

Project report
on

“Nested Storytelling

Submitted in partial fulfillment of requirements
of the degree of

Master in Design

By
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1. Introduction to Nested Storytelling

Nested stories are stories within a story. In such narrative, it can have any number of stories, sub-stories, secondary stories, and any of these can further have it's own plots and sub-plots. Nested stories are present among us from centuries and can be easily seen in books, movies, TV series, plays and so on. However the method of nested loops is used as well in therapies and persuasive techniques.

If we see the common structure of it, sub-stories are often related to a higher-level or main story, but not necessarily directly. Sub-stories can be completely different also or it might add detail about the back story, providing depth and reason for the main storyline, for example through the use of flashback or sometimes through flashforwards.

So what is unique about such narratives? It has usually seen that people become more and more involved in such stories. Using nested stories is effective in drawing the audience in, engaging them in listening and blocking obstructions from the outer, as they tend to focus more and more on keeping all pieces together

and connected. And this ultimately builds up their curiosity.

It is really important to complete all stories and give them reasonably good time for setting up as if all stories have different characters they might need separate time for build up or they might be introduced in previous/ next stories.

It is story within a story, the sub-stories are often related to parent story. Nested stories is useful for drawing people attention. It is also important to complete all stories.

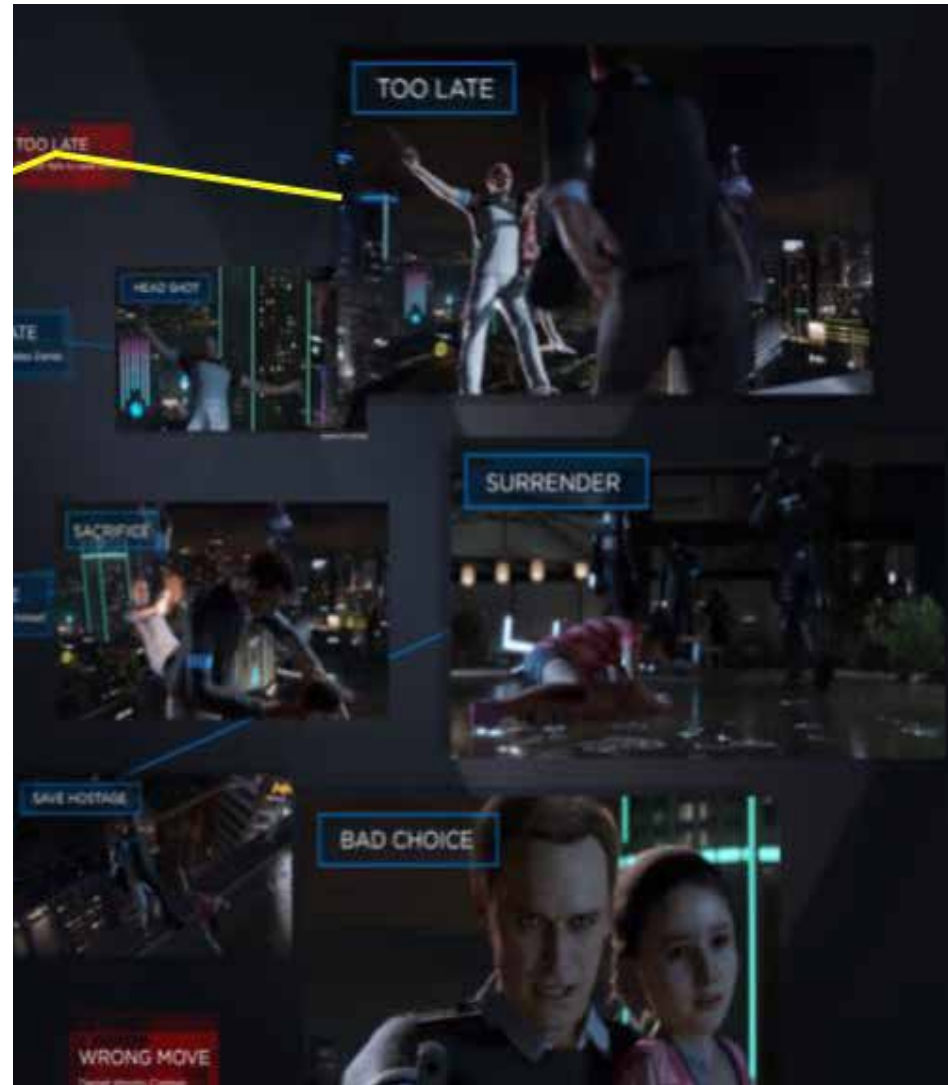
This is typically achieved by returning to the main story. It is also possible to jump back and forth between stories, running the stories in parallel rather than showing them in linearly. The length of each story can vary, range from all being about the same length to inner ones being used to make brief points, to the main story.

Its method of telling and complexity is very hard to generalize. For example, it may about a character, "A" and "B" in the main story and later in the second story it unfolds about how they met through two other characters "B" and "C" and a third story may about "B" and "C". There can be other examples like, "A", "B", "C", and "D" being four unrelated characters who every day used to visit a same cafe or park and it may be four parallel stories running together.

Here the point I wish to made is that there is no hard and fast rule that how all the stories should be connected and how they will going to end. it just needs a common node to start and end different stories. And that is the real beauty of it.

Further, there can be two kinds of such narratives, Linear and Non-linear. In this case, I would define Linear narrative as for where transitions are fixed by the storyteller, not to be confused as stories appearing one after another. Its example can be a book or movie. On another hand, the Non-linear narratives can be defined as where there can be multiple ways of transitions between the stories and which keeps on changing every

time. Does each time the narrative will be different. Its examples can be A storyteller telling the story and he changes it every time based on audience response or may be an interactive movie or probably a story within a video game.



