

DEP 405: B.Des Design Project - 1

Making a Fictional Short Film

Based on the book 'Wings of Fire.'

by:

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Guide:

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Approval

The B.Des Design Project-1 titled “Making a Fictional Short Film Based on the Book ‘Wings of Fire.’” by Avinash Manikandan (18U130010) is approved for partial fulfilment of the requirement for the degree of ‘Bachelor of Design’ at IDC School of Design, IIT Bombay.

Project Guide

Chairperson

External Examiner

Internal Examiner

Declaration

I declare that this written document represents my ideas in my own words, and where others' ideas or words have been included, I have adequately cited and referenced the original sources. 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 or from whom proper permission has not been taken when needed.



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My family for at least letting me consider filmmaking as a career path.

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1. Abstract

Unlike the “Award Films” in Tamil/Malayalam cinema, my interest lies in telling a good story in a commercially successful way. This project is an attempt to understand the audience and what they appreciate.

‘Wings of Fire,’ the autobiography of Dr A. P. J. Abdul Kalam, is the book that first came to my mind when I was thinking about what to write for my first fictional short film. There are multiple reasons for this choice, but the most important is the absence of any movie about this great person.

The concept of the story is to have gripping, high-stakes walk-and-talk conversations, through which we learn about the strengths and weaknesses, the moral and psychological conflicts, and insights into the protagonist’s personal life, Abdul Kalam.

My work as the filmmaker covers roughly the entire process, the three stages of production. I have also adopted the story structure proposed by John Truby in his book ‘The Anatomy of a Story.’

2. Introduction

"status: malfunction" is an 8 min biographical-drama short film. Set in 1968, over the events that unravel on a particular day, the story explores a slice of Indian astronomy and its people, not just Dr Abdul Kalam.

The decision to write an adapted screenplay was made to reduce the time spent imagining a story from scratch, enabling me to focus on the characters and plot progression and the rest of the production process.

2.1. Motivation

An amalgamation of my wish to try and tell good stories and my love for the medium is why I chose to make a film.

2.2. Goal

I want to learn the basics of making a short film, learning the process as I go along. Sending my short film to film festivals would be the ideal next step.

3. Background

3.1. Indian regional cinema

Indian Cinema has been developed into a globally recognised entity since its inception in the early 20th. Its identity is similar to that of the nation itself, diversity in languages, cultures, and hence its stories. Aspects like coexisting religions, multilingualism, nationality are embedded into our lives and are subsequently reflected in our films.

Regional film industries in India have gained significant popularity and have produced great stories for their audiences. But, going mainstream and the need to make box-office hits have started to threaten the quality of stories delivered. My issue isn't with a lack of good films being produced. It is with the relation between the quality of the film and commercial success. I would like to emphasise that I base my opinions on the major trends, and my respect for the remarkable stories and storytellers is still immense.

3.2. 'Wings of Fire'

'Wings of Fire: An Autobiography of APJ Abdul Kalam' (1999) was written by Dr Abdul Kalam and Arun Tiwari. The book examines his early life, effort, hardship, fortitude, luck, and the chance to lead Indian space research and nuclear and missile programs.

Adapting 'Wings of Fire' was an easy choice. The book is a setup for larger subjects such as nationalism and multilingualism, professional and personal life philosophies, and the sacrifices that accompany creating meaning in life. Above all, the audience would learn about the history of Indian astronautics and their various contributors.

4. Preparation

4.1. 'Anatomy of a Story'

'The Anatomy of Story: 22 Steps to Becoming a Master Storyteller' is written by John Truby, an American screenwriter, director and screenwriting teacher. Unlike many authors and teachers on the subject, Truby is critical of Syd Field's three-act "Paradigm", viewing it as a mechanical means of storytelling. Therefore, he crafted his own 22-step outline, which is the subject of this book.

Studying the book opened my eyes to the intricate writing/directing choices in storytelling through films. Although the 22-step process applies only to feature-length movies, I adapted it to write for short films.

I will use the steps and terminologies mentioned by John Truby to explain the process later in this report.

4.2. Regional Filmography

One crucial need was to study regional films to try and identify unique aesthetics. Director Mani Rathnam was one such auteur I was most inspired by. I liked his use of language and songs that blend in with the movie to enrich it. Films like 'Mandela' in Tamil, for example, use regional subjects that drive the story from within, or 'Roja' that exploits cultural

stereotypes with just enough twists to make it refreshing are ones I could notice.

4.3. Aspects of Filmmaking

As my first time planning and shooting a short film, I had to familiarise myself with all aspects of filmmaking, from casting and directing actors, scouting locations and creating shooting plans, editing along with basic sound design, etc. Online resources and masterclasses are helpful to get a sense of both the technical and creative perspectives.

5. Story Ideation

From a book containing 16 chapters and almost 70 years worth of life experiences, I had to select a story that would be suitable for a short film. Meaning there's some conflict, a hook in the narrative, an opportunity for a clear character arc and the potential to include other contributors of Indian astronomy.

Initial story ideas were jotted down, and all the characters I could possibly include were listed. Eventually, I selected one to create a logline.

6. The Logline

A one-sentence summary or description of a movie, or the logline, distills the important elements of your screenplay—main character, setup, central conflict, antagonist—into a clear, concise teaser.

After finalising the plotline roughly, I wrote the logline for my film;

'On a hectic day in the Equatorial Rocket Launching Station, a young group of the great minds must quickly figure out what went wrong during a test demonstration in front of their perfectionist director, as their careers and Indian astronautics lie at stake.'

