

Indian Video Games and Emerging Possibilities: A Study of  
Select Indian Games

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## Chapter 1 - Introduction

### 1.1 Video Games in India

Video games is a polysemic term characterized with a multiplicity of meanings. Apart from what is commonly understood as a leisure activity encapsulated in the term 'game', it also refers to technology, economy and culture – each term offering different vantage points to look at the phenomenon. As a game, it concerns interactivity in the form of 'play' made possible by the digital software as opposed to movies that allow limited participation in the form of viewing. As a technology, it draws attention to how technological strides in the field are not only continuously redefining gaming and enhancing gaming experiences but are also fostering new genre possibilities (Bogost, 2007; Dovey, et al., 2007). As an economy, video games are understood both as an emerging and thriving hardware and software industry that immensely contributes towards the economy and absorbs a growing workforce. (Kline, Dyer-Witherford, & De-Peuter, 2003). As culture, video games have not only pervaded the sphere of popular and mainstream culture but have spawned what is today fashionably called 'gaming cultures' (Dovey & Kennedy, 2006) generating communities and subcultures of its own. (Shaw, 2010) (Dyer- Witherford & De Peuter, 2009) (Fromme & Unger, 2012). In the context of video games, one cannot but agree more with Marshall McLuhan's (1964) position that games are the 'extensions of social man'.

Video games is relatively a recent phenomenon with a history of half a decade. While the invention of the first video game *Tennis for Two* in 1958 in the United States was intended to

attract visitors to a science exhibition (Wolf, 2012) (<https://www.bnl.gov/about/history>)<sup>1</sup>, the commercial viability of video games was realised not until 1970s. Initially, the spread of video games was restricted to United States and the European countries, though one finds countries like Japan and Singapore immensely contributing towards development of the new medium.

In India, video games emerged as a rapidly growing entertainment field since the turn of last decade, though its early entry can be traced to the 1990s when liberalisation of the economy made possible easy availability of video games and its paraphernalia as import duties and taxes were slashed. Concomitantly during the 1990s one finds the growth of local game studios which were mostly involved with performing backend operations for international game studios (O'Donnell, 2009).<sup>2</sup> The first Indian game development company Dhruva Interactive was established in Bangalore later in 1997.

A significant trend in the account of gaming in India is the recent emergence of independent game developers and studios since 2010. Rather than mimicking the conventional game

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<sup>1</sup> The first video game was invented in 1958 by a physicist known as William Higginbotham. The game was called 'Tennis for Two' and was developed as an experiment in Brookhaven National laboratory, however, the game was only present as an exhibit within the laboratory and was dismantled once the exhibition was over.

<sup>2</sup> The initial phase of gaming scenario in India saw very less internal development of games by the local game studios. These studios were mostly contracted for outsourcing the development work of bigger studios.

design which is based on scoring and achieving targets, these games, popularly called *Indie Games* are based on telling stories from Indian culture and history. The emerging wave of independent video games draw their influences from diverse topics such as mythology, history, culture and contemporary issues. Though many of these projects are still under-development, a few of them have released and have garnered attention and critical praise from leading media houses of India. (NDTV, 2018 & 2014; The Week, 2018; Catch News, 2016). These games apart from

experimenting with the boundaries of the medium itself also aim to attach a certain value along with the playing of the game. These values range from being pedagogical, cultural documentation, awareness for a cause etc. Mapping of the history of video games in India is, however problematic on account of rapid, abrupt and almost parallel introduction of various digital technologies unlike in the United States and Japan that saw a smooth progression starting from console through computer to mobile and then to internet-based games (Shaw, 2013).

Video games in contemporary India, as KPMG-FICCI report (2017) suggests, has become a popular entertainment in the everyday life in urban India. Ease of playing and access to digital games and platforms has made games and gaming ubiquitous – always ready to be played with whenever the user so desires even interrupting serious works. Thus, if this scholar wants to take a break from this current serious writing, he can easily switch on to a game either on his system or mobile, play for few minutes, and transits back to writing even without any physical movement. What games studies scholar Jesper Juul (2009) had

remarked about gaming becoming 'normal' in the global context almost a decade back can thus be equally applied to Indian scenario today.

## 1.2 Statement of the problem

Despite the apparent normalcy and popularity of video games within the cultural sphere of India, the activity of playing video games is largely limited to the pursuit of leisure and entertainment. This is attested by the fact that game titles popular in India such as *Clash of Clans*, *Call of Duty*, *Clash Royale*, *Counter Strike*, *Clash of Kings*, *Grand Theft Auto*, etc.

(CII,2017) are all entertainment games. Further, games played in India are overwhelmingly international titles indicating utter lack of thematic originality. In fact, as Adrienne Shaw (2013) argues, there has been little effort to develop original games in India as there is an underlying belief in the gaming industry that digital games are essentially a western phenomenon, and hence most of the games developed within the local game industry are imitations of globally popular and familiar notion of video game design (Shaw, 2013). The pursuit of video games for leisure and entertainment have definitely made video games a popular and preferred choice of entertainment within India, however the awareness about the medium and its scope still remains limited as Indians are yet to pursue a serious engagement with the medium. (KPMG & FICCI, 2017)

In recent years however, there has been a turn towards adapting the popular medium of video games for serious expression in India. This is in sync with the international trend that has been experimenting for quite some time now with the practice of embedding serious cultural expression within the practice of game designing and playing. The idea behind such experimentations is to explore the new possibilities beyond the scope of entertainment in which video games can be used. This trend in India has been primarily visible in the development process of Independent games which are working with vast and diverse material of Indian culture and heritage.

In the light of the criticisms against the Indian gaming industry as discussed earlier, and in the backdrop of the recent trends that contests such an argument, it becomes pertinent to understand the indie games sector in India. How is value addition happening in game designing by Independent game developers in India? What type of local content is used in game designing?

Indie Games are also often different from the Industry games with respect to how they are played. What is significant about game play in Indie Game? How are these games played? These are important questions that need to be probed.

Globally, independent games are a vital part of video games discourse. Independent video games are a subset within the bigger set of independent culture. Rather than being a mere genre classification, Indie games refer to an independent culture of production signified through collaborative and open-source culture of information access and sharing. The field of

independent video games is an important indicator of individual and democratic participation with the medium (Simon, 2013; Ruffino, 2013; Best, 2011; Martin & Deuze, 2009). It is therefore important to inquire into some vital questions: how Indie games in India are shifting towards serious cultural and political expressions? What is the process of the development of these games? How is the process different from the Industry games?

Video games are viable medium of communication and expression as several examples exist on international level which are evidence of how games are being used for cultural awareness, political awareness and artistic expression among other things. The study thus particularly wants to focus on serious expression in video games through a study of independent video games from India. In India the independent gaming scenario has largely remained undocumented with only handful of newspaper and magazines to have documented about the upcoming new trends. The study situates itself within this huge gap between the serious turn in video games from India and lack of documentation about its scope and the development process. This dissertation will study couple of Independent games from India which are

currently in their development phase and are dealing with serious and artistic expression of Indian culture and history.

## 1.3 Methodology

### 1.3.1 Research Design and Methods

The study uses ethnographic research design along with the methodology of Game analysis to gather data pertaining to the process of game development and game playing. An ethnographic design helped the study to get insights into the actual activity and routine operations involved in developing of game through ethnographic methods of interview and participant observation. Game-analysis methods were instrumental towards a critical reading of the game through playing it. The study also draws upon researcher's personal auto-ethnographic accounts as well as those of few other Indian gamers available on their blogs. Such accounts, as (Méndez, 2013) argues, benefit from one's own experiences to understand a particular phenomenon or culture; in the absence of authoritative accounts in the field, these versions were instructive to understand the early history and evolution of video games in India. The combination of selected research design was effective as the scope of this particular study was exploratory in nature and the iterative-inductive method of data gathering thus was best suited for a continuous and comprehensive understanding and evaluation of the interaction between overlapping activities of designing and playing the game.

Ethnographic methods were complemented by newer methods of '*Game Analysis*' which emphasise on the researcher's activity of playing the game to uncover the nuances of player-

game relationship for "providing insight into the player-game relationship, the construction of the game, and its sociocultural relevance". (Fernández-Vara, 2014). The methodology of



Game analysis has been further modified and endorsed by other prominent game scholars as well (Consalvo & Dutton, 2006) (Aarseth E. , 2003) (Konzack, 2002).

The research broadly involved the study of the two variables - Game development and the study of the game itself. To study the game development, personal in-depth interviews were conducted with game developers of the selected games. Interviews and discussions were conducted through emails, skype and face to face interactions. All the interviews were audio recorded and later transcribed. To know more aspects about game development, review of secondary sources in the form of existing interviews, social media accounts, articles and comments published about the selected games was done. The researcher met and visited respondents' multiple times mostly at their workplace and couple of exhibitions on digital art held in Jaipur and Mumbai during the course of this study. Diary was maintained to keep a record of these interactions.

To study the game, two further sub-variables in the form of game content and gameplay were studied. For this, the researcher adopted the method of 'playing' the game. The activity of playing revealed the game content and the controls required to play it. Other than playing, interviews with game developers and review of secondary sources was done of game forums such as *itch.io*, *indie DB*, *Steam*, *Rock-paper-Shotgun*; social media accounts on *Twitter*, *Instagram*, *Tumblr* and *Medium*; game websites to know about how the game has been presented and initial user reviews.

### **1.3.2 Game Selection**

For the purpose of study, couple of Indian games were selected from the independent genre. The primary criteria for the selection of games was that firstly that they needed to be recent ventures exploring the scope beyond leisure. Secondly, apart from being recent ventures they should be under production mode to obtain first-hand information about different aspects of developing an independent video game. The sampling frame for particular independent games as mentioned in the criteria was not clearly discernible owing to scant and scattered documentation and no online repository of these games. Therefore, purposive sampling was employed to identify games from an emerging pool of independent games which matched with the above-mentioned criteria. The games selected for the purpose of study were – ‘*Antariksh Sanchar*’ and ‘*Somewhere*’ through the technique of typical case which as the selected games were illustrative of similar projects. They were selected over other similar games primarily because of two reasons: Few games had already been released and thus the researcher wouldn’t have been able to get first-hand information about game development. The other factor apart from games being in development phase was, the feasibility of approaching the respective developers and their willingness to contribute towards the study.

### **1.3.3 Respondents**

The key respondents of the study were:

#### A. Game Developers

- a. Mr. Dhruv Jani, Studio Oleomingus, Chala, Valsad; Gujarat
- b. Mr. Avinash Kumar, Quicksand Studio, New Delhi
- c. Mr. Kabir David, Quicksand Studio, New Delhi

Apart from the key respondents, the researcher came across various other resource people whose inputs were valuable for the study which and thus were included within the theoretical framework of the study

#### **1.3.4 Tools of Data Collection**

Following instruments were used for conducting research:

- I. Unstructured interview schedule for the game developers.
- II. Diary to record up-to-date information on progress of game development.
- III. Note book to record gameplay experience and observation while playing games

#### **1.3.5 Data Collection and Analysis**

The research was conducted within a period of one year starting from January 2017 and concluding on December 2017. Within this time frame, the researcher conducted interviews with game developers, participated in couple of exhibitions upon digital media and art wherein the selected games were exhibited, played the selected games and had informal conversations with fellow gamers upon the general topic of video games.

Multiple personal interviews were conducted with key respondents through both face to face interaction and over internet. Couple of interviews with Dhruv Jani of Studio Oleomingus were conducted on Skype during the month of July and another interview was a face to face interaction with him during the course of one of the exhibition titled '*When is Space*' where his games was on exhibit, held in Jaipur in the month of December 2017.

Interviews with Avinash Kumar and Kabir David of Quicksand studios was conducted in the month of May 2017. These interviews were face to face interactions and were mostly conducted in their office in New Delhi. Interview bytes were also taken at the digital arts festival named '*Eyemyth*' in Mumbai organised in the month from 18-20th August, 2017. Apart from formal interviews the researcher had several short conversations through email as well.

The process of data collection was an iterative process. The researcher made multiple visits to the relevant exhibitions and played game in multiple sittings. Secondary data in the form of already existing interviews of game developers and reviews of the selected games was done. Audio and video recordings were primary modes of recording the interview. The quantum of the data which was collected thus was large and varied. To organise and analyse this large quantum of data the audio recordings and notes were first transcribed and information was sorted according to the objectives and research questions of the study. Variables of study and tools of data collection such as questionnaire further helped in sorting of data.