2. Study and analysis

2.1 Preliminary Study based on secondary data

The outer, first story usually provides a 'real' context. Even if it is brief, it grounds the inner stories. It is usually assumed to provide context and basic truth. An example of this is in therapy, where the real-world story of clients may be explored in inner metaphoric episodes where the level of indirection allows the client to more comfortably discuss difficult topics. It has been used for centuries in storytelling, for example in Arabian Nights.

In Nested stories the main/first story usually provides a 'real' context. Even if it is very brief, it sets a basis for the sub stories. It is usually assumed to provide context or connection. For example the opening scenes of Inception and Cloud Atlas. It gives a visual clue that all the different stories are connected to each other and are happening in different time frames, this in a way prepares the audience for a loop around the stories.

Connections may work within and between stories. When a chapter ends in-between and the next chapter takes up with what is happening elsewhere, the audience is left out with a curiosity, what happened in the original story. Sets of stories may hold together in a meta-frame of an overarching narrative, such as in

Sherlock Holmes and many modern TV series. When a story stops and a new story is taken up, and a tension is set up as the audience wonders how the first story will going to end. They also tend to remember what happened in the previous story while the second story itself is going on. They are hence forced to mentally rehearse the first story. These tensions, of wondering and rehearsal, add cognitive load that draws the person in, forcing them to ignore other distracting thoughts and events around them and focusing more on the story.

2.2 Analysing Nested Storytelling through Cognitive load theory

In cognitive psychology, cognitive load refers to the total amount of mental effort being used in the working memory. (*source - Wikipedia*)

In general higher, cognitive load tends to affect the task completion but it is also important to note that its effect is not same in every person. Elderly, children, students, working professionals everyone's ability is different. Reading a storybook, comics, graphic novels and watching a film, these are kind of activities people usually do in their leisure time, or also we can say that they are not very task based. Hence the cognitive load which gets induced in case of nested stories is not because of the certain task performed by the audience, but because of the structure of the narrative. Thus the impact is not very high (may vary how complex the story

is) so it just demand a certain amount of attention from the audience and this attention keeps them drawing in with each loop.

"Cognitive load theory has been designed to provide guidelines intended to assist in the presentation of information in a manner that encourages learner activities that optimize intellectual performance". (*Sweller, J.; Van Merriënboer, J. & Paas, F. (1998)*). The two classification of Cognitive load theory, the Intrinsic cognitive load which defines the inherent level of difficulty associated with a specific topic and Extraneous cognitive load which defines the load generated by the manner in which an information has been presented. Thus in former one, as the inherent difficulty cannot be altered what is used to be done is many schemas are broken down into individual sub-schemas and taught separately, and then brought back together and told as a single one. While in extraneous cognitive load, the unnecessary information is removed so that it can be easily conveyed.

So, this is the way how storytellers are using framed devices to tell stories from centuries. A complete story is broken into different stories and are told separately and at the end they all meets at a same place, however unnecessary information are removed from the inner tales to maintain the level of complexity and focused is given on certain specific stories.

Nesting stories is a bit like plate-spinning or juggling, where the more plates or balls you add, the more the person has to concentrate. This drawing in can create a kind of trance state, which is why nested stories are sometimes used in hypnosis and therapy. Concentration can also be increased by adding complexity through such as convoluted story detail.

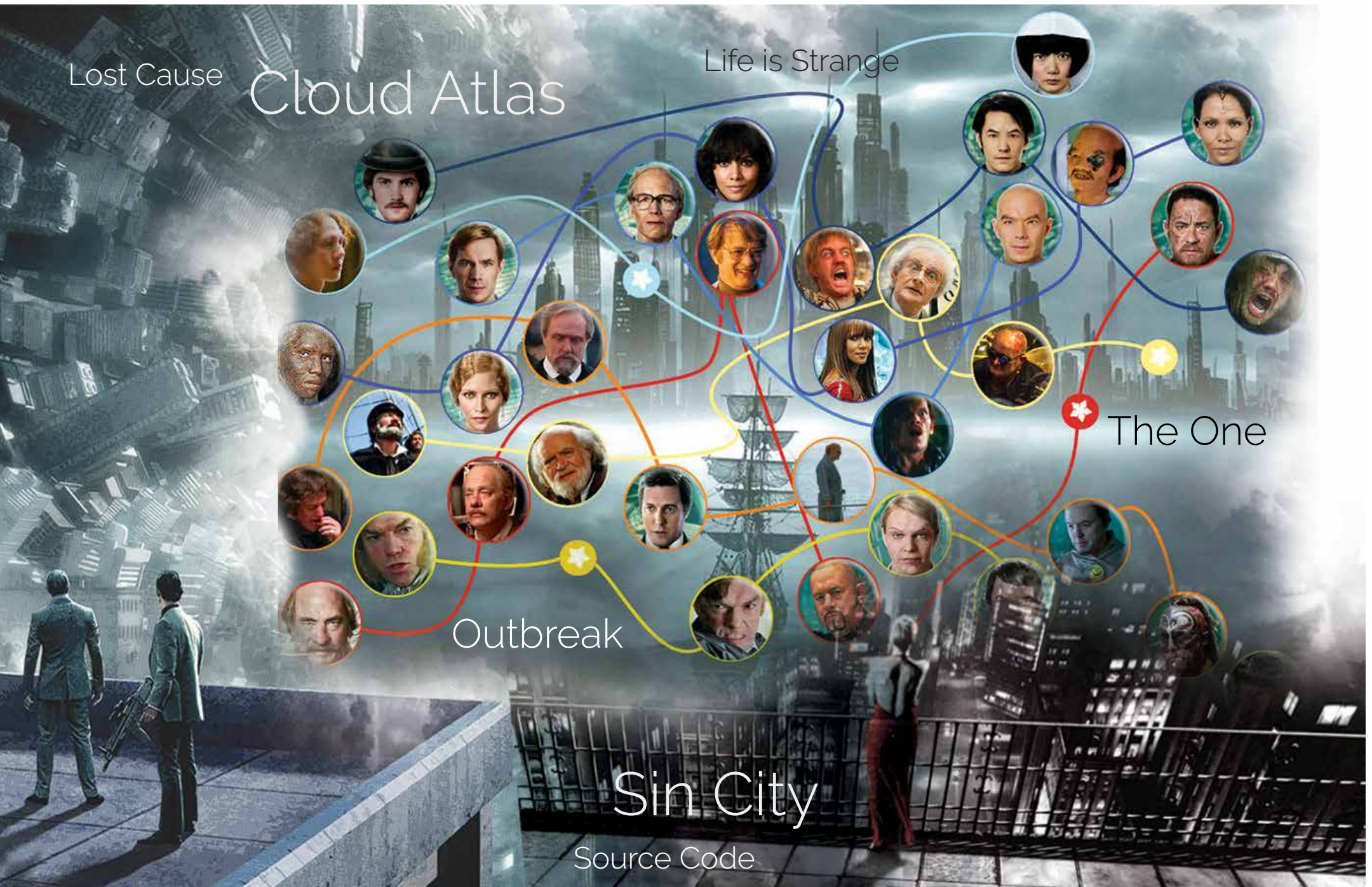
Summary of the overall study is as follows,