7. Research

Now that the story's scope is defined, secondary research was required to flesh out the narrative. The book was a great base, but it was the narrative from a single man's perspective. Hence I dug further about his colleagues and friends, Vikram Sarabhai, ISRO, etc.

The Spotify podcast 'Mission ISRO' is a clear and convenient compilation of Indian astronomy's history. The podcast elaborated the global and Indian events around the respective years that influenced and, in turn, got influenced by ISRO.

8. Constructing the story

8.1. Setting Story Goals

What does the audience take away from the movie? What do they learn? How do they feel? These are the questions answered under the story goals. I have categorised these goals into primary and underlying;

- Primary Goals

Learn "what was" and "how", learn about Kalam, his desires and weaknesses, learn about the people of Indian astronautics, be on the edge of the seat along with the greatest minds of our nation, knowing that a lot rides on it.

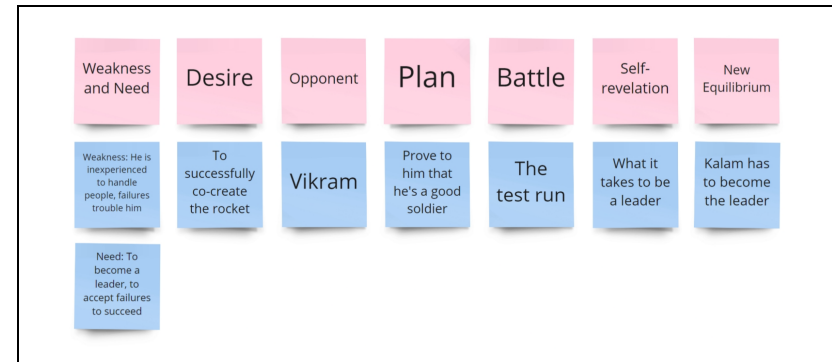
- Underlying Goals

Understand their professional and non-professional lives compared to each other, witness what these men go through to achieve their passion.

8.2. Character Development

7 elements, according to Truby, determine the character development in a narrative, namely;

- Weakness and need
- Desire
- Opponent
- Plan
- Battle
- Self-revelation
- New equilibrium

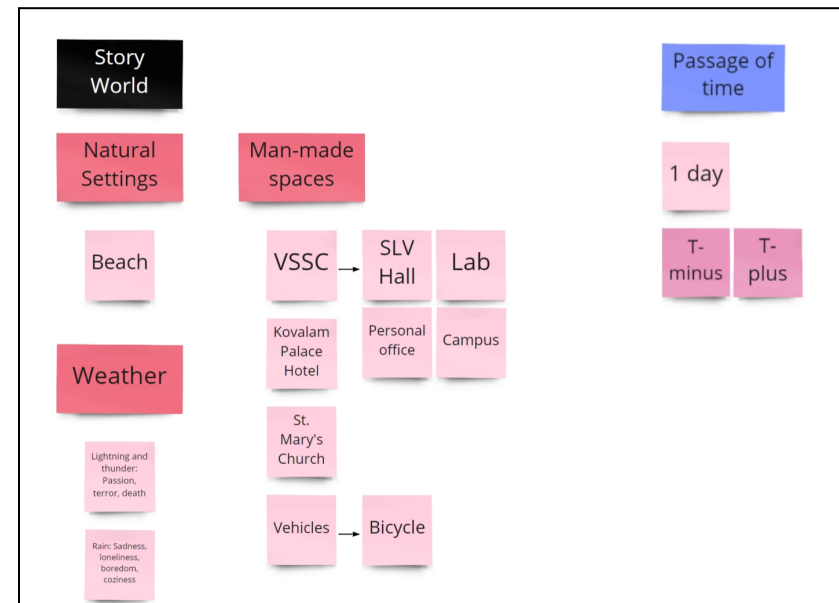


> Kalam's character development

These 7 plot points determine the protagonist's arc and hence define the film.

8.3. Building Story World

The arena in which the subjects and events belong is bounded the story world. It defines the period and people, the natural and man-made settings, the weather, etc.



> "status: malfunction"'s story world

9. Plot Breakdown

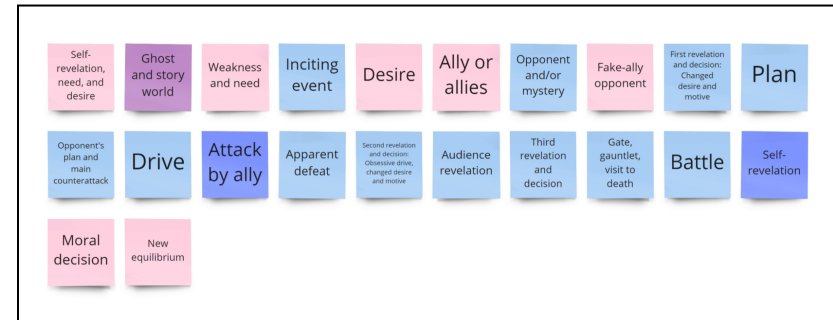
The plot comprises 21 plot elements instead of the more common Hollywood tools like the 'Save the Cat' beat sheet. Truby emphasises that this allows the stories to be more diverse and organic than being restricted by a rigid structure.

For my convenience, I divided my script into 3 acts, each containing 2 segments. The plot elements are divided amongst these segments, moving the plot forward.