During data analysis careful attention was paid to the fact if the findings correlated with the research questions and objectives proposed by the study. The data presented multiple perspectives and researcher tried his level best to present that data in all its variedness while simultaneously maintaining the scientific rigor of qualitative analysis and avoiding any bias from creeping in. During data analysis the aim was two-fold, i.e. simultaneous to studying Indian game development and close reading and analysis of couple of game, the aim also was to situate the gathered data within the larger context of the studies conducted within the domain of video games and communication. Therefore, analysis of data involved

identification of common themes and any deviations were also recorded in the final findings. To know more about play and emerging possibilities afforded through video games the activity of playing the game was central to this study. Selected games were played by the researcher himself. Gameplay notes were maintained to record the observations about play and content of the game and major observations have been documented in the chapters of the respective games within this dissertation.

### **1.3.6 Variables of Study**

#### 1. Development of video games.

##### 1.1. Context in which the games were developed

###### 1.1.1. Creative vision and motivation

###### 1.1.2. Game development team and process

###### 1.1.3 Target Audience

#### 2. Examine the game mechanics of selected video games.

##### 2.1. Game play

#### 3. Examine the game aesthetics of selected video games

##### 3.1. Content of the games

###### 3.1.1. Story and narrative

###### 3.1.2. Visuals and audio in game

###### 3.1.3. Characters

###### 3.1.4. Recreation of space and time

#### 5. Elicit emerging possibilities with reference to select video games

## **1.4 Limitations of the Study**

The researcher has strived to execute this study to best of standards for fair, accurate and consistent results. However, owing to external constraints there were some unavoidable limitations in the study. Methodologically the study would have benefitted with a larger sample size of games for more consistent results. This was not possible due to unavailability of and inaccessibility to game developers during the limited period of the study. Further, more comprehensive and rounded understanding could have been developed had the production procedure been studied through all the three phases: development, release and post- release phases in order to capture the popularity of the games and player interaction. The current study however, had to limit itself only to the development phase due to the release of the games as per schedule in later half of 2017 still pending; this which was not anticipated when the study was taken up.

## **1.5 Organisation of the chapters**

The dissertation argues that video games are a significant medium and are capable of serious expression. The argument constructively has been divided into seven chapters. Chapter 1 talks about the present scenario of video gaming in India. It documents the recent reports and statistics giving an overview of the Indian gaming industry and contextualises it within the global gaming scenario. The chapter further discusses the recent video game trends in India and highlights the research gap which this particular study will address. This section of dissertation also highlights the problem statement along with the research questions which

determined the conceptual and methodological thrust of the study. The chapter concludes by elaborating upon the methodology adopted to conduct this study.

Chapter 2, gives a historical overview of video games both in international and Indian context. It elaborates upon the existing typologies of video games and also demystifies some of the core concepts related to video games. The idea of this chapter is to familiarise the reader with the history and the technicalities of the medium before delving into study of the selected games.

Chapter 3 elucidates the major strands of study on video games. The chapter gives an idea of the different academic perspectives through which game studies have been conducted. Subsequent section of the chapter is divided into sections of conceptual and methodological review and deals with specific literature pertaining to the immediate context of study.

Chapter 4 and 5 presents an ethnographic of selected video games. The games are studied and observed based upon parameters of game development, game content and game play. These three parameters form three sections within the chapter. The chapter documents the personal interviews with game developers and other resource people and highlights upon creative and financial aspects of game development. Apart from direct interviews, the documentation has also been done through playing of the game. The playing of the game not only revealed the content but was also instrumental in knowing about how the activity of playing is important for the conveyance of the message embedded within the game.

Chapter 6 elicits the emerging possibilities afforded through the medium of video games in India through analysing both the games and contextualising it within the recent trends and innovations in the global gaming scenario. Chapter 7 is the concluding chapter and summarises the contributions and findings of all preceding chapters and presents the research argument and the quantum of work done in that regard, in a nutshell.



## **CHAPTER 2: Understanding Video Games**

### **2.1 Introduction**

In contemporary times video games is one of the mass medium for entertainment and its industry boasts of 30.4 million in revenues generated from spending more than 3 billion hours a week gaming. Certainly, they are not unknown anymore and it's pretty evident from the frenzy created whenever a major AAA title such as 'Call of Duty', 'Resident Evil', 'GTA' etc. are released. However, there is a flipside to the widely accepted and popular notion of video games wholly as source and means of entertainment. Video games being games do have the quality of fun central to it and hence entertainment becomes the direct derivative, however, the fun and play should be seen with a broader view as loose entities which can be contextualized in different situations. It comes as no surprise that video games have found fertile grounds in diverse fields such as education, healthcare, social behaviour and is a good example of how concept of fun, games and play can be contextualized in different scenarios. This chapter aims to demystify some of the core concepts surrounding video games and elaborate how the fun element of video games can be contextualised within different situations.

### **2.2 A Brief History of Video Games**

Video games emerged as a phenomenon in West around 1970-80s when they were first commercially available due to drop in the prices of computer and related technologies. Apart

from being a game, video games refer to the technology, economy and the culture fostered by the medium. The gigantic size of the video game industry is actually a culmination of many different technologies having its origin in the latter half of the 20<sup>th</sup> century. First commercial video games were not computer games rather they were console games meant to be played on ordinary television sets. The invention of Cathode ray tube (CRT) in 1922 made television displays affordable and available on a mass scale. The first ever homemade video game console by the name of Magnavox Odyssey which appeared in 1972 was made for ordinary television sets. First commercially successful video game 'PONG' developed by Allan Alcorn and marketed by Atari co-founder Nolan Bushnell was again a console game meant to be played in arcade machines. In fact, "apart from the computer itself, much of the technology used by the video game was already firmly in place by the 1960s." (Wolf, 2008).

Video game evolved parallel to the course of development of computer technology. Computer technology saw swift developments throughout the latter half of 20th century "mid-1980s as a watershed, when the PC began to be equipped with interactive graphic interfaces". (Lister & Dovey, 2009). Technology is indispensable for video games. The initial usage of video games signified the visual technology needed for display of these games which at that time were mostly TV screens. Gradually as technology evolved, visual output diversified into computer screens, mobile screens etc. Consequently, video games being developed for these platforms were named after the technology they were using such as computer games, mobile games, console games etc. Categorically, video games have been a contested term as several alternatives exist in form of 'computer games', 'digital games', 'electronic games' etc. and many scholars have preferred one alternative over other (Karhulahti, 2015; Mayra, 2008; Tavinor, 2008; Kerr, 2006; Esposito, 2005; Wolf & Perron, 2003; Juul, 1999) but overall, either alternative covers games making use of visual and digital

technology irrespective of platform. Video games continue to be the preferred usage among the scholars mainly because “it is the term that dominates current usage, and because it has the virtue of referring to the visual aspect of games that seems crucial to their definition” (Tavinor, 2008).

From relative unfamiliarity about them in its initial years video game now have become almost a ubiquitous phenomenon owing to the converging developments within technology. Video games, no doubt, have come of age because they haven't just remained games. In fact, games were never just games. Play precedes human civilization and games are one of the many manifestations of the play element. Animals learn their way of world through playing by simulating the prey and victim environment, biting and pinning down their own within the controlled confine to prepare themselves for the bigger or 'real' problem. As the old adage goes 'All work and no play make Jack a dull boy' there is nothing new in educational application of games. “Play turns to seriousness and seriousness to play”. (Huizinga, 1949). Roger Caillois, a French intellectual who wrote extensively on games and play, makes a valid suggestion 'to try diagnosing a civilization in the terms of the games that are especially popular there. (Caillois, 2001). Though physical games and sports remain culturally important but video games for good amount of time faced cultural malignation. Marginalization of video games can be attributed to several factors one of which was general scepticism towards technology which persists even in present times as can be seen in the case of artificial intelligence and social media. The perspective however has gradually changed to a more critical outlook towards video games in particular and digital technology in general as they become more assimilated in our cultural practices.

Culture in itself is a hard term to define and there exist many debates arguing about what exactly constitutes a culture, however, when any practice starts producing meaning and identity at a collective level then it becomes a cultural practice particular to the practicing society or community. Consequently, when this process of identification and meaning making happens on a mass scale it is termed as popular culture or mainstream culture and when it remains limited to only a particular community or group of people then it is termed as a subculture. Subculture can be understood as a set of beliefs and practices which are relevant for only a certain community which at the same time is a part of the larger domain of mainstream or dominant culture. For example – Sadhu or Sufi culture within the larger domain of Indian culture.

To understand a term as fluid as culture it is important to understand the process of how societies emerge. In context of video games, when it first emerged in west they gained immense and immediate popularity however they didn't receive wide acceptance. Until that time video game culture mostly remained as a subculture, however towards late 1990s when video games discourse started entering into the field of academics complemented with other factors such as technological convergence, affordability of video games, emerging markets, then gradually video games started being assimilated into popular culture to a point where now video games are seen as effective and innovative tools for imparting education, artistic expression, health awareness etc.

Following the advent of internet, video games became more easily accessible to people across physical boundaries and players were able to interact with each other regardless of physical proximity thus giving rise to virtual societies and virtual worlds. At present, digital platforms

have increased manifold and games are no longer restricted to the domains of PC and gaming consoles. They are now available on a plethora of platforms such as smart phones, tablets, phablets, iPad, etc. making each one of us a gamer. Jesper Juul calls this “A Casual Revolution” (2009) which he describes as a “breakthrough moment in the history where everyone is gaining access to video game.” (p.35) What earlier was considered technically challenging and rested in the domains of mostly hardcore gamers is now absolutely normal. “Video games became normal because one did not have to spend hours to get anywhere in a game, because the games fit the social contexts in which people were already spending their time.” (Juul, 2009) is how Jesper Juul describes this normalcy. This very trait of normalcy, the way it has seeped into our everyday lives serving the purpose of entertainment or social interaction or research is evident of the fact that video games have become an important part of the popular culture.

### **2.3 Video games in India: A historical and cultural account**

*History of Video games in part is history of technology.*

*(Jesper Juul – A Casual Revolution, 1999)*

Video games first arrived in India during the 1990s at a time when digital technology had just started to get some pace in Indian markets. Though the video games which first appeared were console games and were not meant to be played on computers. They came with their own system, controllers and cartridges and required a television screen for visual display much like today’s Xbox and PlayStation. Within India however, it was the computer

technology which played an enormous role in the adoption and spreading of video games amongst the Indian urban media population. The history of computers in India dates back to 1955 with the “installation of HEC-2M ... a computer designed by A.D.Booth in England at the Indian Statistical Institute (ISI) at Calcutta.” (Rajaraman, 2012, p. 7). These were huge and complex machines primarily for the purpose of calculations and were limited to educational centers for scientific and statistical purposes. It was during the decade of 1980-90s that the use of computers gradually permeated in the popular sphere and ultimately, liberalization of economy in 1991 provided impetus to diffusion of computer technology on a mass scale in the country.

Simultaneous to computer technology, video games were also present in India but owing to the high taxes and import duties pre-liberalization, video games were exorbitantly priced making them virtually non-existent. The earlier games weren't played on the computer rather there were consoles manufactured by international companies such as Nintendo, Sega, Atari etc. which required cassette like cartridges on which the game was stored and needed a television screen for the visual display. The exhaustive set of paraphernalia required a lot of money to develop the video game and then import costs made it further expensive owing to the restrictive economic policies. Video games as console systems entered very less homes as investing in a gaming console was expensive and given the availability of relatively cheaper media in the form of television and cinema, the investment was considered a complete waste of money. Investing in a computer however, was an attractive option as it allowed multitasking and perform various other tasks with ease and accuracy.

### **2.3.1 Early Auto-ethnographic Historical Account**

From what only few could afford to lay their hands on the games in their early days in the country, it has today become one of the most popular, affordable and easily available leisure activity. This research study has been motivated through researcher's personal involvement as a player with the medium since relatively early days of 1990s and the subsequent technological boom and emergence of regional game industry and culture.