- Nested Stories hold attention
- Creates a lasting impression
- Blocks External Intrusion
- Induces a thought virus
- Sometime audience might feel lost
- Attention may deviate with increase in complexity
- Sometime it needs to watch /read more than once

2.3 Study of existing examples and works

After studying the secondary data and articles written on the area of Nested Story/ Framed Story/ Nested loops, the next step was to study the existing works which has been done using Nested Stories. For the purpose various films and books has been chosen for the further understanding of the topic.





Following are the movies, interactive movies and books referred for the study,

1. Cloud Atlas
2. Inception
3. Predestination
4. Sin City
5. Edge of tomorrow
6. Source Code
7. The One
8. Outbreak
9. Bank Run
10. Stitcher
11. Lost Cause
12. Life is Strange
13. Stories from Panchatantra
14. Stories from Hitopadesha
15. Vikram aur Betal
16. Ramayana

After studying the movies and books it has been seen that there are some predominant topics which are being used in movies with nested stories and nested loops.

Undermentioned are some of them,

- Resurrection / Rebirth
- Time travel
- Historic events
- Astral projection
- Dreams
- Getting into someone else's mind
- Flashbacks

3. Initial Story Concepts

After the preliminary study the concepts for the story has been chosen around some of the pre-dominant areas and topics, around which further the story concepts has been generated,

Story Concept 1

Keywords: Crime and Investigation, Historic Events

In the year 2030,

A train accident took place somewhere in North Korea.

Due to a massive explosion within a compartment.

Explosion forms a deep pit around the area of accident.

Whole world and also the India doubts that it's not a normal accident.

India overlooked the matter at first.

Weeks after the accident Air Intelligence monitors frequent flights between Pakistan-China-North Korea

RAW started investigating it, and found that they are researching on something, but what?

During investigation they found a name "Operation Krodh"

It was just a name, nothing was there in records. Other than name of a Missing Agent.

Investigation begins and it reveals secrets of another secret, "Project 701"

Pakistan was developing a weapon of Mass Destruction,

North Korea and China helped them with research

Production was about to start at some remote facility in Syria which may also invoke nuclear terrorism

India launched an Airstrike on the facility

Story Concept 2

Keywords: Mythology, Quest, Dreams

The Quest to find Hanuman.

Hanuman being the only immortal avatar, shall be somewhere around us.

He might have forgot who he is because of the curse.

The protagonist went on a quest to find hanuman.

He saw some dreams, through which he recollects various clues and informations.

During his journey he falls into various problems.

Story is about how he tackles them.

Did he able to find hanuman.

Story Concept 3

Keywords: Mythology, Astral Projection, Time Loops

Story of an ordinary guy turned into a superhero.

Story will be based on avatar of Kalki.

The protagonist travels into a time loop.

He has to collect eight mystic opulence of Kalki to save the world before darkness spread.

Story Concept 4
Keywords: Sci-Fi

Gamification of life.

People do everything for earning points which improves their status in society.

Everything has entered into virtuality.

If they are not happy with something, they search it in the virtual world.

If they can't achieve something in life, instead of trying for that they build it around their virtual world.

That is what the trillion-dollar corporation, Virtual life Inc. do.

Controls human life.

Story Concept 5
Keywords: Crime and Investigation

Negative Creativity: Dark side of creativity

Not necessarily the outcomes of creativity should be good/desirable/socially acceptable

The story could revolve around how a person put on his creativity in use, also showing dark sides of creativity

A clash of good and bad evolve from same idea

Story Concept 6
Keywords: Historic Events, Action

A Little girl, dumb, confused and introvert.

She doesn't have any goal in life.

Whenever someone asked her, what she wants to become in future.

She either remain mum or say "i don't know".

One day she found a comics titled, "The Flying Bullets", And she started reading it.

The Comics was about an Airforce veteran. Who fought gallantly to save the country.

The girl got inspired by it and decided to become a fighter pilot.

4. Final Concept and Development

4.1 Final Story Concept

During the process of making the story concepts to final story, each individual story and sub-stories has been treated as a single open ended stories form where it can be extended further or may lead to a different story if required. The final story is based on concept 6, whose initial idea is developed and modified from the concept 1.

During developing the story at first length has not been taken into account so that it doesn't hamper the flow. Later keeping in mind that it has to be a story for a short film many elements has been removed but many of them has been kept to represent that those can be extended further in the story. Which can be served as the future scope.

The story is based upon, "How actions of some people keep motivating generations and helps in keeping their ideas and thoughts alive".

There are three stories nested together.

(Story A)

9th Dec, 2024, Classified Location

Background:

There is a conflict going on between India and Neighbouring country since many days. A small team of Indian Special Ops have been send over there to destroy the communication facility set up by enemies. But after the completion of the mission the Indian troops comes under heavy firing and shelling. Indian Commandos calls for Air Support while situation gets worse. The request for air support affirmed by the command post, and told that Estimated time of arrival is 10 minutes. Till then they were ordered to head toward a predefined location for evacuation.

