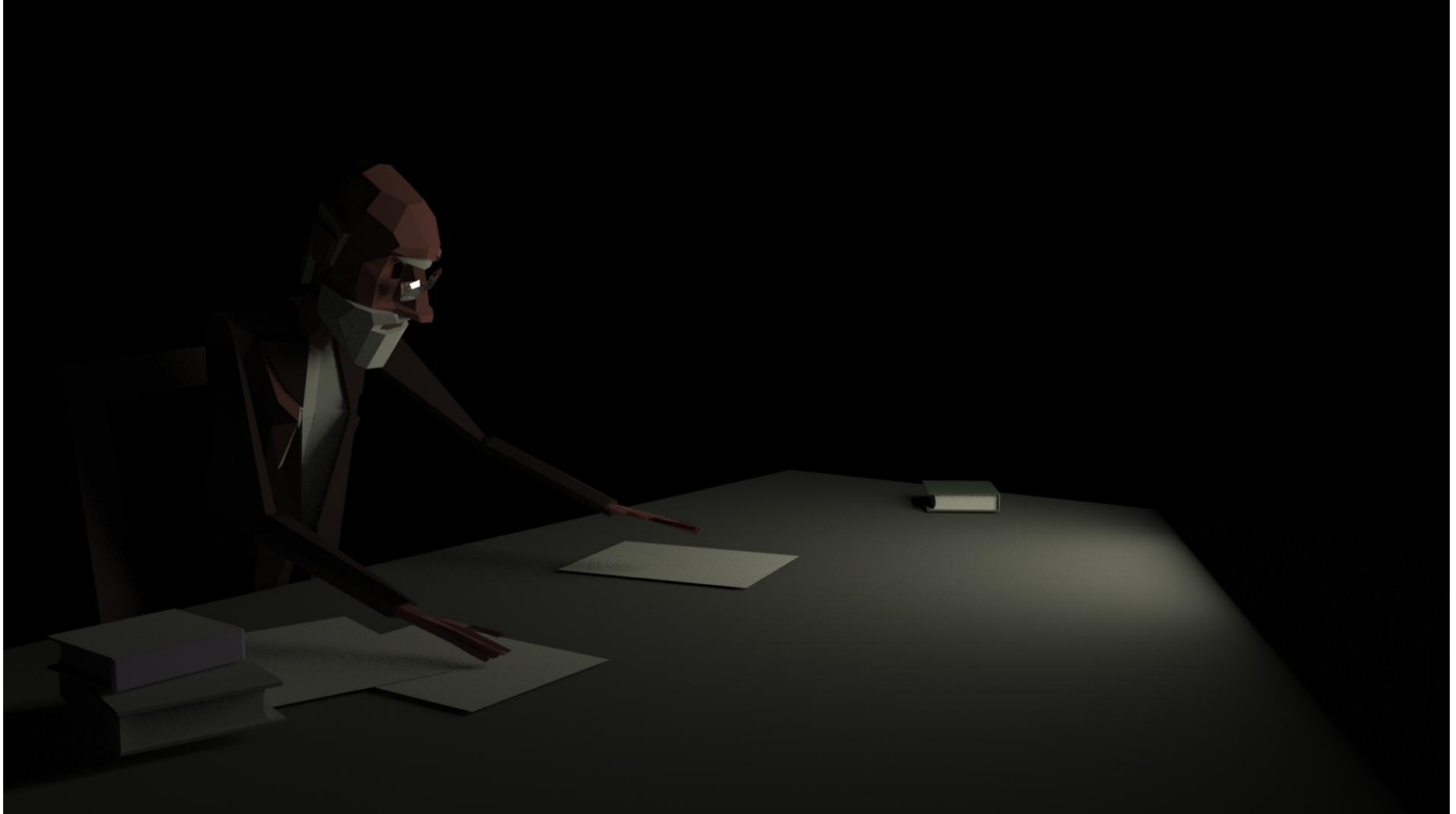
The voice over for the characters were done by my friends. I chose Udbhav Jain to voice the detective, Vidya Bhushan for that of the client and Amruta Chirasmita for the daughter. Because the two characters were old enough, I had to choose people who either belong to the same age group. But, after experimenting with Udbhav's voice, I reckoned his voice to be good enough for the character.