I was lucky in 1998 as a growing up child in Aligarh to own a a personal computer back when computers had just started to become more affordable. The PC ran on Windows 95 edition and me along with my elder brother would intensely compete with each other in Pinball and Minesweeper trying to beat each other's high scores. Occasionally, my mother would play a game of Solitaire for a stretch of 10-15 minutes. Unlike present times, familiarity with digital technology was non-existent and computer culture was still in an embryonic stage. Owning a personal computer was a prized possession and was handled with utmost care. In my home, computer was only meant to be switched on during Sundays strictly for an hour during evening. Most of our time was spent playing games and listening to music while occasionally practicing applications such as MS-Word, Power-point taught in our school curriculum in the limited time of 60 minutes divided in two breaks of 30 minutes each for me and my brother. As the machine was an expensive investment, extra care was taken by not switching on computers on weekdays to save both electricity bill and protect the machine from unpredictable power fluctuations. This routine was only sporadically interrupted when someone had to use the printer or access internet. Broadband services didn't exist at that time and computers connected to internet through Dial-up connection which offered speeds just

enough for email delivery and basic browsing so any sort of online gaming was out of question.

During my growing years the routine was strictly followed, however by the time I was in middle school around 2006-07 the situation had gradually begun to change. Most of my friends by now possessed computers and were avid players of computer games. Major factor was obviously the increased adoption of personal computers in Indian households. According to the World bank report by the year 2007, three out of 100 people in India possessed personal computers. Though still less according to the present user statistics, the figure below clearly shows the pattern of consistent growth of computer usage since 1990s.



Figure 1: World Bank Development Indicator -India 2007 (World-Bank, 2007)

The increased adoption on a mass level had its implications on culture as paradigms of interaction underwent subtle yet massive change. The preference of computer over social and



physical interactions especially for entertainment gave way to individual interaction and engagement with the technology – a behaviour which became prevalent on a mass level. Computer culture further opened up avenues economically especially in a developing country like India where relatively less purchasing power, cheap labour and weak cyber laws made piracy a thriving business. In school most of my classmates now possessed computers and we often exchanged a lot of music and CDs of video games between ourselves. Some popular games in circulation within our group were ‘Roadrash’, ‘Midtown Madness’, ‘Hitman’, ‘Maxpayne’, ‘Mafia’, ‘Need for speed’, ‘Age of Empires’ etc. The games were either cheaply available pirated copies or came as demo versions in the CDs which came free with several computer and technology magazines such as ‘Information technology’, ‘Digit’ etc.

Aniket Majumdar another video game player from India and an online user chronicles his journey of video games in his blog – ‘Virtual Diaries: Looking back at two decades of gaming in India’ on blog hosting and sharing platform Medium. Recalling his early days when he was first introduced to Aniket writes:

*Growing up in 1990s... My first introduction to video games was at an arcade. We lived in the outskirts of Kolkata (which was known as Calcutta back then) ... I have some early memories of there being an arcade adjacent to one of the cinemas, which I managed to visit a couple of times before it closed down. That was where my infatuation with video games began... Those days, having a PC was not very common. My father was an entrepreneur and an engineer, and so he bought a PC for his personal office...The first PC game I fell in love with was Age of Empires II (again, demo version). I had access to the tutorial levels and could only play as the Celtic civilization, but I was completely blown away by the graphics and the concept*

*of managing your own kingdom. I remember planning my kingdom in class when the teacher was not looking. I used to scribble how many villagers I would need for each resource, how many soldiers, bowmen, and monks would be enough, etc. Then I would return home and try to implement my school-time strategies into the game. It was also the Age of Empires II demo that attracted me to medieval Europe's history and culture, and it was the Warlords: Battlecry demo that made me fall in love with medieval European fantasy. I also spent hours playing the demo of Zeus: Master of Olympus. (Majumdar, 2015)*

Being an avid gamer himself Aniket is no stranger to the rise of computer culture and game industry in India and makes an important observation from his experience:

*whole gaming industry in India exists today because of piracy from back then. I was among the first generation of gamers here, and we had no concept of piracy. The computer culture was new; nobody told us that copying a game was wrong. I myself had no internet until a couple of years later. I did not know how games were made, how they were sold, or anything else about the industry. And to be honest, I did not pause to think about such things. It was true for all of my friends back then, who eventually bought their own PCs. (Majumdar, 2015)*

Playing video games was gradually becoming more regular, although still not on everyday basis but as a mode of recreation and entertainment it gradually gained preference over physical form of play. Everyday discussions amongst my friend circle were often about tips

on how to cross certain levels in games, sharing cheat codes and challenging each other skills and scores. “I remember being enthralled by Spiderman, Enter the Matrix for the gameplay and the freedom they gave me to relive the movies in my own way” reveals, Umar Mohd Khan- student of Mathematics and another video game player from India who was introduced to gaming through a ‘Gameboy’ gaming console. (Khan, 2017). Alongside computers, there were other platforms available as well to play video games such as gaming consoles like PlayStation, Xbox and hand-held video gaming units. Many youths, mostly boys would also visit the video game parlour and cyber cafes where they played games on consoles and computers in exchange of a fee for a limited amount of time.

Pirated CDs of latest game titles were easily available for as less as 20-40 rupees and sold like hot cakes. Most of these games were either action or racing games and money-based tournaments were a common occurrence in video game parlours across the city. Now obsolete video game parlours used to be popular hangout places for young gamers who would bide their time in long queues for their turn at play. These spaces vanished as quickly as they emerged as corresponding this digital technology abroad was evolving in leaps and bounds and Indian markets remained no stranger to these developments. So, although computers were a fairly new medium in India and video games culture had just started to emerge, the technology upgraded rapidly. Not only the computer technology needed to be upgraded with high capacity RAMs, Graphic cards, processors etc., new gadgets and devices were also entering Indian markets.

During late 1990s and early 2000s mobile phones made an entry in Indian markets, however, as was the case with computers, their presence failed to impress initially owing to high

service costs and its restricted usability owing to network issues. Umang Das, a prominent figure in Indian telecom circles in an article written for Economic Times recalls the momentous event when he witnessed what was perhaps going to usher India in a period of mobile revolution.

*We weren't expecting anything more than a courtesy meeting. Towards the end of the meeting, Basu, in his typical bhadrak manner, asserted that Calcutta should become India's first city to have a mobile network. The entrepreneurial zeal of Modi made him commit to an exact date: July 31, 1995, as my mind immediately moved towards 'project countdown... Equipped with the determination to keep our word, we landed up in Australia to hold discussions with our joint venture partner, Telstra, to help us to find a suitable technology partner. The hunt for the technical expert who could roll out such a network brought us to Nokia, which had been a sleeping giant till then in Australia. Nokia had cutting-edge technology but were initially reluctant. Perhaps it was the timeline. It took us a bit of convincing to get them going and it wasn't until Nokia agreed to accompany us that we hopped on the same flight back to India. And that's how we partnered with a sceptical Nokia to accomplish the impossible. Within nine months, the network was in place. We kept the promise by being ingenious but played it by the book. There has been no looking back for Indian telecom since then.*

(Das, 2015).

What started with Nokia feature phones was carried forward through HTC when it released the first Android smartphone in India in 2008. The present competitiveness in the telecom sector is an evidence of the popularity of mobile phones both as an economy and as a

technology. Citing present government initiatives as an evidence of mobile revolution, Das emphasises on the power and impact of mobile technology among Indian masses as he says:

*Today, two of the biggest development schemes of the government, Digital India and Smart Cities, rely on wireless telecommunications to bear the fruits of a connected society. Moreover, the other two government programmes, Skill India and Make in India, are predominantly relying on the power of telecom and technology. Had it not been for the mobile revolution, India's buzzing startup scene wouldn't have been half as vibrant as it is today. (Das, 2015)*

Mobile gaming scenario in India is a rapidly emerging field. Telecom industry has matured along with the high usage of smartphones in India resulting in cheap mobile devices, fast and stable network and good internet speed. Mobile games are one of the popular sources of entertainment as the figures from a report of market survey of Mobile gaming industry in India published in 2016 illustrates (Annie & NASSCOMM, 2016)

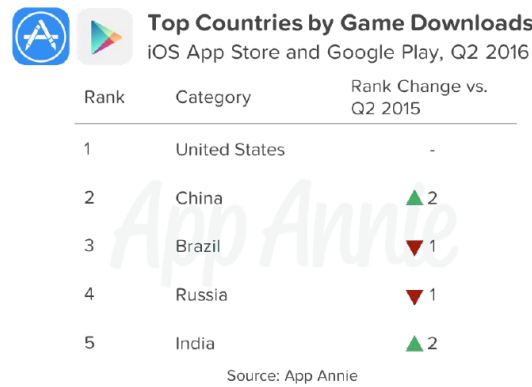


Figure 2: A report on 'Mobile Gaming on the rise in India' (2016) - App Annie

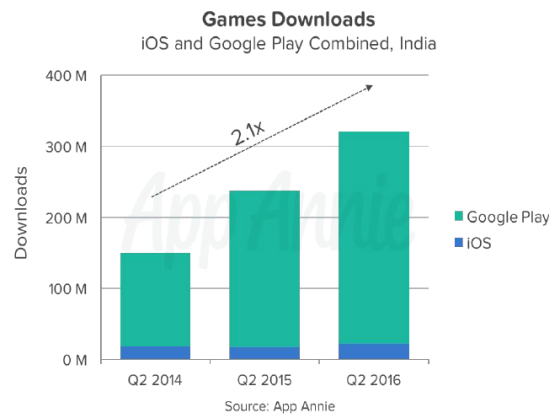


Figure 3: App Annie & NASSCOMM (2016)

The popularity of mobile video games is documented interestingly in yet another player account of a female Indian video game player. Neha Mathews (2016) talks about what was it like to be a woman video game player in India. In her blog ‘The (mobile) games women play’ (2016) she documents her experience along with that of several other women from different professions about their interaction with mobile video games. Recalling her own introduction to video games she writes:

*While I was growing up in the sleepy town of Pune, many teenage girls made the most of their first cell phones by sending coy, flirty texts to their boyfriends and making plans about which Café Coffee Day to hang out at after school. Those blessed with early smartphones also had the privilege of uploading a new Facebook profile picture every week... meanwhile, I was busy playing Snake 2 on my dinky Nokia 1101.*

(Mathews, 2016)

In her highly informative piece of work, Mathew observes how the popularity of mobile video games amongst Indian women is owing mainly to its accessibility and easy gameplay:

*It has a lot to do with how easy it is. Unlike console gaming, mobile gaming requires very little investment when it comes to time, money or effort. With simple gameplay and easy tutorials, these games have you invested at the get-go, and then keep challenging you so you never leave their sorry asses. They're also really easy to access. You can pull out your phone wherever you are and fit in a quick game before hitting the pause button and continuing with your daily activities. Women play mobile games when they're commuting, before they fall asleep, while they're watching TV, and mostly when they're, well, in the bathroom. (Mathews, 2016).*

Mobile technology has greatly revolutionised the current communication scenario. The graphs below shows the growth of mobile phones and wireless subscriptions in India.

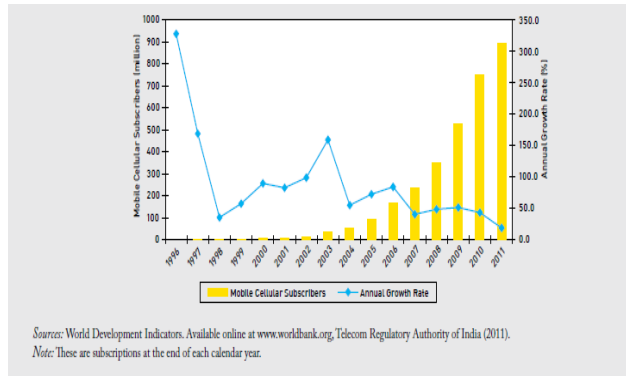


Figure 4: Wireless Subscribers and Growth Rate in India (1996-2011) (TRAI, 2012)

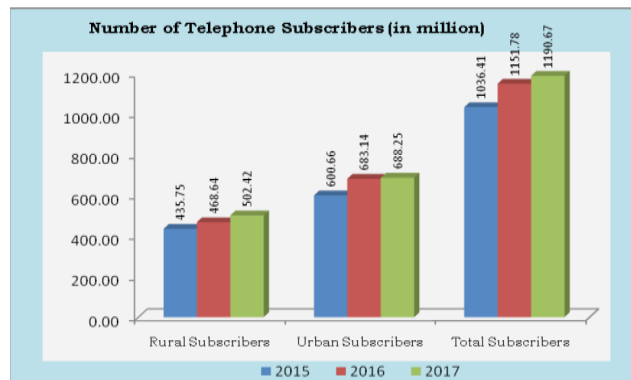


Figure 5: Telephone Subscriptions in India (TRAI, 2017)

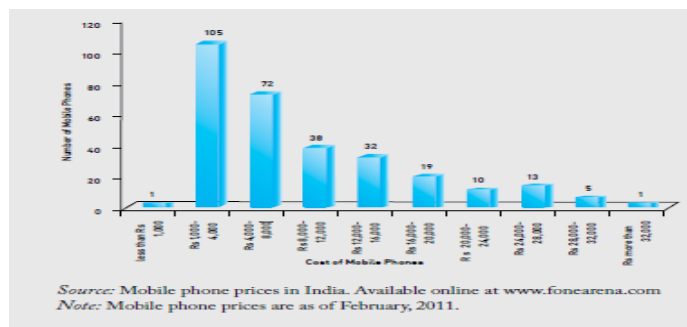


Figure 6: Mobile Phone prices in India (TRAI, Overview of Telecom and Broadcasting Sectors, 2017)

While the mobile phone and internet subscription has been on rise, prices of mobile phones have kept on steadily declining. More recently introduction of 4G technology in India has made mobile phones more efficient and preferred medium for communication and entertainment.