(Story B)

2008, Punjab, India

A small girl who is very dumb, introvert and confused in life. She doesn't know what is her goal in life. Whenever someone ask what do you want to be in future, she remains numb or simply say "I don't know". But what she loves and enjoys most is staring the vast blue sky. And this is what she do all the time. One day she found a comics titled "The flying bullets". And it entirely changed her life, she started reading the comics

(Story C - In comic book)

A small boy named Nirmaljit Singh Sekhon, who loves watching the planes. It is his only favourite thing. Since his childhood he was raised with the values of gallantry and patriotism. As expected when he grown up joined the Indian Airforce as an Fighter Pilot.

On December 1971, Six Pakistani F-86 Sabres were approaching toward Srinagar Air Force base. They were Flying at low altitude to bypass the radar signals. All six Sabres started pitch up on reaching the target. Srinagar base had very few fighter pilots at that moment, as most of the fleets were engaged in the eastern front.

On intercepting the Sabres, without thinking for a second young Flying Officer Nirmaljit Singh Sekhon who was off duty at that moment, took off with his Folland Gnat. And the Dogfight begins, the lone pilot shot down 1 Sabre and tearing off the vertical tail of another one. Meanwhile a Sabre hit the right wing of Sekhon. Due to failure in control system he couldn't eject out and his aircraft got crashed.

(Story B - continues)

Aarohi, the protagonist decides to be a Fighter Pilot and with excitement she ran off to her father, but then she came to know from him that girls cannot be Fighter pilots, only boys can. But he said her that everything happens for the first time. which motivates her further to chase her dream.

(Story A - Continues)

Air support was about to reach the target area, and it reveals that one of the pilot is Squadron Leader Aarohi Singh (The protagonist of the main story). They strike over the enemy Armoured troops and destroys all the target. She gives the call sign for mission accomplishment to the base. She saved the life of outnumbered brave commandos on ground, fighting against the enemy troops.

Below is flow chart showing the loops and transition between the stories.



4.2 Study and Research around Story topic

As the story revolves around the Indian Armed Forces, particularly on Indian Airforce and Indian Army. Research has been started to understand motivations of serving personnels which make them to choose Armed Forces as an career option which involves great risk of life. For this purpose apart from my own experiences, I talked personally

and also through other sources with some of the serving Officers, JCOs, Airmen and Soldiers in Indian Airforce and Indian Army. I also have a exchange of words with Aspirants who wants to join these elite professions. It allows me to have a better understanding and also helped in developing the characteristics of the protagonist of the Main story.

The secondary story includes a true life incident of Flying officer Nirmaljit Singh Sekhon, PVC (17 July 1945 – 14 December 1971) was an officer from No. 18 Squadron of the Indian Air Force. He was posthumously awarded the Param Vir Chakra, India's highest military decoration, in recognition of his lone defence of Srinagar Air Base against a PAF air

raid during the Indo-Pakistani War of 1971. He is the only member of the Indian Air Force to be so honoured. Hence I referred to available materials from various internet sources to understand the event and about the life of Flying officer Sekhon. I also referred to the the comics book of Aditya Horizons and a Television Series called Param Vir Chakra on the same event.

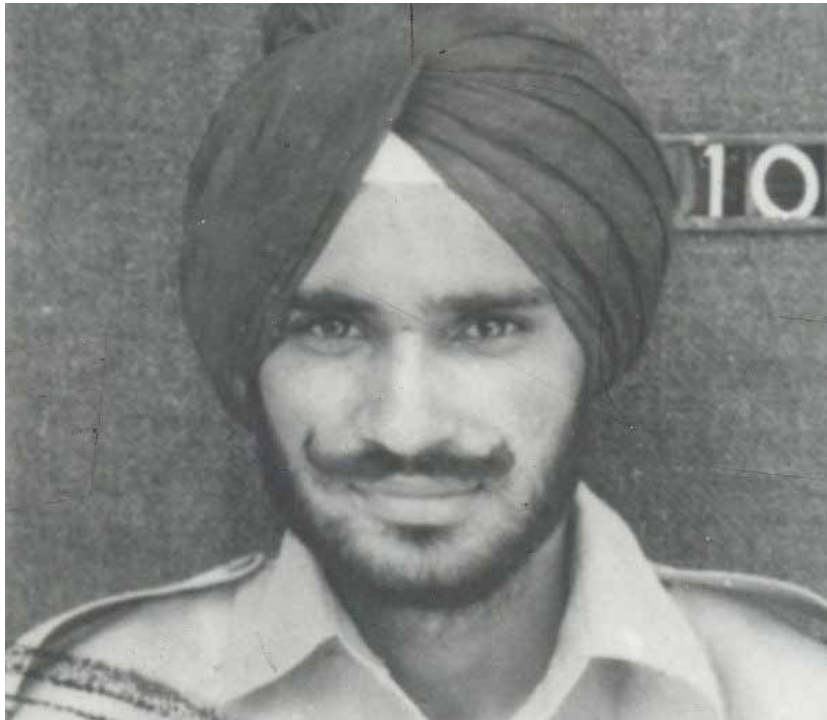
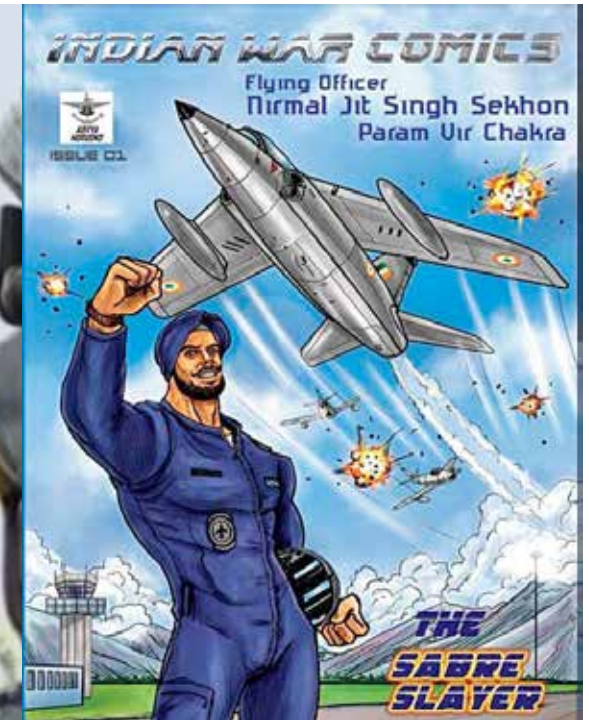