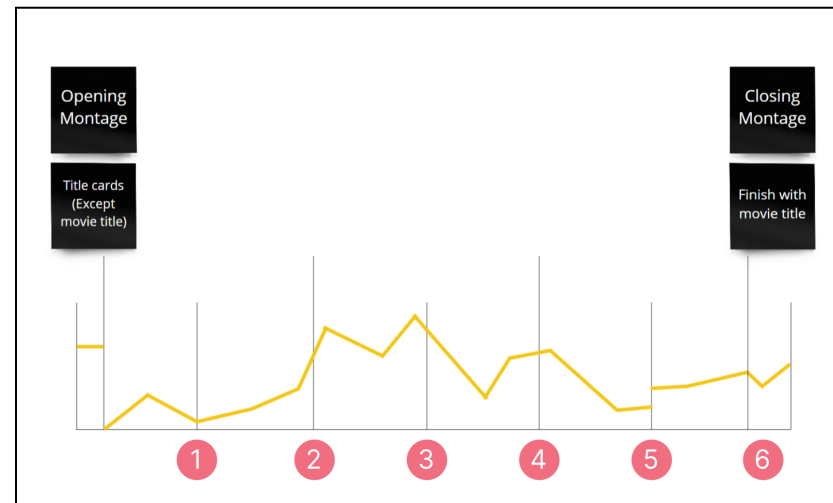
9.1. Plot Rhythm

The rhythm or tone of a movie is a function of conveying the intended emotion. The movie's beats can be manipulated to create a rhythm of the writer's choice. A monotonous film can get boring.

In my film, the rhythm is plotted against the energy of the moment along time.



> Truby's 21 plot elements



> Rhythm of "status: malfunction"

9.2. Character Web

Characters in a movie coexist and interact with each other to serve the plot. The general rule is that anything or anyone present in the film must serve the story. Supporting characters are classified as; Ally, Opponent, Fake ally - opponent, Fake opponent - ally. Characters can also roughly conform to archetypes such as the king-queen, Commander-sepoy, etc.

The web is made with a selected few from a list of all the possible characters I can include. It comes down to 5 significant roles and 6 more minor roles.



> All the supporting characters in "status: malfunction"

10. Pre-production

10.1. Screenwriting

Once I had everything in place, I started putting down notes with character dialogues and actions. After understanding the standard format of writing a movie script, I started writing the screenplay. Some improvisation and iterations later, the final draft was completed. "status: malfunction" has 11 scenes.

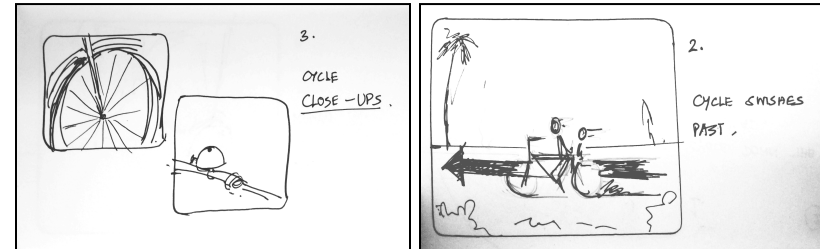
10.2. Shot Breakdown

Making storyboards helped me block out the characters and other subjects in the scene quickly. Storyboards include the shot breakdown, with any camera or subject movements involved.

Although I thought this would be sufficient a production guide, later on, I also prepared a shooting plan to help me keep track of the videography.

10.3. Location Scouting

As the film is set in the year 1968, a suitable location had to be found that can be used. The story is set in TERLS (Thumba Equatorial Rocket Launching Station). I decided to shoot it within the IIT Bombay campus as science and engineering department buildings and estate locations match the period.



> My storyboards



> Location scouting inside IIT Bombay

10.4. Mood board

From movie scenes and photographs that inspired me, I created a mood board that provided an outline of the aesthetics for the short film to be made. This includes the visuals, lighting, shot-blocking, costumes and makeup, and even the sound and music design.

10.5. Casting

Casting calls were sent out in the drama and film clubs in IIT Bombay, and the rest of the cast was at the mercy of my interested friends. For the final production of my film, there are four characters that were cast for the shooting of my film.

11. Principal photography

I have decided to shoot a portion of my script due to time constraints. The screenplay is slightly modified to create a complete and impactful narrative.

11.1. Shooting plan

I created a shot-by-shot direction for myself, to remember the list and order things to do during the shoot. I learned from experience that it is easy to forget tasks in the hurry of the moment. It includes directions for the actors as well.

Short Film - Fiction

Based on the book *Wings of Fire* by A.P.J. Abdul Kalam & Arun Tiwari

Project by: **Avinash Manikandan - 18U130010**

Project Guide: **Prof. Sudesh Balan**

Production setup

Chairs form a rectangle.

KALAM sits on the edge of one long sofa. BUSINESSMAN who was sitting in the far corner comes and sits on the single couch beside KALAM.

Actors checklist

SARABHAI

- Coat suit
- Tie
- Comb
- Mole
- Glass & water

Shooting plan

SHOT 1

Fast pace. Slight push-in from behind KALAM (At a slight angle also).

SHOT 2

Slow pace. Close-up on KALAM pans to SARABHAI as he tried to look above. SARABHAI looks at KALAM holding a smile.

Your boss is here, mr. Kalam.

Honour to meet you again Mr. Kottukapalli.

12. Post-production

The post-production processes I did includes shot-editing, basic color-grading and cleaning up the audio.