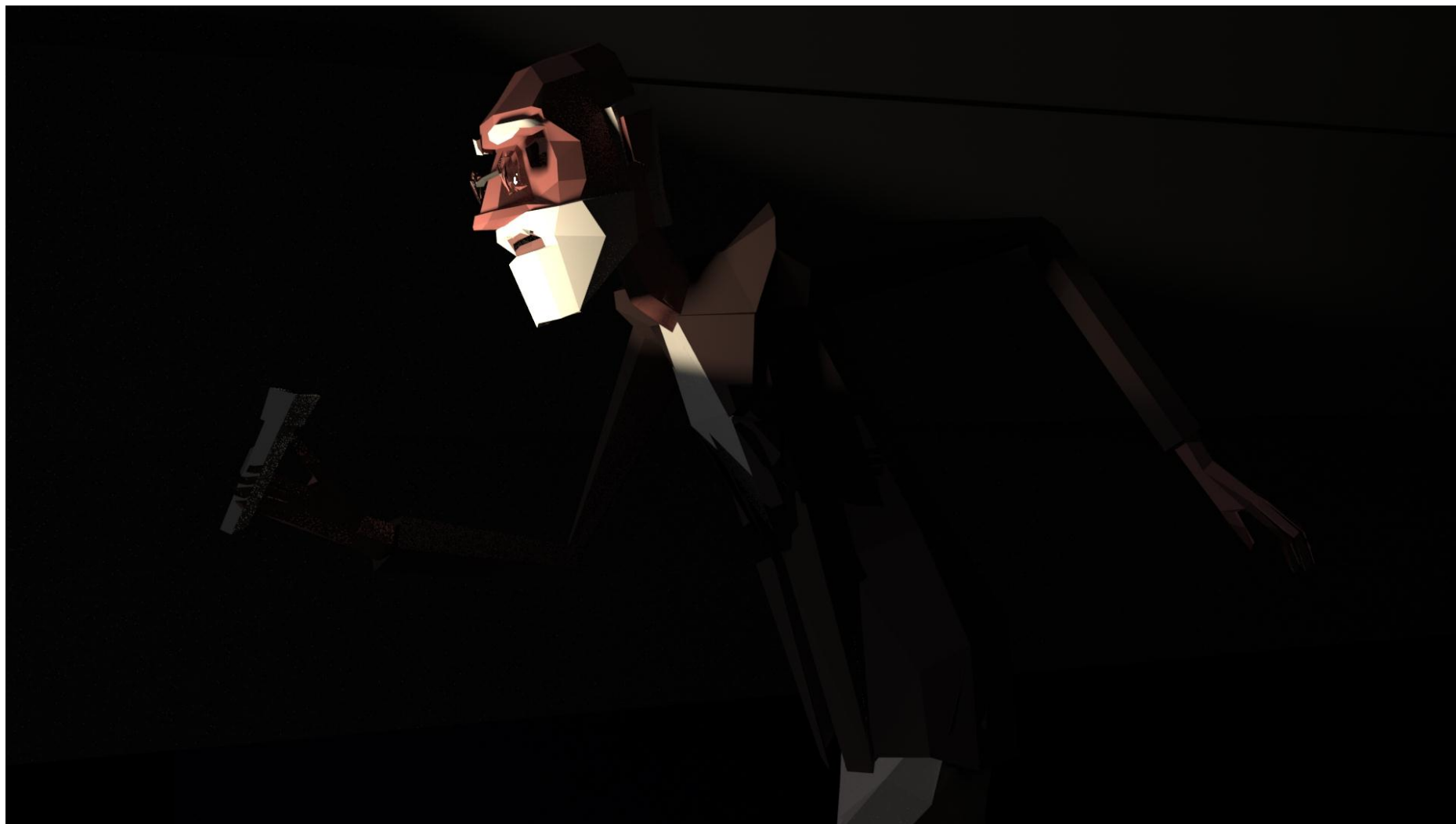
The dialogues are written in the languages English and Hindi. I wanted dialogues to have an impact so I considered choosing the languages for the respective dialogues accordingly.

Shots of the film











Challenges

One of the major challenges was to come up with a story that is short and works well with the genre of the film. It took me months to come up with a proper story and make it work for the film.

Even after the story was written, it had to be converted into a script. This conversion was to be done smartly as to what to show and what not to. Because the execution of a short written story is very different from the treatment of the same stuff as a script for a film. There were a lot of dialogues which I wanted to have in the final script of the film but then it would become too lengthy. Cutting a short story into a script and then shortening the script was a challenge.

I wanted to create my own style in the film and things become not really easy when one is to start from scratch. I wanted to have that geometric feel in the visuals of the film. I created props and intentionally distorted them with respect to perspective. I liked the distortion because that was unnatural and was appealing more in an artistic manner.

Again, I was not well acquainted with the medium that I chose for the film. I had learnt Maya in the year 2011 where I was aware of the modelling tools. But I had difficulty learning the rigging stuff then. So, the software was again new to me because I was not in regular practise. It took me some time to brush up my modelling skills and learn the extensive use of rigging and animation tools.

Because I working in 3d for the first time, I as the film-maker, wasn't sure of the final visual design for the film. It took me time to understand and figure out the final look and feel for the film. Later, in

the production stage, during animating the scenes, the pivot point of the rigs got dislocated by mistake. I realized soon that there are situations while working in 3d when the undo options don't work. I tried correcting the rig at several areas but nothing really helped. As a result, some of the scenes which already had the character animations also got affected. I stopped proceeding further and worked on the previous shots and made it a point to render those scenes that very instant. The damage control wasn't very difficult as the scenes were not very complicated.

I also worked on maintaining the color palette of the film throughout the scenes.

Conclusion

The basic idea of the film was not the detective solving the case but the case itself solving the detective.

The initial stages of the project were tedious. I was struggling to find the perfect story for my film. I got the breakthrough in the later stages of the project. But the entire thing has taught me to be patient. No matter how much one ignores the term 'peer pressure', it keeps on bouncing at him when he feels that things are not happening for him at the desired level and at the desired time. But after some point of time, my goal became to focus on the self and not care about where I stand in the race course, if any.

The overall experience was nice in a way that I learnt to deal with pressure. I never stopped giving my 100 percent and was ready to change the entire script of the film at a crucial stage where the film was expected to reach an appreciable progress. Nevertheless, I learnt to be patient and this attitude has helped in achieving better results.

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