Image of Flying officer Nirmaljit Singh Sekhon



Screen shot from TV series
Paramvir Chakra



Cover page of comic book from Aditya
Horizons

Next I started with data collection about the regiments and squadrons in Indian Army and Indian Airforce to find which will be best suit according to the plot of the story and it was followed by collecting information about equipments used by them from official sources in order to design the props and assets.

Before proceeding to the final story, a mind map has been created which helped in expanding the dimensions of the

story and visualize it as a bigger picture, and then it has been narrowed down to fit as a short film. Within the story there are various open ended nodes which can be further told as an separate story and the loop can be continued.

4.3 Character and props Design

Character: Protagonist

Name: Aarohi Singh

Age: 15 years

Characteristics:

Introvert, Confused, Lost, Jolly, Love Aeroplanes





Character: Protagonist

Name: Aarohi Singh

Age: 31 years

Profession: Fighter Pilot

Rank: Squadron Leader

Squadron: No. 223 Trident

Code Name: Brother-06

Years of Service: 8 years

Marital Status: Unmarried

Characteristics:

Calm and Quite, Punctual,
Dedicated, Concerned for people,
Logical, Optimistic

Character: Spotter

Name: Lance Naik Ryan Konyak



Character: Sniper

Name: Captain Raj Baruah



Crowd Characters

Enemies



Model: Fighter Jet

Name: Mikoyan Mig-29 Fulcrum

Kind: Multi Role Combat Aircraft



4.4 Storyboards



"One individual may die for an idea; but that idea will after his death, incarnate itself in a thousand lives. That is how wheel of evolution moves on and the ideas and dreams of one nation are bequeathed to the next".



Classified location, December' 2020

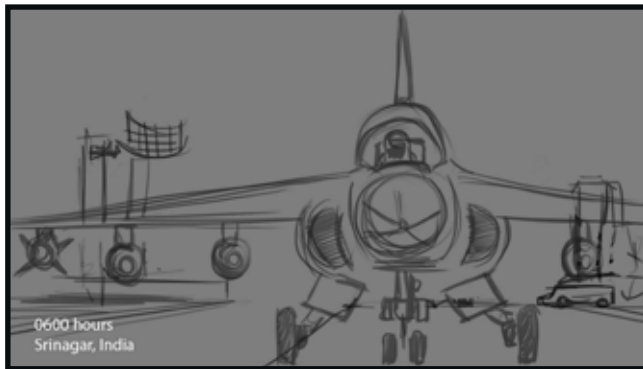
A group of special forces who were on a covert operation, got trapped by the enemy upon evacuation and comes under heavy fire.



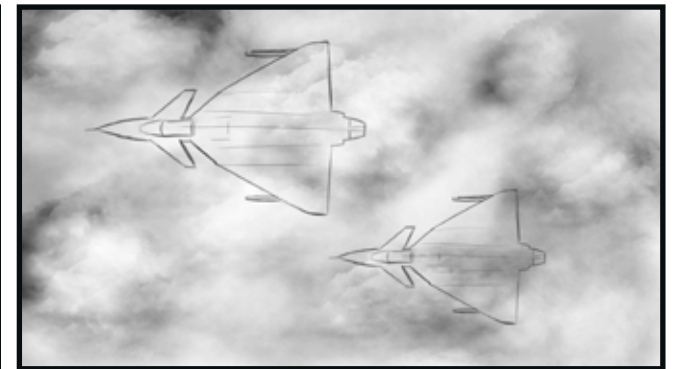
Soldiers requests for air support



Command post affirms the request for air support.