The knowledge of editing turned out to be very important while videography as the shots needed to be planned to weave smoothly, something that I realised a little late.

As for sound, I understand it makes up for at least half of filmmaking, but that is a half I have chosen to explore a bare minimum.

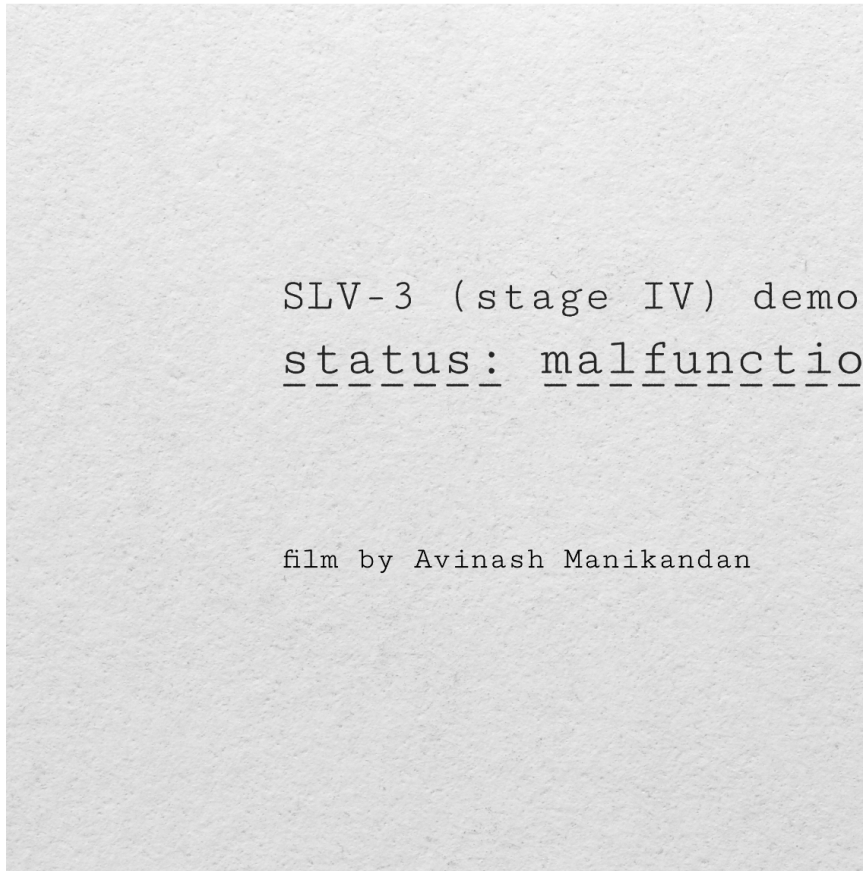
13. Final output

The film "status: malfunction" came out to be roughly 8 mins long. Hope you appreciate it.

Link to video:

<https://drive.google.com/drive/folders/1SSVYxE2LUR6wZa9tZM9cgZ4D85gab69?usp=sharing>

13.1. Title & poster



13.2. Frame highlights





14. Conclusions & reflections

As usual, the expectations weren't met in most aspects, but I learned a lot throughout the process. The most important being getting comfortable during production and getting to know areas I should improve, anticipating post-production editing, etc.

Although I had an idea of how the film would look in each step of the process, I was constantly surprised along the way by how it turns out, sometimes pleasantly, sometimes not.

I have now come to the realization that, for my future project, I should work on a very short and simple narrative, that would enable me to produce a video of sophisticated quality with attention to the basic details. Next would be to rinse and repeat.

15. References

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16. Appendix

16.1. The production script

He who can listen to the music in the
midst of noise can achieve great things.

- VIKRAM SARABHAI

INT. KALAM'S OFFICE - EVENING

We see a door closing in slowly on us. It
is a silent room and suddenly the door
bursts open.

KALAM

enters and shuts his door, agitatedly
takes his water bottle and drinks some
water, spills some. He wipes the spilt
water around his face like he's wiping
tears. After a moment to orient himself,
he places the bottle and goes towards the
window in his room.

He stares outside the window, eyes
glistening like he's on the verge of
crying.

KALAM walks back to the desk and lies

down stretching his arms out, moving
everything on the table out of its
assigned place. After a while of lying
down, he gets up and takes a second to
straighten up, and finds his family photo.

He picks it up and looks at it, wishing someone would come there and comfort him.

As he looks at the images, the door opens, and the PEON enters.

PEON
Sir, Dr Sarabhai wants to meet with you tonight at Kovalam Palace.

PEON leaves after saying that before KALAM can fully acknowledge that.

KALAM has an idea of what the meeting is going to be about. His face reads emotions of shame and petrification.

The scene blacks out as the door slams shut.

INT. KOVALAM PALACE HOTEL - NIGHT

The scene opens with an establishing shot of the Kovalam Palace Hotel in a cloudy, rumbling night. We see it in its full majesty.

KALAM is standing in a pitch-black space, with just ONE strong light right above his face.

CAMERA CLOSES IN ON HIS FACE AS IF THE SPACE IS CLOSING IN

CUT TO:

The lighting livens up, not much, but just a bit. KALAM is standing in front of the majestic Kovalam Palace Hotel. He looks up at that building, not astonished, but terrified, like entering a trial court.

CUT TO:

Powerful threatening classical music is being played on a piano inside the Palace as KALAM enters.