The evolution of technology also saw change in the pattern of game playing and consumption. By the end of first decade of 2000s, the picture had changed completely as now most of the people had their own devices either laptops or mobiles and owing to faster Internet speeds there is formidable presence of Indian players in online gaming forums and online game competitions. Cheap and affordable mobile technology further normalised the gaming culture in India.


















IMAGE	RANK	COUNTRY	POPULATION	INTERNET POPULATION	TOTAL REVENUES IN US DOLLARS
	1	China	1,410 M	814 M	32,536 M
	2	United States of America	324 M	260 M	25,426 M
	3	Japan	127 M	121 M	14,048 M
	4	Germany	82 M	74 M	4,430 M
	5	United Kingdom	66 M	62 M	4,238 M
	6	Republic of Korea	51 M	47 M	4,203 M
	7	France	65 M	57 M	2,977 M
	8	Canada	37 M	33 M	1,968 M
	9	Spain	46 M	39 M	1,918 M
	10	Italy	59 M	43 M	1,881 M
	11	Russian Federation	144 M	114 M	1,531 M
	12	Mexico	129 M	83 M	1,418 M
	13	Brazil	209 M	139 M	1,324 M
	14	Australia	24 M	22 M	1,242 M
	15	Taiwan	24 M	21 M	1,030 M
	16	Indonesia	264 M	72 M	882 M
	17	India	1,339 M	428 M	819 M

Figure 7: India online gaming users (Newzoo, 2017)

The increasing engagement with digital products especially video games have generated a sceptical outlook of elders towards playing video games as Umar Mohd. Khan narrates - “The primary perception among the elders in my family is that video games are distractions and leisure pursuits that rank below playing physical sports because at least sports allow you to stay physically fit.” (Khan, 2017). The scepticism of such sort is spread by the general perception about video games built through either the mainstream titles which mostly either

bank on violence and gender stereotyping for mass appeal or casual mobile games which literally are nothing other than an addictive leisure activity. To extend the scope of video games beyond leisure thus it is important to add value to the activity of game creation and game playing other than that of leisure so as to both game developer and players partake in something meaningful which doesn't necessarily have to be trivial.

In India especially, video games have emerged as an important contributor to country's economy. The market share of video games has seen a consistent growth since its emergence.

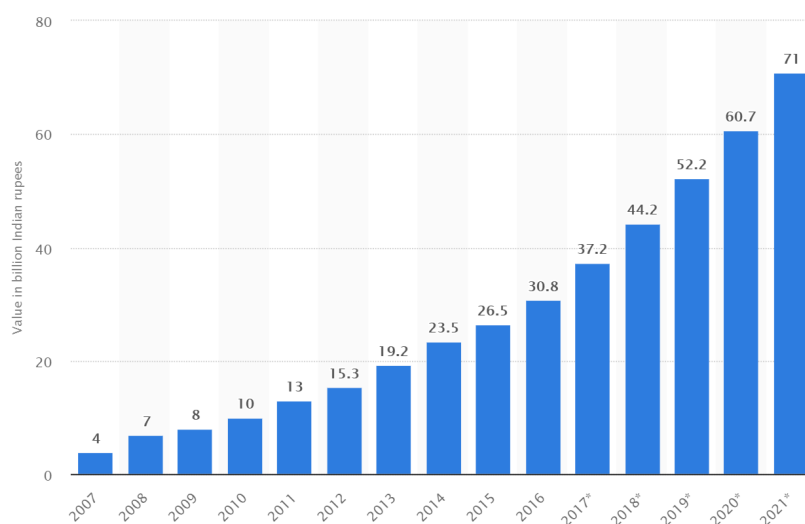


Figure 8: Indian video game market share (Statista, 2015)

As a culture it has pervaded the sphere of popular/mainstream culture. This is evident by the success of video games based on the popular references of Bollywood movies and popular sports personalities. “Celebrity and persona-based Bollywood and sport celebrity games have witnessed huge success over the last few years., and this is expected to significantly boost gaming content consumption in the country over the next five years.” (CII and TechSci

Research, 2017). Apart from the popular culture, a niche community has also emerged within India which wants to experiment with the medium of games and consciously wants to deviate from the industry mode of game development. Such signs are hugely encouraging and promising for the future of gaming scenario in India.

The growing trend of video games reflects in other statistical reports published by leading media watchdogs. Indian gaming industry has been growing at a good pace and is expected to be worth USD 801 by 2022 growing at the CAGR of 6.61% (CII and TechSci Research, 2017). This complemented with the increase in number of telephone subscribers in India to 1,102.94 million and broadband subscribers to 218.42 million at the end of Oct-16 (TRAI, Overview of Telecom and Broadcasting Sectors, 2017) which makes mobiles, especially smartphones the most popular and also the fastest growing platform for development and consumption of video games followed by PC and gaming consoles. (CII and TechSci Research, 2017). While the industry figures have been optimistic with each passing year the report also observes that increase in urban level income has made advanced technology (hardware and software) more accessible to Indian users. (CII and TechSci Research, 2017).

The place of video games within Indian culture is still limited to the activity of leisure. Game titles popular in India are all international titles such as “*Clash of Clans, Call of Duty, Clash Royale, Counter Strike, Clash of Kings, Grand Theft Auto*” while locally made games are mostly based on Indian popular culture such as the digitized versions of traditional card games, board games, physical sports like cricket and many of them are also based on popular

Bollywood cinema. This dependence on popular culture has restricted video games strictly within the domain of entertainment. Though, it's not important for games to be based upon local content or local narratives it however reflects the value associated with the medium. Shaw observes that “Video games in India are marked as Western—and specifically American as a result there is a general misconception that digital games are external to Indian media culture.” (2013). In a study conducted by App Annie in 2016 about mobile gaming in India, following trends were revealed:

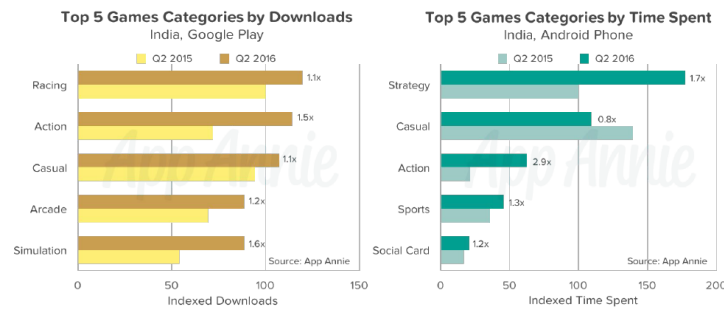


Figure 9: AppAnnie & NASSCOMM (2016)

**Top Games by Downloads, India**  
iOS App Store and Google Play Combined, Q2 2016

Rank	App	Company	Genre	Company HQ
1	Candy Crush Saga	Activision Blizzard	Casual	United States
2	Subway Surfers	Kiloo	Arcade	Denmark
3	Temple Run 2	Imangi	Action	United States
4	Train Simulator 2016	Timuz	Simulation	India
5	Doodle Army 2 : Mini Militia	Appsomniacs	Action	United States
6	My Talking Tom	Outfit7	Casual	Cyprus
7	Racing in Car	Fast Free Games	Racing	Turkey
8	Traffic Rider	Soner Kara	Racing	Turkey
9	Hill Climb Racing	Fingersoft	Racing	Finland
10	Clash of Clans	Supercell	Strategy	Finland

Source: App Annie

Figure 10: AppAnnie & NASSCOMM (2016)

The observations unsurprisingly reveal the casual and leisurely engagement with the video games, however what is encouraging is the increasing number of gamers from India where video games appeared almost 3 decades after they first appeared in USA and Japan. “India did not experience the evolution of digital gaming that began in the 1960s in the United States and Japan” (Shaw, 2013) as a result Indian players or gamers don’t have the same progression through games and its technology as their US counterparts. Adrienne Shaw in her 3-month ethnographic study of Indian gaming industry and culture observes that apart from the huge diversity of the country, the abrupt introduction of technology and its limitation to certain economic classes makes Indian gaming scenario quite messy. “In India everything is happening all at once... There was no build up from playing simple games, such as *Pong* and *Space Invaders* to more complex games like *Call of Duty*; there was no subsequent shift to casual games, mobile games, and social networking games.” says Rajesh Rao – CEO of Dhruva interactive, India’s first game development company- in an interview with Shaw. (Shaw, 2013).

Video game culture in India for most of the time have been on the periphery of mainstream culture. It was only after the boom of mobile technology that video games were able to tap into sizeable Indian population. Presently, Indian video game industry grows at an exciting rate and shows great potential however it still has to go a fair way in producing original content and be a competitive sector within highly competitive Indian entertainment industry.

### **2.3.2 Industry in India**

Video games industry emerged around late 1990s around the same time when video games technology entered the Indian markets. India’s liberalization of its economy in 1991 saw

import duties slashed on computers and related technology which consequently carved the way for digital technology enter Indian markets and home. Dhruva Interactive was the first Indian video game company to be setup in 1997 which was soon followed by establishment of other companies such as Nazara technologies in 1999, Zapak games in 2005 etc. The decade from 2000-2010 saw setup of several video game and gradual establishment of regional video game industry. National Association of Software and Services Companies (NASSCOM) – is a Non-profit organization established on 1988 which oversees Indian I.T and B.P.O sector in their recent annual report pegs the number of Indian gaming companies to 200 with an annual revenue share of USD 300 million. (NASSCOM, 2016-17). Indian gaming industry has been growing at a good pace and is expected to be worth USD 801 by 2022 growing at the CAGR of 6.61% (CII and TechSci Research, 2017).

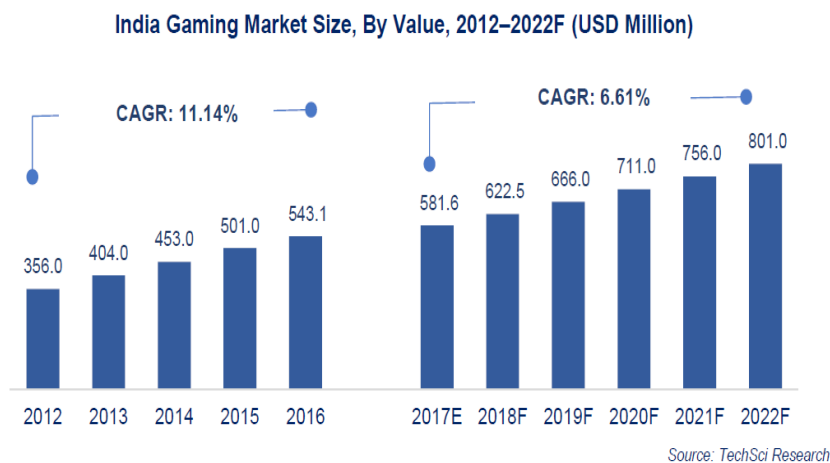


Figure 11: Emerging Trends in Indian gaming Industry

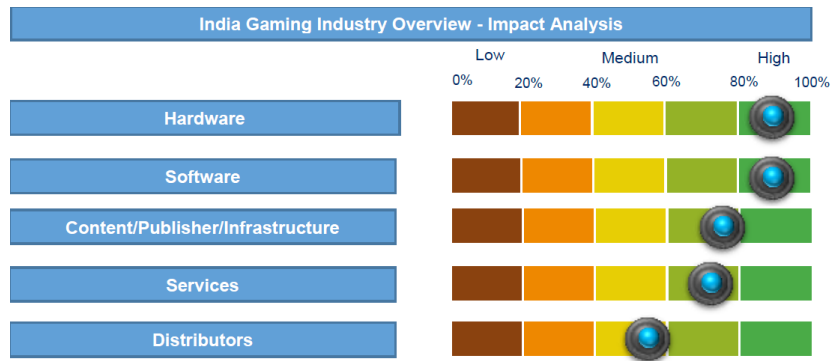


Figure 12: Gaming Industry Overview

This complemented with the increase in number of mobile phone subscribers in India to 1,170.18 million and broadband subscribers to 276.52 million at the end of 31<sup>st</sup> March, 2017 (TRAI, 2017) which makes mobiles, especially smartphones the most popular and also the fastest growing platform for development and consumption of video games followed by PC and gaming consoles. (CII and TechSci Research, 2017).