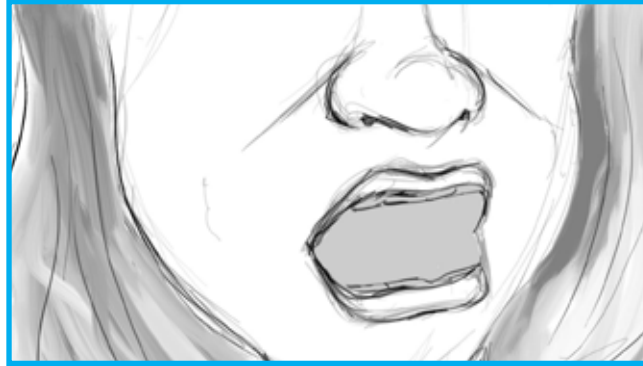
Strike Jets took-off



Frame dissolves to next frame



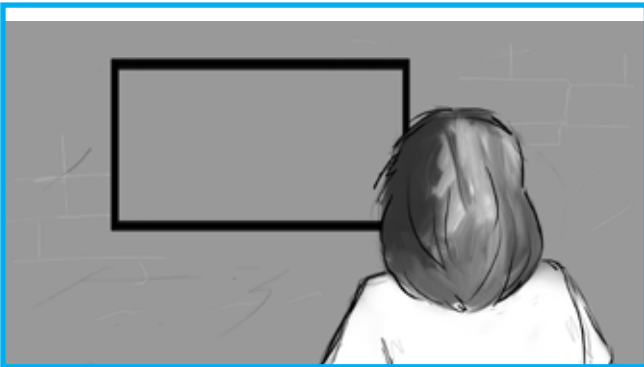
August' 2004, Chandigarh



A tween-age girl was looking at a plane



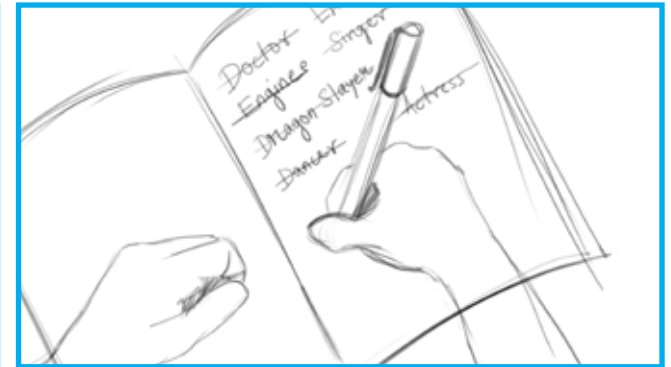
Her mother called her name, "bitto..."



And asks whether she finished her homework or not.



She replied, "No".



She started doing her homework



Her father asked, if she had decided what she'll become in future.



Strikes off a "profession"



Her mother asks, what she's thinking about?



Strikes off another "profession"



Thinking...



Strikes off more "professions"



Confused...



Sound of Jet passing



Looks back with excitement



runs to the window



Soldiers looks up on the sky
(A flash of bright light appears)



They keep on firing.
(Sounds of approaching armour vehicles)



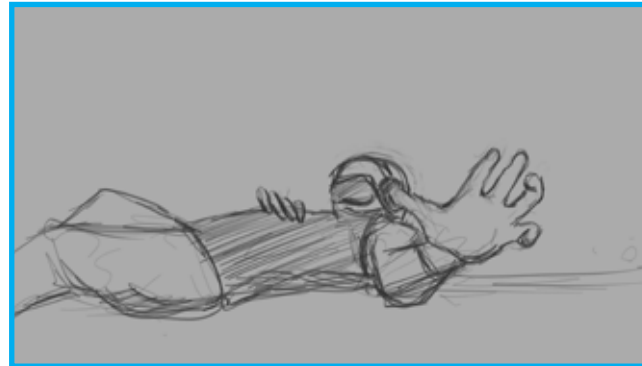
Being outnumbered and outgunned they fall back



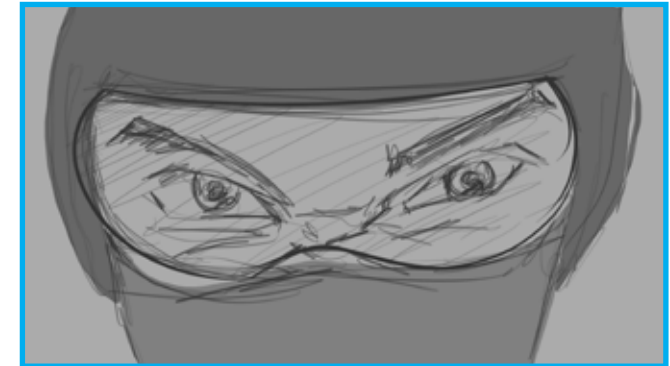
Spotter got hit



Sniper, pinned down by heavy enemy fire



Spotter lying on ground, injured and looking for help



Spotter, extreme close shot



Aarohi was returning home from school, saying I don't even know what I want to be.



Suddenly stops.
(Sound of passing traffic)



Looked at a comic book with an image of plane.



Picks up the comic



Opens it up.



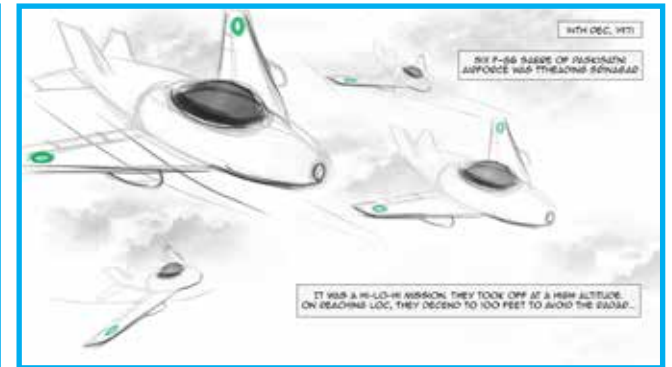
(Comic book story continues...)
Year 1971, war wages in East Pakistan



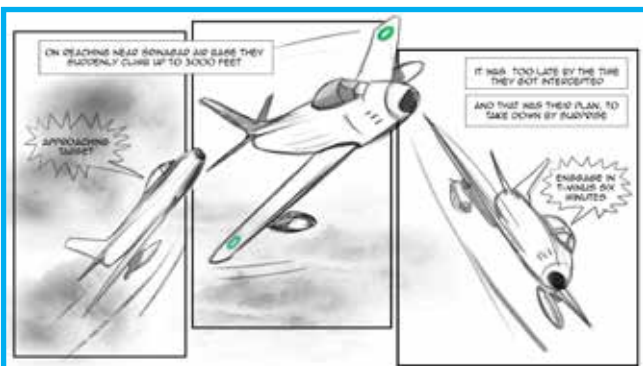
PAF started bombing in Kashmir



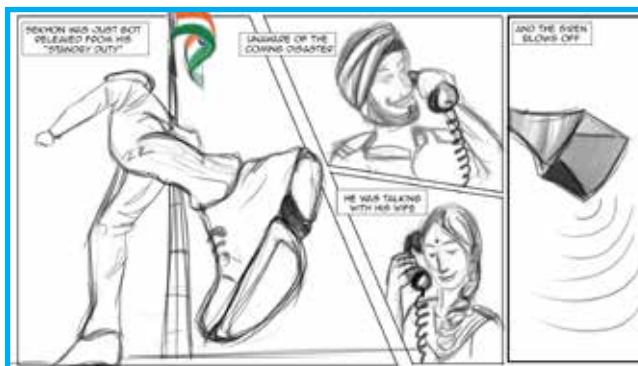
Sekhon and his squadron was called for protecting the air space of Kashmir