KALAM is shown to a waiting lounge. He sits down nervously, and seems to be uncomfortable in the most luxurious chair he must've sat on. He taps his foot, and we see his footwear, an open-toed CHAPPAL, dirty from walking through the monsoon puddles.

There's an old BUSINESSMAN sitting right opposite KALAM. He looks at KALAM for a while as he is clearly sticking out in such a posh place. KALAM avoids eye contact, but the BUSINESSMAN continues to stare up and down at him as he sips alcohol from his glass before he starts to speak;

BUSINESSMAN
What's your name?

KALAM
Huh?

BUSINESSMAN
Your name, young man?

KALAM
Nervously
Abdul Kalam.

BUSINESSMAN
Malayali-aano?

KALAM
Tamil.

BUSINESSMAN
Chuckling
Thoni...

What are you doing here in
Kovalam then?

KALAM
I work at the Rocket Launching
Station,.. in Thumba.

BUSINESSMAN
Tone completely changing to
scary exclamation

O, so you are here waiting to
meet Vikram.

KALAM
Yes, sir.

BUSINESSMAN
You must be really smart then?

KALAM doesn't know how to react. He simply
smiles, nervously. The BUSINESSMAN takes a
loud sip from his glass.

BUSINESSMAN
I heard they are renaming
INCOSPAR?

KALAM
Uhh I thought it was a secret.
They didn't announce anywhere.

BUSINESSMAN
(Dismissingly laughs)
hhaah.. What are they going to
call it?

KALAM
ISRO...

The BUSINESSMAN notices KALAM's
restlessness.

BUSINESSMAN

I think you should join me with a drink... You seem like you could use one.

KALAM
No. I don't drink.

BUSINESSMAN
Hmmm... Cigarette?

KALAM
No...

BUSINESSMAN
Why? Are you married?

KALAM
No.

BUSINESSMAN
You don't smoke, you don't drink... How else do you handle stress?

KALAM
Nervously laughing
I am fine...

BUSINESSMAN
Fine is not a word, gentleman
Suddenly the conversation is interrupted.

BUSINESSMAN

Ah, Vikram!

SARABHAI enters the frame behind KALAM (like LANDA in Inglourious Basters). He places his hand on KALAM's shoulder and KALAM is taken by surprise, as he was lost in thought.

SARABHAI
Honour to meet you again Mr. Kottukapalli.

BUSINESSMAN
I was just chatting with your young scientist, as I finish my scotch. I'll leave you two young men.

SARABHAI
Sorry for being late, Kalam. Busy as usual.

As SARABHAI starts speaking, KALAM stands up in respect.

KALAM
No it's fine, sir.

SARABHAI
Hurriedly
So, how was your journey in?

KALAM
Good sir.

SARABHAI

Oh, well then... Shall we...

SARABHAI places his hand on KALAM's back and guides him towards the window.

SARABHAI

How are you, Kalam. How's everything? I met our friend Dan today. He is doing wonders in Telemetry, isn't he?

KALAM

Yes Sir. Everyone is working really hard.

SARABHAI

Hmm-hmm.

SARABHAI pulls out a comb and corrects his hair.

SARABHAI

So, Kalam. I am sure you know the main reason I wanted to meet with you today...

Have a seat...

KALAM's fears have been realised. He starts to get more uncomfortable as he needs answers for his boss's disappointment.

SARABHAI

So... What happened at the demonstration today?

KALAM

Agitatedly

Sir, the assembly of subsystems was done in the last minute and the pyro timer circ...

SARABHAI

Interrupts

Kalam, Kalam, I am not here to conclude that this was due to lack of knowledge or skill.

KALAM looks cluelessly at SARABHAI. He clearly expects something worse.

SARABHAI

Can I ask you something? Were you unenthused by a job that did not pose sufficient challenge, or was it just too much pressure I had imposed on you?

KALAM

No sir, it wasn't either.

SARABHAI looks at KALAM for a second and then places his fingers on his eyes, thinking deeply. After a second or two, he looks up and asks;

SARABHAI

Okay, what was the issue you were explaining earlier?

KALAM

Sir, Pramod had warned me about the complications of the extra payload safety, and I only rushed him against time to make it possible... The complications of integrating everything caused the error.

SARABHAI

Why? Why did you take the chance knowing the risk? All while exhausting your coworkers

KALAM

Looking down
a good plan violently executed
right now... is far better than a
perfect plan executed next week

SARABHAI

completing his sentence
...is far better than a perfect
plan executed now.

SARABHAI has a small laugh to himself. He listens to KALAM as a school teacher listens to a young child.

KALAM

I once read this article on project management, that optimization wins on paper, but would lose later in the real world.

This is my fault, sir. I don't know why I was chosen to lead a team while there are others with more experience.

BUSINESSMAN

Rise to the task gentleman.

The conversation is interrupted by the BUSINESSMAN. SARABHAI welcomes it. KALAM is surprised though.

KALAM

Pardon?..

BUSINESSMAN

For all your days be prepared,
And meet them ever alike.
When you are the anvil, bear –
When you are the hammer, strike.

SARABHAI

Kalam, the reason you were chosen is not for your knowing. What matters to me is if you will

adapt to the task. Can you do that for me?

KALAM
Of course.

SARABHAI leans back, having successfully motivated his mentee. He drinks some water from the glass nearby. He then calls KALAM closer.

SARABHAI
General Patton or not, you will figure out how to manage your team sooner or later.

But can I tell you one thing. A leader doesn't make the best results. Instead he guides his team into darkness, delivering hope when there isn't the faintest, and gets his followers to achieve what they do best. Sometimes you just have to protect them like a child.