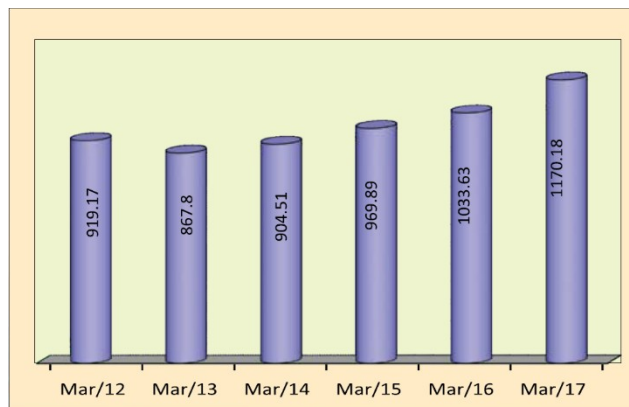


Figure 13: Wireless subscriber base 2012-17

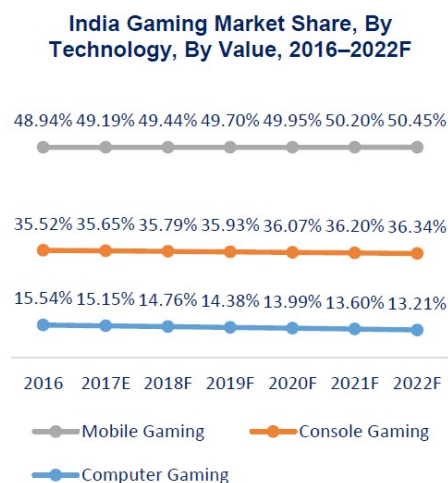


Figure 14: CII & TechSci Research, 2017

While the industry figures have been optimistic with each passing year the report also observes that increase in urban level income has made advanced technology (both hardware and software) more accessible to Indian users. (CII and TechSci Research, 2017).

The statistics and emerging trends are a major boost for growing Indian gaming industry, however, the major concern with the output is lack of originality. For most amount of time Indian video game industry has been an outsourcing market for foreign industries where video games could be developed at cheap costs. Games which were coming out of industry were mostly based on the preferences of popular culture. They were either digital renditions of physical sports in India such as cricket, badminton, kabaddi, card games, board games or were based on popular Bollywood movies such as ‘*Fan: The Game*’, ‘*Sultan: The Game*’, ‘*Dhoom 3: The Game*’ etc. as a part of their marketing strategy.



Unlike other entertainment industries, video games haven't borrowed much from the Indian culture or history and there has been no conceptualisation of a video game based upon Indian cultures, identity or landscape. Few games which make use of 'Indian' objects use so in a very trivial manner such as the racing games being developed with auto-rickshaws or cycle-rickshaws rather than cars or motorbikes. Shaw (2013) aptly points out this tendency of 'mapping of Indian content onto well-known game mechanics.' (p.63).

### **2.3.3 Independent game development in India**

Indie video games are independently developed games made with personal and often limited resources. As opposed to the mainstream or industry counterparts whose decisions are largely guided by the variables of profit/revenue generation and mass appeal, independent games generally have a niche audience and are largely guided by personal decisions than mass appeal which many a times leads to a wide variety of games in terms of content, play, interactions, visuals thus making it viable to have games of experimental or exploratory nature which test the boundaries of medium of video games. There was never a clear distinction between the industry and independent development in Indian markets especially during its early days owing to overlapping modes of production. Its only in recent years that a certain difference in style and content is visible in upcoming video games.

In a recently published article about future Indian video games to look forward to, all four games mentioned are made by independent game developers out of which two draw their content from Indian culture.<sup>3</sup> Independent game culture has also been fostered by the emergence of events like NGDC (National Game Developers Conference) an annual event hosted by NASSCOM which rewards best Indie game of the year based on the entries

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<sup>3</sup> 'Four Made-in-India PC Games to Look Forward to in New Year's 2018' – Article published in NDTV Gadgets on 2<sup>nd</sup> January, 2018

received over the course of year. Such gatherings have been hugely helpful in not only recognizing the work of independent developers but also through providing them incentives of awards and wider exposure help in making a conducive atmosphere for indie developers to work. and it won't be wrong to claim that presently much of the original work has been coming from independent game developers.

Within this independent culture, there is an emerging trend of video games as an expressive medium where games are embedding cultures with play. Zeiler (2017) observes “Since approximately 2015, a highly interesting development in the larger video game boom in India is a wave of new games that make extensive use of South Asian cultural settings.” (p.88). *'Unrest'*, *'Raji'*, *'Asura'*, *'Hanuman'* are to name some few games inspired by Indian mythologies and culture.

It is noteworthy that all this is happening simultaneous to technological developments in the country which has a big role to play in accessibility of these video games. This is evident with the case of mobile technology which in comparison of other technology, has experienced wider diffusion in Indian society across class and economic barriers. Naturally this makes video games developed specifically for mobile platform more accessible than games being developed for computer and consoles.

## **2.4 Typologies of video games**

Classification of video games are in abundance based on several parameters such as platforms, content, playing style etc. Typology of video games is made problematic by the

medium itself. As noted above, video games are a culmination of many mediums and signify multiple things at once, as a result of which there exists too many parameters to make any coherent universal classification. Juul observes that rate of development and diversification in field of video games is so rapid that “it is safe to say that genre does not figure very prominently in the study of games or in game design discussion.” (Juul, 2005).

Based on existing trends, video games can be broadly divided into five categories:

1. Platform based division
2. Development based Division
3. Action based division
4. Player and perspective-based division
5. Idea based division

These categories however should not be mistaken as absolute classifications as several scholars and game practitioner have pointed out the shortcomings and problems within the genre classification of video games. Rather these should be understood as mutually overlapping categories which makes marketing and distribution of video games accessible.

**Platform based division** is currently the dominant way of identifying the games. In this division the games are divided according to the devices they are played upon. For e.g.: mobile games, computer games, console games, handheld games etc. Popular games like ‘*Pokémon GO*’, ‘*Temple Run*’ will be classified under mobile games as they are playable specifically only on mobile devices. Similarly, games like ‘*Hitman*’, ‘*Assassin’s Creed*’ will

be classified under computer games because of their dependence of the machine. Earlier this classification held exclusivity to some extent but with convergence of technology now most games are being developed in such a way that they can be played across platforms. For eg: *FIFA* – a popular football video game which is released annually and is designed for all three platforms of mobile, computer and console.

**Development based division** classifies the game depending on their mode of production. There are two modes of development: Industry and Independent. Industry mode of development is the mainstream mode of game development where the game production is backed by international corporates and game publishers such as EA, Ubisoft, Rockstar etc. Game development team is made up of highly skilled professionals. The prime focus of the industry developed games is to be accessible, appealing and entertaining to its global audience. Owing to huge market share industry developed games generate huge profits as well as a result high technical excellence but not much experimentation with content is visible in industry developed games.

In contrast, independent games also referred to as indie games are developed individually or by a group of people from their own personal resources and finances. Given the paucity of resources the exposure of independent games is limited to only a niche community and hardly generate any profit. Independent creators generally employ strategies of crowdfunding and pay-as-you-like to raise development budget. The game development team is either made up of couple of individuals or might be a collaborative and participative affair between several artists and professional. Though independent games suffer from less exposure and less funds but mostly exhibit high degree of expressivity and experimentation.

**Action based division** is another popular way of classifying games which has been there since video games became commercially available in 1970s. In this category video games are classified according to the overall actions which is meant to be performed within the game. For eg: action games, sports game, racing games etc. Normally most games require a combination of several actions. For e.g.- *Grand Theft auto (GTA)* game franchise allows player to perform several actions such as racing, action, sports and exploration within their games.

**Player and perspective-based division** is based upon the number of players required to play the game. On basis of this division games can be classified either as a single player game which requires a single player or a multiplayer game which requires more than one player to play the game. For e.g.: most mobile games such as '*Temple Run*' and '*Subway Surfer*' require only one player to complete the game objectives, while in games such as '*FIFA*', '*Counter-Strike*' one can compete with several other players either through internet or through setting up a local WLAN connection. Advent of internet and higher bandwidth have allowed player participation on a massive scale which has further produced variants within the multi-player genre as 'massively multiplayer' and 'multi-team' options.

Classification on the basis of perspective indicates that in what perspective will the player be controlling his in-game character. It can be either in first-person where player itself is the in-game character or third-person where the player can see the whole character which he controls. First-person and third-person are two most popular distinctions on the basis of perspective, however, there are other options as well which can be found within the vast

repository of video games such as top-down perspective in the case of ‘Tetris’ and side-scrolling perspective in the case of ‘Mario’.

***Idea based division*** classifies the game on the basis of the idea represented through its story, characters and play. This category of video games tries to extend the scope of the medium beyond entertainment by clubbing games according to the value embedded in them. Although entertainment in itself is an idea, the category emphasises on the new and unique avenues where the medium of video games is being utilised. For e.g.- Cultural games, political games, educational games etc.

Genre classifications of video games is done mostly to enhance the market-ability of the game which renders most of the classifications vague and overlapping. Apperley (2006) points out the major problem with present classification of video games is that the categories used for division bears similarity with previous media forms and thus ignoring the unique qualities of the medium. Similar observations have been made in other studies which have pointed out the failure of existing classification to take in account the activity of player interaction. Hence, all the classifications should be understood as broad divisions with vague boundaries and with further subdivisions. This highlights the problem of genre classification within game studies pertaining to the reason that which element should gain precedence over other - representation, gameplay, themes or the goals. Following distinctions aren’t misplaced but aren’t complete as well. Below is the table which illustrates the five broad categories of video-game classification:

S. No.	Categories	Types
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1	Platform	Consoles, Arcade, Computer, Handheld devices, Mobile, Internet
2	Development	Industry, Independent (Indie)
3	Action	Action, Sports, Racing, Puzzle, Survival, Sci-fiction, Strategy, Simulation, Stealth
4	Player and perspective	Single player, Multiplayer, Massively Multiplayer, Single team, Multi-team, Co-operative  First person, Third Person, Top-down, Side-scrolling
5	Idea	Cultural, Historical, Casual, Serious, Educational, Political, Entertainment, Fitness

*Table 1: Typologies of video games*

## 2.5 Demystifying Core Concepts of Video Games

At core of every game there are rules which define the goals and means to achieve it. Be it a game of chess or '*Call of Duty*' both have an objective which has to be achieved by the means devised for it. In a game of chess, it is to strategically move the pieces in prescribed manner (diagonal moves of bishop, straight moves of rook) such that it outsmarts the opponent, while in *Call of Duty* it's about traversing the story-world of the game and shoot the opponents in order to accumulate more points. The movements and interaction that a player can make such as run, jump and crouch are hardcoded in the game software through programming language. These embedded rules not only define how a game has to be played but also defines how and to what degree a player can engage and interact with the game. The point worth observing is that games through their rules provides a structure wherein the fluid concepts of fun and play can be contextualized. They can be either further contextualized by embedding game rules in story lines and narratives as visible in popular games such as '*Maxpayne*', '*Hitman*' etc. or can be kept just as simple rules which the player has to observe if he has to progress such as in puzzle games like '*Tetris*'.