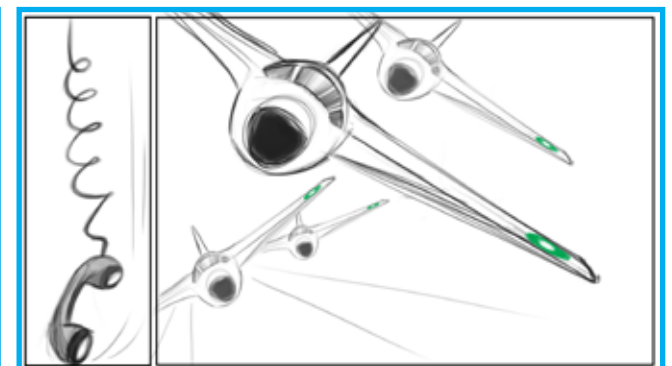
Another surprise attack was carried out by PAF



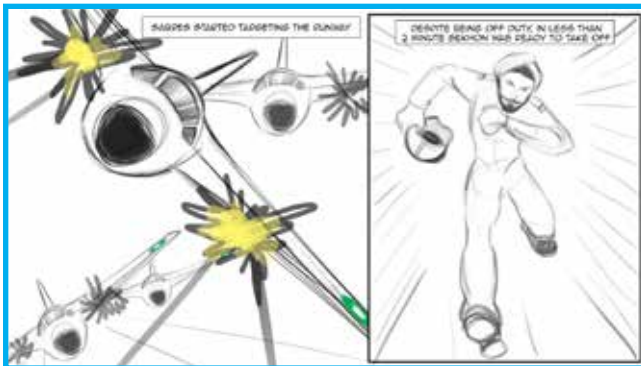
They by-passes the RADARs



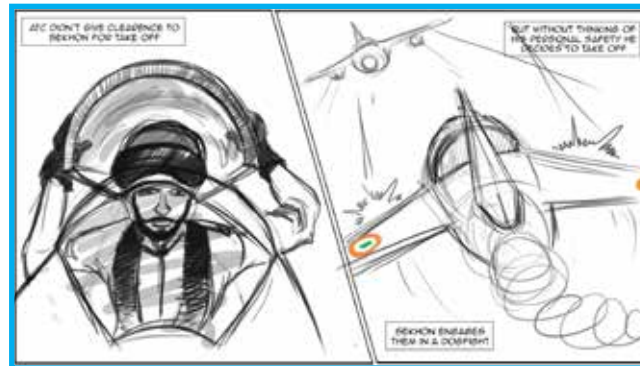
At that moment Sekhon had just finished his duty and talking to his wife



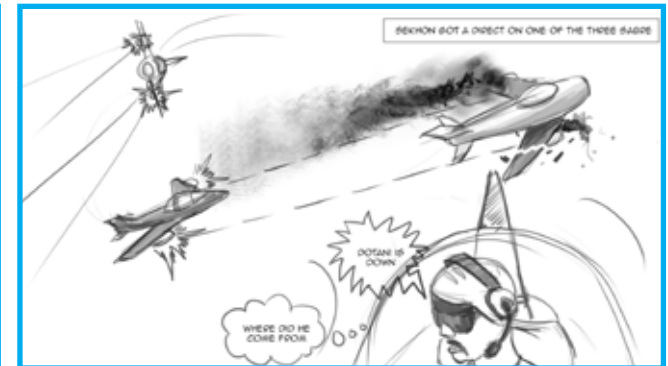
And they Pakistani jets started bombing the airbase



Sekhon scrambled within 2 minutes



He alone engages the Pakistani jets in a Dog fight



But being highly outnumbered he got hit



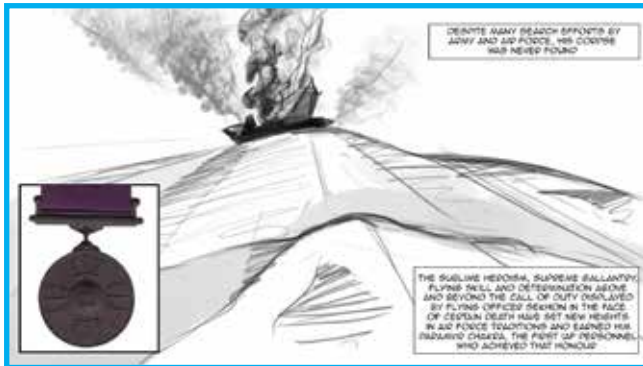
He tried to eject out of his aircraft



But his control system failed



His aircraft got crashed into the hilly terrains of Kashmir



(Comic book ends, followed by a narration of an adult girl)



"A comic book that is how it all began..."



"... Can it be suffice as a motivation ..."



"... But sacrifices made by people like ..."



"... May be not ..."



Aarohi suddenly opens the door and says, "Papa I want to be a fighter pilot."



"... Flying officer Sekhon were ..."



He explains her that only boys are allowed fly fighter jets not girls.



But he also tell her that there is always a first time.



She got some motivation from her father's word



"... Deep inside me I can feel something different ..."



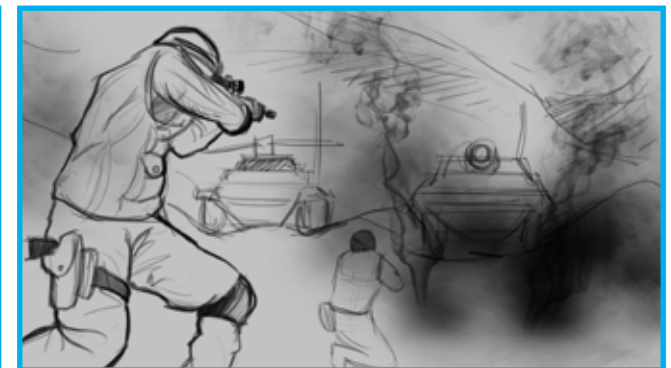
"... A warm and gentle whisper telling me that I can achieve my dreams ..."