Are you sure there isn't something else that is burdening you, Kalam? Something you have not realised yet?

KALAM
No, sir... I wouldn't know.

SARABHAI
Well, in that case, everything's fine. These things happen, Kalam. And Pramod is probably right.

We have managed to do with so little, because I was able to find some very dedicated young people who did more than what I can ask for. Maybe we just need a Rocket Engineering Station. All our troops in one roof! How does that sound?

KALAM's eyes lighten up hearing that, like a kid who is about to get a new toy to play with. SARABHAI gets up and KALAM follows.

SARABHAI
I think you are doing great, son... and congratulate your team on my behalf. Now get back, before it becomes too late.

After KALAM leaves, SARABHAI sits there, tired, after his long day. The BUSINESSMAN comes over and keeps his hand on SARABHAI's shoulders, the same way he had done for KALAM.

FADE TO BLACK:

16.2. The complete screenplay

He who can listen to the music in the
midst of noise can achieve great things.

- VIKRAM SARABHAI

OPENING MONTAGE

Historical events from WW2
to Indo-Pak War-2

FADE IN:

EXT. BEACH TOWN - DAWN

A blue scenery of a rainy seashore in the
sleepy hamlet of THUMBA, near Trivandrum.

The movie opens with the sounds of distant
thunder, sounding soothing than startling,
with a heavy drizzle of rain splashing
across the Arabian sea.

We read a SUBTITLE at the bottom of the
screen;

"1968"

"THUMBA VILLAGE - THIRUVANANTHAPURAM
DISTRICT"

The subtitle slowly fades away, and the
sounds of the rain are dampened, replaced

by the early morning waves with fishermen just woken by the chirping of small birds.

Sleepy village men walk around in their lungis and mundu, with their hands tied back and eyes on the ground.

In contrast to the lazy town setting, we see the campus of TERLS - THE EQUATORIAL ROCKET LAUNCHING STATION, as we pan up to the arch.

The sunrise hits this town, providing the energy to start a new day.

CUT TO:

INT. KALAM'S OFFICE - MOMENTS LATER

The shot opens with the chatter of people. As the camera pans, we see a neat wooden office desk, and on it is KALAM's family photo. There are three young engineers talking around the desk, one sitting on the chair opposite, one leaning on the desk and one standing near the door.

KALAM enters the room;

KALAM
Semi-awkwardly
Good morning young minds! How are you today?

As soon as they realise KALAM is there, they straighten themselves up. It is also visible clearly on the faces of the engineers that sometimes they don't know how to react to the way KALAM speaks. KALAM isn't very comfortable when it comes to small talk, and more so than not, his attempts are futile.

Overlappingly they reply;

ENGINEER 1
Morning, Sir.

ENGINEER 2
Good.

ENGINEER 3
How are you, Sir?

The other two engineers look at ENGINEER 3 with looks of cluelessness and mockery, as his words seemed like an attempt at brown-nosing.

This SUBTITLE appears at the bottom of the freeze-frame

"KALAM's TEAM - SLV PROJECT"

"CR SATYA, PN SUBRAMANIAN, AND MN SATYANARAYANA"

There's an awkward silence as KALAM keeps his head down and walks over to his side of the desk. He sits down and starts meticulously organising his desk, almost obsessive behaviour.

ENGINEER 1 steps in to break the silence;

ENGINEER 1
Sir, the Nose-cone has been transported to the lab.

ENGINEER 3
We made sure it was safely done, no rain damage, nothing.

KALAM
Thank you, Subramanian.

ENGINEER 3 smiles...

KALAM
In Kannada
Pramod ello?

ENGINEER 1
Sir, we took the systems to him in the lab, and then he was called by Gowarikar sir.

The room door opens and everyone turns their heads in unison as a bold and sharp office woman stands holding the door open.

PEON

Sarcastically & friendly
Hello Sir... and boys, the acting group captain wants to meet with you. I hope the young ones don't get lost in your absence.

Saying that she exits. And like that took all of them completely by surprise, they just look stupefied, wondering what just happened.

KALAM knows that he can't avoid meeting NARAYANAN and gets up from his chair, overcoming inertia, like an older adult. As KALAM is ready to leave;

KALAM
Exhales in exhaustion
Okay.

KALAM gets up, and they start walking, ENGINEER 1 in front, facing KALAM, ENGINEER 2 behind, and ENGINEER 3 at the last.

KALAM
We should find Pramod and take the Integration plans to him.

ENGINEER 1
Ok, Sir...

KALAM

Overlappingly
How are other stages doing? Why
does Dr. Gowarikar want Kale now?
Is there some hurry?

ENGINEER 3
Don't know Sir, but everyone is
jealous of our progress... No one
can catch up.

KALAM doesn't say anything and just seems
to acknowledge, lost in thought.

They all walk from a corridor to a big
spacious lounge...

FADE IN:

INT. TESTING LAB - NOON

The door burst open and two scientists
walk in.

KALAM
Shocked
What?!

PRAMOD
Emphasising
Yes,... Sarabhai is visiting, and
he would like to see our work.

KALAM

But we still have to integrate
micro-systems.

PRAMOD
I know, and yet most of my
morning went trying to find you.

This SUBTITLE appears at the bottom of the
freeze-frame

"PRAMOD KALE"

NARRATOR (V.O.)
Another scientist who was part of
the team that was sent to NASA,
Pramod Kale has been part of
Indian Space efforts right from
the launch of the first rocket
from Thumba.