So far, we can loosely classify video games in two broad categories of games one which are story driven and ones which are not. Rather than being oppositional, these categories should be seen on a tangent where they lie at extreme ends and video games exhibiting these characteristics lie all across the tangent. So, on one end we have games which are completely story driven and the in-game actions are strictly restricted to progression of the story and characters or situations and the players enjoy only a limited freedom for interaction with the game world. Then there are games which do not really have a story but rely on story elements



such as protagonist and loose narratives to give its rules a context for example - GTA series of video games and on the opposite end we have games which make no use of story and the game is simply about negotiating the game rules such as earlier game of 'Pinball', 'Tetris', 'Minesweeper' etc. This variance introduced one of the earliest debates in the field of video game studies which was between the narratologists and ludologists.

Although none of the scholars identified themselves with any group, however, there were two schools of thought one which saw computers as an extension of theatre and video games as an extension of stage and narratives where stories cannot be only told but can be both displayed and experienced. The idea was that it's the content which defines a medium and content can be made richer by effective employment of narratives. (Murray, 1997; Laurel, 1991). Other group of scholars were called as Ludologists who opposed the idea of studying video games through literary framework. Their argument was that not only narrative theories have limited scope but also the field of video games in particular and digital texts in general need to develop and understand their own unique language. They rejected narrative theories on grounds of being too simplistic, alien and inadequate to understand the complexity of these texts. Instead of narratives what is central to games is the play or the 'ludus'. The word 'ludus' has its origin in the ancient Roman culture where ludus was defined as play in its broadest sense which encompassed both play in games and playfulness in human nature.

Taking inspiration and building upon these previous scholarships on play, term Ludology was coined by game designer and researcher, Gonzalo Frasca in an article published in 1999 to bring together many similar and earlier studies in field of video games which agreed upon the inadequacy of narrative theories and attempted to develop a different framework for the study

of video games. Ludology referred to “discipline that studies game and play activities”. (Frasca, 1999). Gonzalo Frasca also clears the stand of the ludology “As a formalist discipline, it should focus on the understanding of its structure and elements—particularly its rules—as well as creating typologies and models for explaining the mechanics of games.” (Frasca, 2007). Jesper Juul directly addresses the narratology/ludology debate by arguing that narratives have pre-requisites of characters, and, also narrative is a very time specific thing i.e. there is a difference between the time of the actual story and the time of narration, however, in games the play action is always active in the present tense. (Juul, 1999).

The debate weathered down as it was gradually realized that narratives and storylines alone cannot make a game. The rules have to be incorporated in any style of game to bring in the activity of user interaction i.e. playing. User interaction is central to games. Without the activity of playing, a game ceases to be a game. Unlike cinema, television and books, a video game cannot proceed further without user input. Player has to perform action so that the text of game is revealed. Consider a simple case of game like chess which most of us will be familiar with, the game is rendered meaningless until unless players move their pieces and try to outdo each other. Hence, the focus shifted more on the fundamental aspect of how rules can be devised to contextualize fun and play. Within video game studies, this process of contextualization is best understood through core concept of – Game Design. Game designing is a multivalent activity which can be further classified according to different parameters involved such as story design, play design, interaction design etc. Eric Zimmerman (2004) proposes three typologies for game design. These three categories are as follows: -

- *RULES* contains formal game design schemas that focus on the essential logical and mathematical structures of a game.
- *PLAY* contains experiential, social, and representational game design schemas that foreground the player's participation with the game and with other players.
- *CULTURE* contains contextual game design schemas that investigate the larger cultural contexts within which games are designed and played.

(Salen & Zimmerman, 2004)

In the course of this study and also in game studies in general these terms appear frequently, so I will attempt to present a simplified explanation of key video game related concepts.

### **2.5.1. Game Design**

*Play doesn't just come from the game itself, but from the way that players interact with the game in order to play it.* (Salen & Zimmerman, 2004)

Game Design simply refers to conceptualization and creation of a game both technically and aesthetically. It is a blue print of the structure of the game involving the fundamentals of game design such as design, systems, and interactivity, as well as player choice, action, and outcome. (Salen & Zimmerman, 2004). Perhaps a definition of the word design will be helpful here –The art or action of conceiving of and producing a plan or drawing of

something before it is made – (Norman, 2002). It is worth observing that the definition considers design as both art and as an action, hence designing is both technical and aesthetical. In context of games thus designing includes not only creation of game rules and goals but also conceiving concept and actions in a manner that they are ‘fun’ and creates ‘meaningful play’. This leads to an obvious question of how play is rendered meaningful? Meaning making can be observed in the action of playing pertaining how player and game interact with the rules designed to be negotiated and in the larger context of player to player, player and context, content and context interaction etc. Focusing strictly on play, ‘*meaningful play* in a game emerges from the relationship between player action and system outcome’. The meaning of an action in a game resides in the relationship between action and outcome. “Design is the process by which a *designer* creates a *context* to be encountered by a *participant*, from which *meaning* emerges.” (Salen & Zimmerman, 2004)

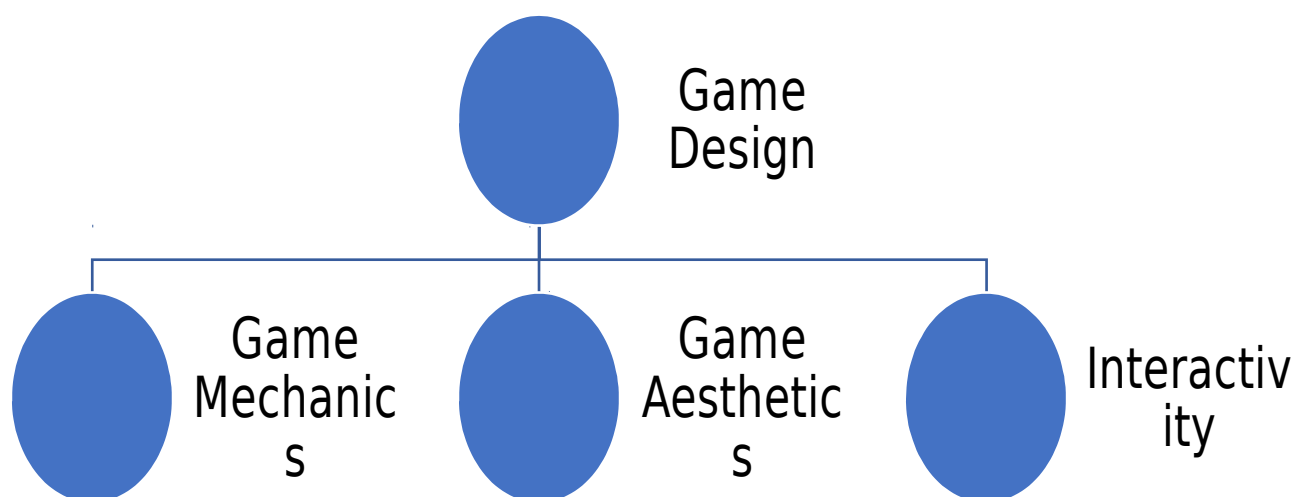
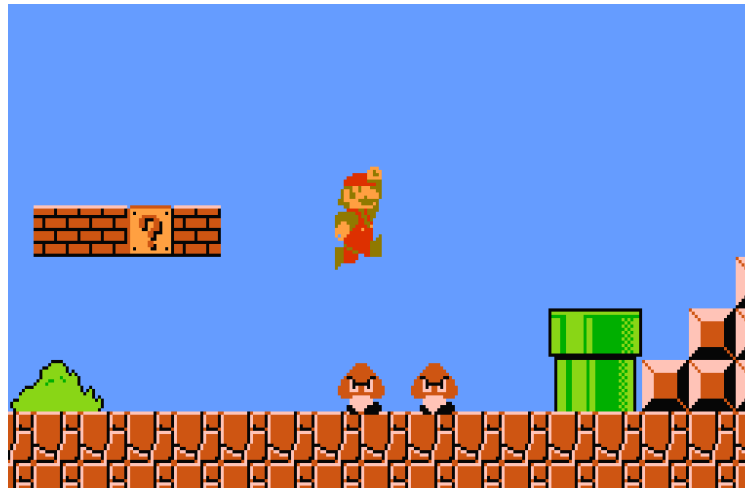


Figure 15: Core concepts of video games

In the above figure, the process of Game design has been broadly divided into categories of game mechanics, game aesthetics and interactivity.

### 2.5.1.1 Game Mechanics

Game mechanics deals with how the challenges and levels will be designed within a game and how a player is supposed to play those challenges. This is most commonly understood as the ‘gameplay’ of a particular game. So, for example if we talk about gameplay of a popular video game such as Mario, it is wherein the user has to play as the character Mario who has to cross multiple levels by walking, jumping, running and shooting on a platform running from side to side. He has to both eliminate his enemies whose routes and abilities are designed and gather gifts in form of extra lives and special objects which again are designed into the game. As the game progresses, the levels continue to get tougher as the rules become stricter in order to increase both the challenge and user interest. The ultimate goal of the game is to rescue Princess Toadstool and as player continues to cross levels he is occasionally confronted by the ‘Boss’ enemy who is the strongest of all the enemies. The game is over if the player is out of lives or out of time. Thus, game mechanics is contextualizing play activity through series of rules and actions which in case of Mario will involve overcoming and interacting with obstacles on his way through running, jumping and similar movements which in return will be rewarded by points and perhaps player satisfaction. Iterative design is a method in which design decisions are made based on the experience of playing a game while it is in development.



*Figure 16- Gameplay of Mario - Mario fighting enemies to collect points*



*Figure 17 - Mario running to collect rewards. Rewards are an important part of gameplay as they provide motivation to proceed further*

### **2.5.1.2 Game Aesthetics**

Game aesthetics deal with aspects such as study of style and form of the game and user response emerging through playing of the game. Game aesthetics can be classified within two broad domains of: -

- I. Conceptualization of a video game – Choices pertaining to the story structure, colours and shape of characters and representation of game world.

- II. User response and feedback – Emotions provoked in users after playing of the game and their response afterwards.

Game Aesthetics answers the fundamental question of what is ‘fun’. It contextualizes the fun and play visually and conceptually effecting emotions, interactions, associations thus giving rise to meaning in the play. The goal of successful game design is meaningful play which enhances user association and participation. “*Meaningful play* in a game emerges from the relationship between player action and system outcome... by which a player takes action within the designed system of a game and the system responds to the action.” (Salen & Zimmerman, 2004, p. 34). Continuing with our example of Mario, game aesthetics of this game will include everything from the visual representation of character Mario and other non-playing characters to the surrounding visual attributes related to game-world and general look also understood as graphics of the game.

The visuals or the graphic design of ‘*Mario*’ and many similar games from that era are now nostalgically remembered as 8-Bit Art where 8-bit is the technical reference to the graphical technology. Technical limitations of yesteryears are celebrated by the contemporary pop culture as 8-bit graphical style now have been recreated for numerous videos and games for the nostalgic value and retro feel. Apart from the visuals, much has also been written about the character of Mario and the probable communist propaganda built in the game visuals and character representations. Such varied readings and wide interpretation of the game makes evident the engagement between the game and the users beyond the immediate setting and actions of a play. Much like cinema a lot can be communicated through visuals in video games with an added possibility of playing the message.



*Figure 18-* Game world of Mario: Above picture is an illustration is of space where the character of Mario will operate against all the hurdles and enemies for the reward points designed in this space. In the top corner player achievements.

The final parameter to study game aesthetics is to study the user response emanating from playing of the game in order to understand what sort of emotions or reactions the playing of the game evoked. As video games are multimodal medium, a player is engaging with multiple aspects of the game such as visuals, audio, story, gameplay which can induce a wide variety of response having both short and long-term effects. While the actual playing of game can evoke emotions such as curiosity, thrill, competition etc. in the immediate context of playing it, video game playing also affects long term user emotions and associations such as the construct of gamer identity, attitude and perspective towards video games etc.

### **2.5.1.3 Interactivity**



Interactivity is the buzz word when one talks about video games and new media in general. So much has it been in parlance that scholars and media practitioners have come to disregard the term for being too vague and redundant. The word has travelled from scholarly journals to popular magazines without ever being properly defined to an extent that it is now almost synonymous to new media technology. Terms such as interactive media and interactive fiction have created an uneasy dichotomy of interactive and non-interactive and scholars and practitioners have vehemently argued against such an overtly simplistic and inaccurate classification. Interactivity and interaction has to be understood as a process rather than an absolute concept which can be distinguished with varying degrees.

Interactivity is an expansive term embedded in different contexts. It is better understood through perspectives of various disciplines. Eric Zimmerman provide a useful summarisation of four modes of interactivity which should be understood as overlapping categories rather than explicit ones.