"... I am Sqn. Ldr. Aaroohi Singh and this is my stroy".



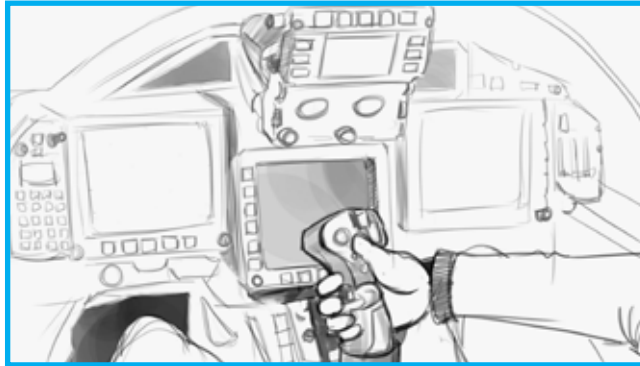
"Greenhouse this is Yankee-06, approaching target TS129" (Voice on radio)



"Requesting visual confirmation" (Voice on Radio)
(Tanks closing in)



"You are clear to engage zero-six"
(Message from Control Room)



"Tomcat going HOT in T-minus-six"
(Aarohi to her wing man)



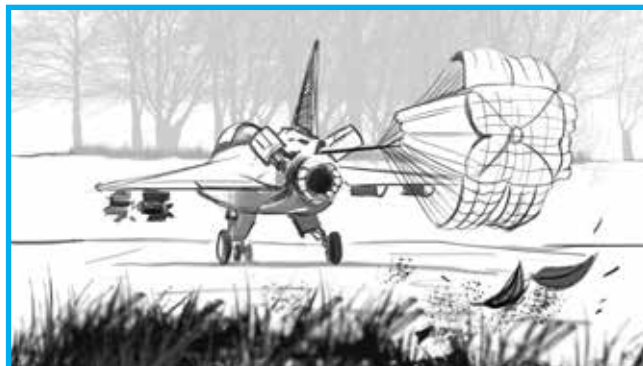
Missiles got inbound



(Music Track, "Sooraj khake jite hum")



Tanks destroyed



4.5 Concept Arts





5. Visual Styles



6. Breakdown



Before color correction and effects

After color correction and effects

7. Other possibilities

4.1 Extending the project for creating other formats of storytelling

As mentioned in the previous sections, this structure allows you to combine multiple stories together. That may sound very simple and not so special, but while working on the movie project throughout the process I have realised that it is really a great thing. Even though it can make things very complex, but it can provide a great amount of flexibility to writers, filmmakers, designers and everyone associated with the business of storytelling.

After I finalised my story, I tried to explore what else this structure allows me to do apart from presenting it in the form of a movie. Thus I tried to implement the same story in two different formats; first an interactive movie and second a game.

When it comes to an interactive movie or a game, it always has a user perspective associated with it. So, it requires a proper narrative design rather than just having a good story to effectively draw in the user's interest.

4.1 Interactive movie format

In the interactive version, the story keeps moving forward according to the user's input. The whole interaction has been kept to a minimum so that the process doesn't hinder the movie experience of the user. After a secondary research on existing interactive videos, I came up with two narrative designs which can be implemented in the interactive movie.

Following are three different ways of progressing the story-

- i. Choosing an action
- ii. Choosing a perspective
- iii. Switching story

i) Choosing an action

There will be 3 ways by which the story can progress. Out of 3, 1 will be a default. Thus the user will be given 2 choices. The user will have 8 seconds to make a choice between the two. On the basis of their choice plot will be diverted in a different path. If they don't make any choice it will progress as per default path until next choice is given. Choice making is the most widely used method in interactive movies.

ii) Choosing a perspective

In the nested story, each story has its own protagonist but the film progresses from the point of view of a

single protagonist. Here users will have the choice to choose to view the story from the point of different characters.

iii) Switching story

Assuming two stories are running in parallel, the user can switch between the stories to see what's happening over there. Here the interactivity will just be in the form one key press, and it will switch between the stories. As the story progresses user will never know when a new story is going to be added, so they can navigate through the stories in a fixed order with a single click.

8. Conclusion

Through my project I have tried to understand the structure and method of Nested storytelling. This project provided me a chance to visualize it beyond film-making, and how nested story / loops can be used in various domains such as gaming and education. Nested stories create an opportunity to carry forward the stories to other dimensions as desired by the writers. Its power of telling different stories can be further stretched through interactive narratives such as interactive installations, interactive movies or through gaming. It also provide a very easy platform to make sequels or spin-off version of a story.

Stories are meant for humans, and our life is not a single story. It comprises of many stories and many people in our life. Every incident, every story affects and shapes our life, our main story. Thus as per my opinion, nested stories provide a platform to visualize the stories, just like our own life.

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Story Concepts

Concept 1:

"Nesting various events in history". For this particular story Operation Orchard (Israel) (https://en.wikipedia.org/wiki/Operation_Orchard) and Operation Kahuta (India) (<http://www.dailyo.in/politics/morarji-desai-kargil-war-pervez-musharraf-pakistan-raw-kahuta-nuclear-warfare/story/1/3802.html>) has been taken as inspiration.

Concept 3:

Story of an ordinary guy turned into a superhero
<https://www.quora.com/Epics-of-India-What-are-the-eight-mystical-opulences-of-Kalki>

Concept 5:

Negative Creativity: Dark side of creativity
David H. Cropley, Arthur J. Cropley, James C. Kaufman, Mark A. Runco, (2010), The Dark Side of Creativity, Cambridge University Press