After his post-graduation, he
worked for three years as a
research student under Dr Vikram
Sarabhai. Before becoming
Director, VSSC in 1994, he has
held several key positions in
ISRO viz Head-Electronic Division
(Satellite systems).

KALAM

Okay okay, where are the integration prints? Did you get them?

PRAMOD
I have connected most systems, as fast as I could, but the pyro timer circuit is still remaining...

KALAM
The stage leaders are already here? Why wasn't I told that Vikram Sarabhai is coming?

We see close-ups of the other three stage-leaders, along with their corresponding subtitles;

"1st STAGE: VR GOWARIKAR (EXPERTISE - COMPOSITE PROPELLANTS) "

"2nd STAGE: MR KURUP (EXPERTISE - PROPELLANT PYROTECHNICS) "

"3rd STAGE: AE MUTHUNAYAGAM (EXPERTISE - HIGH ENERGY PROPELLANTS) "

PRAMOD
Overlappingly
...and even if we manage to do that, we can only go to demonstration without testing, and that is very very bad.

KALAM
We have to...

PRAMOD
Emphasising
I told you before, all this can be avoided if we had a single roof to prototype and assemble.

CUT TO:

INT. WORK LAB - MIDNIGHT (FLASHBACK)

In the middle of the night, everything is dark except for a small portion of a dimly lit room and everyone is asleep except for two exhausted scientists.

PRAMOD is brushing his teeth, and KALAM's sitting beside him with neglected, knotty hair. Their coffee flask is open and empty.

KALAM
mumbling
Why can't we achieve this again?

PRAMOD
Because, although the design of the jettisoning mechanism is highly efficient, it becomes extremely complicated to fabricate electronic components

separately, especially with your extra layer of safety.

KALAM
Overlappingly
Pramod, I am prioritizing payload safety, this is what I do best.

PRAMOD
It's simply too many components.

PRAMOD goes away to spit his toothpaste and finish brushing. He gargles with water from a plastic bottle and spits it into the bushes. He shouts from out of the frame and makes KALAM lift his heavy head off the table and turn around.

PRAMOD
You know what NASA works with. They have entire laboratories of CNC's for this purpose. Above all, they will do anything to defeat those Soviet communists.

KALAM
My design is better than the Americans.

KALAM pours the cooled coffee from the flask and tries to drink it.

KALAM
Disgustedly

Kadavulae...

PRAMOD
Don't drink that.

KALAM
Pramod, help me here...

PRAMOD
Let us settle on removing the safety sub-system. It is just extra.

KALAM
If Sarabhai or Homi Bhabha didn't do extra, we would be drinking masala chai right now, reading headlines on the morning newspaper "NASA goes to Moon" instead of having this front-back conversation.

PRAMOD is walking around not knowing what to do. Again, from outside the frame, shouts;

PRAMOD
It is going to take a lot of time...

JUMP CUT TO:

INT. TESTING LAB - AFTERNOON

PRAMOD

It is going to take time, Kalam.
We should just say we would need
more time.

KALAM

A good plan violently executed
now is better than a perfect plan
executed next week.

PRAMOD

Confused
What plan??

KALAM

I am saying we should try and do
it today only.

PRAMOD

So you are telling me you will be
fine if it goes wrong in front of
Sarabhai?

KALAM

Hopefully Whispering
It won't...

We see KALAM's eyes up close, as he looks
up like he's praying for it to go
smoothly.

DR. VIKRAM SARABHAI

walks into the building, in his bold suit
and slick, combed hair. We see him from
behind as he commandingly walks through
the bright corridors. The PEON walks
behind him and as he reaches the lab, she
opens the door for him. She has the look
of utter respect and fascination, unlike
the one she had when she entered KALAM's
office.

LONG PAUSE

After a while, the lab doors open loudly.
KALAM and PRAMOD exit, visibly downcast.

This colleague approaches them as they
leave;

COLLEAGUE

Badiya kaam, gave everyone a
small scare, but at least it
worked well in the second
attempt.

PRAMOD

Painfully smiling
Thanks...

PRAMOD says to KALAM without even look at
the general direction;

PRAMOD

I'm going to smoke.

KALAM doesn't reply but just acknowledges with body language. He goes another way, through another corridor.

INT. KALAM'S OFFICE - CONTINUOUS

KALAM quickly opens and shuts his door, agitatedly takes his water bottle and drinks some water, spills some. After a moment to orient himself, he places the bottle and goes towards the window in his room.

He stares outside the window, eyes glistening like he's on the verge of crying.

KALAM walks back to the desk and lies down stretching his arms out, moving everything on the table out of its assigned place. After a while of lying down, he gets up and takes a second to straighten up, and finds his family photo. He picks it up and looks at it, wishing someone would come there and comfort him.

As he looks at the images, the door opens, and the PEON enters.

PEON

Sir, Dr. Sarabhai wants to meet with you tonight at Kovalam Palace.

PEON leaves after saying that before KALAM can fully acknowledge that.

KALAM has an idea of what the meeting is going to be about. His face reads emotions of shame and petrification.

The scene blacks out as the door slams shut.

INT. KOVALAM PALACE HOTEL - NIGHT

KALAM

is standing in a pitch-black space, with just ONE strong light right above his face.