These four modes are: -

**Mode 1:** Cognitive interactivity; or interpretive participation;

**Mode 2:** Functional interactivity; or utilitarian participation;

**Mode 3:** Explicit interactivity; or participation with designed choices and procedures;

**Mode 4:** Beyond-the-object-interactivity or cultural participation.

(Salen & Zimmerman, 2004)

Interactivity is about meaningful participation where user actions generate a certain outcome which engages user for further inputs. If an action starts giving undesirable outcome then the user input reduces until completely over. In digital artefacts the interactivity is designed to give ‘structure and a context that assign meaning to the actions taken.’ Actions are designed to have certain outcomes which will be executed when a user participates through its input. An interactive context presents participants with choices which can be related to either immediate setting of play or might concern the long-term progress of the game experience.

In context of video games, the designed interaction signifies the internal structure of the game such where user interacts with the various aspects of game story, game space, game play, player interaction. User interaction simply signifies the input of player agency. The games rules and design are called into effect through user inputs and a mutual interaction is initiated between the game and its player which we generally understand as ‘play’. The play engages a player holistically i.e. both physically and mentally, however, the degree of engagement can vary. User interaction in itself is a multidimensional entity with a user having simultaneous interactions such as with other players, the game, the interface etc. Apart from these designed interactions, one can find a larger naturally occurring interaction in cultural milieu where games exist as a popular art form spawning wide array of its communities and economies and intersecting with diverse fields.

## **CHAPTER 3: Literature Review**

### **3.1. Introduction – An Overview of Game Studies**

Game studies is a multidisciplinary field and there exists a fair amount of scholarship elaborating upon different aspects of video games. Since the formal inception of the discipline of Game Studies in 2001<sup>4</sup>, a considerable amount of work has been done in the field of video games. The multi-modality of the medium has encouraged studies across various disciplines within science, humanities and social sciences. When video games first became commercially available during later part of 20<sup>th</sup> century, amidst its raging phenomena amongst masses, the fundamental question which it posed was what contributed to the immense popularity of the medium. Several disciplines attempted to ascertain the characteristics and popularity of the medium. Early approaches constituted of mainly experimental studies conducted within the ambit of psychology, to measure the impact and effects of video game playing in laboratory settings. These studies revealed the negative impacts of playing which purportedly induced aggressive behaviour and violent conduct in players and enforce gender stereotyping. (King, Delfabbro, & Griffiths, 2009; Anderson, 2004; Anderson & Murphy, 2003; Griffiths & Davies, 2002; Anderson & Bushman, 2001; Anderson & Ford, 1986; Dominick, 1984). Apart from psychology, sociologists have also explored the field of video games by studying it in relation to gender, personality, consumption patterns, social behaviour etc. (Kaplan, 1983; Kiesler & Eccles, 1983).

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<sup>4</sup> In 2001 Espen Aarseth in the editorial of Game studies, for the first time, proposed a separate discipline and study perspective for digital games. Although seminal text of Game studies date back to 1990s, these studies however were conducted under the ambit of humanities, psychology and similar disciplines.

As the video game industry diversified it invited new perspectives for inquiry. It was during the 1990s when the qualitative turn appeared in Game Studies which viewed the medium as a subset within the larger phenomenon of digital culture and technology. Its aim was to see video games as a unique medium with its own unique features and characteristics. Scholars from humanities and media studies attempted to outline the potential scope of the medium by emphasizing on the structural and aesthetical paradigm shift brought by the onset of digital technology, particularly video games. The paradigm shift was measured and analysed through several parameters such as through studying player interaction and gamer identity, game production and marketing, game cultures and game communities, independent gaming scenario, application of video games etc. Given that the discipline of game studies is still on its course of maturation, newer trends and perspectives of study have continued to enrich the field.

### **3.2 Major Strands in Game Studies**

Simon-Egenfeldt Nielson (2008) has broadly highlighted two broad approaches within game studies:

*Formalist group tends to use game analysis or ontological analysis. They represent a humanistic approach to media and focus on the works themselves or philosophical questions related to the nature or use of these works.*

*The situationist group is generally interested in analysis of game players or the culture at large. They search less for general patterns or laws and more for analysis and descriptions of specific events or social practices.*

(Egenfeldt-Nielsen, Smith, & Tosca, 2008)

To loosely organize the multifarious studies with distinct approaches, scholars have divided the existing research in field of game studies broadly in categories of games, players and culture (Mayra, 2008; Salen & Zimmerman, 2004). These categories are in no way mutually exclusive and are mostly overlapping areas of study and research. All these three categories can be further divided into number of subcategories as shown in the illustration below:

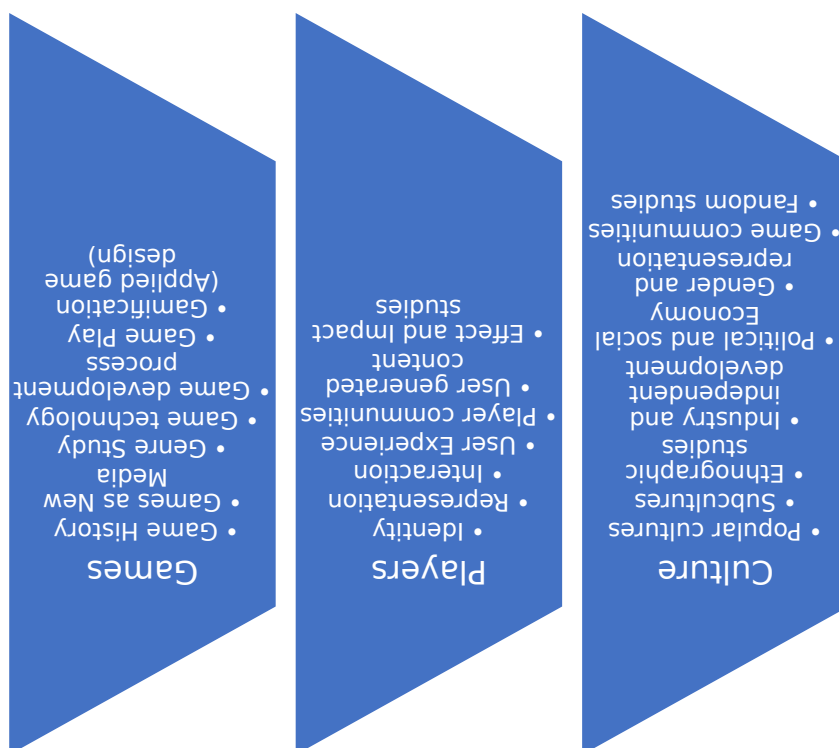


Figure 19: Major strands in Game studies

### 3.2.1 Study of Games

This category of studies focused on diverse aspects of video games. Apart from the usual impact and effect studies these studies also focused on the process of game designing, development, technology along with their intersections with other disciplines. In 1991, Brenda Laurel’s ‘Computer as Theatre’ was published which saw computers as an extension of theatre where one can create “imaginary worlds that have a special relationship to reality

worlds in which we can extend, amplify, and enrich our own capacities to think, feel, and act.” (Laurel, 1991). Although Laurel was speaking about the larger canvas of digital technology and scope of digital artifacts created through a digital medium, it was video games one of the first digital artifacts which exhibited the said characteristics in the manifest. Similar were Janet H. Murray’s observation in ‘Hamlet on Holodeck: The future of narrative in Cyberspace’ - “Just as the computers promises to reshape knowledge... so too does it promise to reshape the spectrum of narrative expression not by replacing the novel or the movie but by continuing their timeless bardic work within another framework.” (Murray, 1997). Here as well, Murray is not specifically talking about video games, however, video games were most apt and fertile examples to illustrate the potential and scope of the digital medium which at that time promised new paradigms of user participation and behavior.

Aarseth describes video games as a form of text which requires non-trivial efforts to traverse the text i.e. it required user participation to reveal its meanings. (Aarseth E. J., 1997). Chris Crawford talks about the game designer as an artist “The control and manipulation of this physical medium is a technical problem that the artist must master before she can express herself through it.” (Crawford, 1984). As much as video game theory derives from the practice of its design, equally it derives from older theories upon play which views the activity of playing more as a behaviour. For most of the time the binary distinction between play and work is emphasised upon, however, the philosophy of play only reinforces the fact how play element is diffused in our everyday activities. (Caillois, 2001; Sutton-Smith, 1997; Suits, 1978; Huizinga, 1949).

Kurt Squire (2006) describes video games as ‘designed experiences’ where ‘players’ understandings are developed through cycles of performance within the game-worlds, which instantiate particular theories of the world (ideological worlds). Ian Bogost further delineates the importance of game designing when he suggests that the rhetoric of game can be encoded in the rules which in turn can generate ‘persuasion’ in users. (Bogost I., 2007). This he called ‘Proceduralism’ which referred to “the core practice of authorship”. We rely on the practice of procedurality to craft representations through rules, which in turn create possibility spaces that can be explored through play. (Bogost I., 2008). Eric Zimmerman further breaks down the structure of video games and reveals the process of game designing “A game design education cannot consist of a purely theoretical approach to games... designers learn best through the process of design, by directly experiencing the things they make.” (Salen & Zimmerman, 2004).

Simultaneous to the formalist studies of games, which emphasized upon the role of game designing and rule-based behavior of video games as a defining feature of the medium, the ‘situationist’ studies emphasized on another essential component of user interaction and gaming culture. (Egenfeldt-Nielsen, Smith, & Tosca, 2008) Miguel Sicart in his paper ‘Against Procedurality’ presents a strong criticism against the procedural way of defining video games arguing that a design-based definition deprives video game of an essential component of player interaction. (Sicart, 2011). Recent trends have exhibited more of the situated approach while studying games and its application. Ethnographic and auto-ethnographic turn in game studies have led towards more focused studies on activity of playing and designing the game. It has led to some useful insights upon how players and developers construct meaning out of video games in their individual context. This has given turn to ethnographic analysis of particular games and their communities. Ethnographic turn

has opened up many interesting avenues for video games research. There have been ethnographic studies of virtual worlds and with players and gaming communities, (Yee 2006; Corneliussen 2008; Quandt, Wimmer, Wolling 2008; Boellstorff 2008; Sisler 2008a, 2008b, 2009; Taylor 2006).

Video games have been also of great interest in the field of teaching and education as increasing number of researchers have established the positive effects and potential of video game in a learning environment (Christensen & Machado, 2010; Simpson, 2009; Parks, 2008; Jolley, 2008; Desilet, 2006; Shaffer, Squire, Halverson, & Gee, 2005). Along with exploring new avenues, scholars have also attempted to document the history and evolution of video games. (Wolf M. J., 2012; Donovan, 2010; Wolf M. J., 2008; Kent, 2001).

### **3.2.2 Study of Players**

User input and user participation is a vital aspect of the operation of a video game. Hence user interaction forms an important part of video game design. Designing products such that they are both accessible and aesthetically pleasing for the user has been in practice well before the advent of digital technology. The term came in popular usage through Donald Norman's book 'The Design of Everyday Things' wherein he argued to "advocate a user-centered design, a philosophy based on the needs and interests of users". (Norman, 1988).

With the coming of digital, user interaction partly became intangible wherein the user was interacting with software, virtual worlds and even with other people through the internet. In the context of video games thus user interaction involves interaction with game hardware, the game itself (content and gameplay) and interaction with other players such as in multiplayer



games. Interaction is not limited to the immediate settings of the game but seeps into the larger canvas of culture and lifestyle where players start identifying themselves with the game characters, online avatars and the virtual worlds. (Nardi, 2010; Pearce & Artemesia, 2009; Boellstorff T. , 2008). Player interaction in video games involves “user experience including physical, sensual, cognitive, emotional, and aesthetical issues; the relationship between form, function, and content; as well as fuzzy concepts such as fun and playability.” (Fallman, 2008).

Just like physical games promote social cohesion in the actual world, video games do the same in virtual worlds as “modern video games increasingly serve as interactive platforms that enable a sort of virtual mobility through which gamers might chat, interact, and play both cooperatively and competitively with people from other regions of the world. (Carlson & Corliss, 2010). Kurt Squire (2006) describes video games as ‘designed experiences’ where “Players’ understandings are developed through cycles of performance within the gameworlds, which instantiate particular theories of the world (ideological worlds). Continuing studies of players and virtual worlds further highlights the dynamics of space and players’ identification with it. Celia Pearce’s ‘Communities of play’ provides important insights into online multiplayer games and virtual worlds and how cultures and communities have formed around them. (Pearce & Artemesia, 2009).