CAMERA CLOSES IN ON HIS FACE AS IF THE SPACE IS CLOSING IN

CUT TO:

The lighting livens up, not much, but just a bit. KALAM is standing in front of the majestic Kovalam Palace Hotel. He looks up at that building, not astonished, but terrified, like entering a trial court.

CUT TO:

KALAM is shown to a waiting lounge. He sits down nervously, and seems to be

uncomfortable in the most luxurious chair he must've sat on. He taps his foot, and we see his footwear, an open-toed CHAPPAL, dirty from walking through the monsoon puddles.

There's an old BUSINESSMAN sitting right opposite KALAM. He looks at KALAM for a while as he is clearly sticking out in such a posh place. KALAM avoids eye contact, but the BUSINESSMAN continues to stare at him as he sips alcohol from his glass before he starts to speak;

BUSINESSMAN
What's your name, young man?

KALAM
Nervously
Abdul Kalam.

BUSINESSMAN
Malayali-aano?

KALAM
Illa... Naan Tamil.

BUSINESSMAN
Chuckling
Thoni...

What are you doing here in Kovalam then?

KALAM
I am working at the Rocket Launching Station, in Thumba.

BUSINESSMAN
O, so you are here waiting to meet Vikram.

KALAM
Yes, sir.

BUSINESSMAN
Must be really smart then? I don't understand this Rocket science and all...

BUSINESSMAN takes a loud sip from his glass.

BUSINESSMAN
So you can tell me when the SLV is going to launch India to greatness?

KALAM
Nervously laughing
Don't know, sir. It is very hard and giving lots of problems.

BUSINESSMAN
Of course. Otherwise, everyone can make one.

Ah, hello Vikram.

SARABHAI enters the frame behind KALAM (like LANDA in Inglourious Baster). He places his hand on KALAM's shoulder and KALAM is taken by surprise, as he was lost in thought.

SARABHAI
Honour to meet you Mr.
Kottukapalli.

BUSINESSMAN
I was just chatting with your
young scientist, as I finish my
night whiskey. I'll leave you
young men.

The BUSINESSMAN gets up to leave, but not before he turns back to say something.

Mr. Kalam, some things aren't
easy in life. People have gone
through the unimaginable. It
takes the bravest and strongest
of humanity to succeed. I am glad
to see independent India in great
hands. Don't give up just yet.

The SUBTITLE appears;

**"GEORGE THOMAS INT. KOTTUKAPALLI - MEMBER
OF PARLIAMENT, PHILANTHROPIST, ONE OF
SOUTH INDIA'S LARGEST PLANTATION OWNERS,
PUBLIC INTELLECTUAL, AN INDIAN
INDEPENDENCE ACTIVIST"**

KALAM realises who he is, but it was too late. He turns back to see SARABHAI.

SARABHAI
Sorry for being late, Kalam. Busy
as usual.

KALAM
No it's fine, sir.

SARABHAI
Hurriedly
So, did you have something to
drink or eat?

KALAM
I had before coming, sir. Thank
you.

SARABHAI
How are you, Kalam. How's
everything? I met our friend Dan
today. He is doing wonders in
Telemetry, isn't he?

KALAM
Yes Sir. Everyone is working
really well.

SARABHAI
Hmmhmm.

SARABHAI pulls out a comb and corrects his
hair.

SARABHAI

So, Kalam. I am sure you know the main reason I wanted to meet with you today.

KALAM's fears have been realised. He starts to get more uncomfortable as he needs answers for his boss's disappointment.

SARABHAI

So... What happened at the demonstration today?

KALAM

Agitatedly

The assembly of certain subsystems was done in the last minute and the pyro timer circ...

SARABHAI

Interrupts

Kalam, Kalam, I am not here to conclude that this was due to insufficient knowledge or lack of skill or fate.

KALAM looks cluelessly at SARABHAI. He clearly expects something worse.

SARABHAI

Were you unenthused by a job that did not pose sufficient challenge, or was it just too

much pressure I had imposed on you?

KALAM

No sir.

SARABHAI looks at KALAM for a second and then places his fingers on his eyes, thinking deeply. After a second or two, he looks up and asks;

SARABHAI

Okay, what was the issue you were explaining earlier?

KALAM

Sir, Pramod had warned me about the complications of the extra payload safety, and I only pushed him to make it possible... The complications of integrating everything occurred and caused the error.

SARABHAI

Are you sure there isn't something that is burdening you, Kalam? Something you have not realised yet?

KALAM

I don't know...

SARABHAI

Well, in that case, everything's fine. These things happen, Kalam. And Pramod is probably right. How did you do things at NASA?

KALAM

There is a single roof to carry out system integration of all our rocket stages and rocket systems.

SARABHAI

See, we have managed to do with so little, because I was able to find some very dedicated young people who did more than what I can ask for. But, for how long will Electrical and mechanical integration work go on with a significant phase difference—both in time and in space?

KALAM

What are you thinking, Sir?

SARABHAI

Maybe we just need a Rocket Engineering Station.

KALAM's eyes lighten up hearing that, like a kid who is about to get a new toy to play with.

SARABHAI goes on to discuss other small changes, but KALAM is still not out of

shock. He went in fearing the worst, but somehow a crisis has led to the conception of something groundbreaking. He sees experience and leadership in their truest form.

SARABHAI

Background Dialogues

Well, I think some small changes to the workload will also help you personally. I know how much you like to get your hands dirty, but I think you should just stick to the design table and phase management...

FADE TO WHITE:

QUOTE

NARRATOR (V.O.)

He who can listen to the music in the midst of noise can achieve great things.