A plethora of studies have observed player-game interaction through multi-disciplinary perspectives of science and social science employing both quantitative and qualitative methods. A systematic study of literature done by Mekler et al (2014), Caroux et al (2015) provides a comprehensive overview of the studies done in the field. Initial studies upon

player study were mostly effect studies focusing on player behavior, however, over time, the focus has gradually shifted towards understanding the nature of the player-game interaction.

Quantitative studies have forwarded several models of measurement for the empirical study of player-game interaction (Abbasi, Ting, & Hlavacs, 2017; Elson, Breuer, & Quandt, 2014; Brockmyer et al, 2009). Further studies have tried to empirically record and study the player actions, reactions and responses by employing diverse methods such as self-developed scales and questionnaires, biometric analysis, feedback recording, psycho-analysis to objectively understand the user experience such as entertainment, boredom, engagement, immersion etc. (Denisova, Nordin, & Cairns, 2016; Elson, Breuer, & Quandt, 2014).

Qualitative studies too have attempted to understand the variables of play, engagement, immersion and flow however unlike quantitative studies, a sample size of these studies is limited to particular gaming communities or players. Ethnography is the most common methodology adopted to observe the virtual worlds and how a player identified itself while playing the game. These studies aimed for a subjective analysis of player's decisions, motivation and the meaning-making process while playing a game. The overall focus of these studies is to observe how player interaction fosters the meaning-making process. (Hung, 2007; Brown & Cairns, 2004; Dibble, 1999).

### **3.2.3 Video Games and Culture**

Video game culture is a subset of the larger digital culture which transcends the physical borders owing to its intangibility and networked-ness. "With the adoption of emerging

technologies becoming worldwide, people's lives are in a state of transformation toward virtual societies... The term "virtual society" is used to encapsulate all the components that are part of cultures based on the logical rather than the physical" (Agres, Edberg, & Igbaria, 1998). Emergent societies gave way for new forms of associations and cultural transactions. (Kline, Dyer-Wtherford, & De Peuter, 2003). Currently, video games operate not only as mass media in mainstream culture (Tavinor, 2011) but also have given way for gaming sub cultures (Carbone & Ruffino, 2014). Discourse of sub-cultures is rich and diverse and beyond the scope of this study, however, all contemporary mass art forms of literature, film, and music had parallel subcultures which were generally sites of resistance to the homogenising and dominant voice of the mainstream encouraging multiple subjectivities and more or less independent sources of production. (Jenks, 2005).

Adrienne Shaw (2010), states the need to understand the working of video game culture as "unpacking the discourses surrounding "video game culture" allows us to see the power dynamics involved in attributing certain characteristics to it, as well as naming it video game culture as such." (Shaw, 2010). Greenfield looks beyond the fog of moral panics and observes video games to be as "cultural artifacts that both depend on and develop the iconic mode of representation, particularly one important aspect of iconic representation: the dynamic representation of space. (Greenfield, 1994)." This space represented by video games "not only embody particular symbol systems; they do so in a context of goal-directed activity with instantaneous feedback. (Greenfield, 1994)." Steinkuehler further emphasizes on the place of video games in culture- "Games are an extremely valuable context for the study of cognition... They provide a representational trace of both individual and collective activity and how it changes over time, enabling the researcher to unpack the bidirectional influence of self and society." (Steinkuehler, 2006). They not only foster our skill levels pertaining to

cognition, problem-solving and learning “but also in terms of what they can tell us (as both culture and cultural artifact) about life in a world that is increasingly globalized and networked.” (Steinkuehler, 2006).

John Fiske describes culture as “...the constant process of producing meanings of and from our social experience, and such meanings necessarily produce a social identity for the people involved.” (Fiske, 1989). Games and sports through ages have remained an indispensable part of any culture so much so that Roger Caillois, a French intellectual who wrote extensively on games and play, suggests ‘to try diagnosing a civilization in the terms of the games that are especially popular there’. (Caillois, 2001). There exists an immense amount of scholarship on the subject of games, plays and toys and their position in relation to culture (Huizinga, 1949) (Sutton-Smith, 1997) (Caillois, 2001) (Suits, 1978).

The idea of video games as a product has always been a global one owing to the networked technology and the fact that the production of most popular video game titles is concentrated in geographical locations of Europe, North America and few Asian countries such as Japan and Singapore from where the first video games industries originated. The universality of play across cultures and networked-ness has created an illusion of a homogenous video gaming culture where players across the world are glued to their respective devices spending hours on the popular titles. However, as video games diffused into the popular culture they gradually settled in diverse cultures and regions. Users started to identify themselves with the game characters, virtual worlds, and online avatars. Subsequent innovation, mass production, and fall in prices of digital technology stimulated the growth of new geographies of gaming

and regional gaming industries. It was understood that games and game interactions although almost ubiquitous cannot be seen as a homogenous entity and perhaps a better understanding of game cultures as a whole can be understood through many different localized and regional studies of video games. This understanding marked a regional turn in the study of video games.

Regional video game studies can be defined as the study of “regional games and gaming cultures at a range of scales and identifies connections across and between these scales; It highlights and addresses unequal global relations within gaming culture and within the academic study of games; and it enriches the field with new perspectives drawn from regional cultural contexts.” (Liboriussen & Martin, 2016). Regional games and game cultures pay “attention to globalization in game studies by considering how local, national, regional, transnational, and trans-local perspectives can add new levels of complexity to how we assess and experience the formal, textual, and representational content of games; discourses and practices of game development, distribution, policy, ratings, and censorship; historical, geographic, spatial, linguistic, racial, ethnic, and domestic contexts that influence design, hardware and software production; and embodied and networked play practices.” (Huntemann & Aslinger, 2013). Regional studies focused on the local contexts of video game production and user participation. This includes the study of both mainstream regional game industries and regional independent (indie) game development.

(Flanagan, 2013) (McGonigal, 2012) (Burak & Parker, 2017) (Bissell, 2011) (Upton, 2015)  
(Flanagan & Nissenbaum, 2016) (Gee, 2007) (Macklin & Sharp, 2016)

### 3.3 Independent Games and Participative Culture

There exists a lot of debate on the conflicting terms of what is mainstream and what is indie, however in simple terms indie or independent refers to that mode of development where the product has been created from creator's own personal resources who mostly are individuals or small group of people as opposed to the mainstream games which have the backing of huge studios and have large amount of finances and resources at their disposal. The motive of indie development is not to earn profits although some of them might earn owing to its popularity but for a mainstream game, it is imperative that it churns out profits and generate revenues in return of the resources invested. "Indie games are in part defined by the reliance on alternative production and distribution structures compared to mainstream game companies." (Lipkin, 2013). As much as the category of indie games is defined by the financial resources and economy, it is equally defined through style, ideology, and subculture associated with these games vis-à-vis mainstream games. It generally differs in its style and content and is more exploratory in nature than its industry counterparts. Much of the academic work upon Indie games revolves around, as Felan Parker summarises,

1. theoretical accounts of indie games and attempts to conceptualize independence;
  2. historical research on independent games and their development;
  3. the political economy of indie games; and
  4. studies of indie games in their socio-cultural contexts.
- (Parker, 2014)

Independent culture and independent mode of production is not limited to video games rather independent culture has a strong presence in the field of cinema and music. Studies upon independent video games have been few and irregular. Existing studies mostly debate the relevance and politics of the term 'indie' and characteristics of such games

A comprehensive study of Indie games is yet to be done through regional perspective especially in the emerging video game markets, however, that might take time as studies are still attempting to chart the contours of the emerging game industry in regional scenario where presently the notion of mainstream and indie are still blurred owing to the overlapping modes of production. A comprehensive study has been done on the gaming cultures in Asia-Pacific with objectives of exploring “depth and diversity of games culture in this region; and secondly, to consider how these gaming cultures, in turn, provide a lens to view and examine salient geopolitical and socio-cultural developments within the region.” (Hjorth & Chan, 2009). The study includes old bastions of game cultures-Japan and Australia as well as relatively new countries of Taiwan, South Korea, Singapore and Hong Kong. (Hjorth & Chan, 2009). In another study, Huntemann and Aslinger, “touches upon nations not usually examined by game studies—the former Czechoslovakia, India, and Brazil” (Huntemann & Aslinger, 2013) in order to explore “heterogeneous models for gaming production and consumption.” (Hjorth & Chan, 2009).

According to, Parker (2013) there's no established definition for indie game. The idea of indie is ambivalent and varies in wherever and for what purpose it's used. Similar views are held by different scholars such as Simon (2013), Guevara-Villalobos (2011), Lipkin (2013) and Rufino (2013). Being indie suggests that various things to different developers as Guevara-

Villalobos' (2015) suggests "The identities of independent development are embedded within the economic and cultural structures that harness specific forms to understand and embody their sense of autonomy". (Guevara-Villalobos, 2015). Ruffino (2013) sees indie game business as a "justification of a series of changes in the production method of video game" which results in bigger expression and freedom for the designers, various game forms and style resulting in additional varied games within the market. Juul (2014) analyzed winning works of the freelance Game pageant from years 2001-2013 to spot 'Independent Style'. He defines this vogue as "an illustration of an illustration. It uses up to date technology to emulate low-tech and typically "cheap" graphical materials and visual designs and communication." (Juul 2014:4.)

Indie is partially outlined by the subcultures that support it, its game aesthetics and mechanics and dealing conditions. Support for creating independent games is the community behind and the indie development and therefore the fans encompassing it. There are publications specializing in indie games. several game magazines and different on-line game publishers have separate sections dedicated to indie games. There are many festivals, numerous events, developers' conferences and game jams that revolve around indie development and production.

Guevara-Villalobos (2011) sees indie games as forming "communities of production". Community networks and community events are shaped to counteract social issues of individual and team work, and to form common attribute among indie developers. Communities, concerning indie game development, provide infrastructure for handling collective challenges, gaining information, learning from one another and for peer support.



(Guevara-Villalobos 2011.) Guevara-Villalobos (2014) states that social worlds that are concerning freelance production, particularly artisanal and native net-works, will facilitate freelance developers with technical, artistic and psychological feature aspects of the assembly. Wright's study of freelance game developers (2015) additionally shows that the freelance developers actively hunt down networking opportunities, share their experiences and have robust activity community. Social networks inside indie distribution channels have offered forums for developers, players and critics to create communities that promote and stimulate indie game development. Indie games additionally enable their audience to have interaction in cultural identity. They create interactive relationships between the business, developers, and audiences.

### **3.4 Methodological Review**

Owing to its cross-disciplinary nature methodology to study video games too have been varied and borrowed from different disciplines. Game studies can be classified broadly on the basis of methodological approaches: -

- Experimental
- Ethnography
- Auto-ethnography
- Descriptive
- Content Analysis/Textual
- Game Analysis
- Practice based research through game designing

The study employs methodology of ethnography as the chief investigation tool complemented by methods of game analysis. Game analysis is a recent development set of methods primarily to study video games, ethnography on other hand has its origin primarily in the field of anthropology which over time has been adapted and modified to use in different disciplines such as media and has increasingly been used by various researchers to study virtual communities and virtual worlds. Terms like ‘Netnography’ and ‘Virtual ethnography’ are examples of how traditional ethnography has been adapted to study the newer domains of media. Within media studies, ethnography generally has been used to study online communities and virtual worlds. Several studies have employed qualitative research methods for studying virtual communities (Agres et al., 1998; Fox and Roberts, 1999; Catterall and Maclaran, 2001; Vrooman, 2001; Kozinets, 2002; Maclaran and Catterall, 2002; Bakardjieva, 2003). Several virtual community studies have already used netnography methods to study virtual communities (Fox and Roberts, 1999; Bakardjieva, 2003; Vrooman, 2001). The process of conducting ethnography in virtual worlds has been well elaborated upon by several scholars (Boellstorff, Nardi, Pearce, & Taylor, 2012) (Hine, 2000) (Snodgrass, 2016) (Kozinets, 2009) and the methodology has been applied in the study of video games and its players as well. Video game studies have mostly used the methodology of online ethnography in tandem with the game analysis which is recently developed set of methods to study video games. Though still charting its contours, nonetheless it has provided some useful frameworks towards the study of games emphasizing primarily on the activity of playing the game.

The methodology of game analysis has been informed by the theoretical understanding of video games as a configurative medium which requires active user input for the text to progress. (Aarseth E. J., 1997) (Eskelinen, 2001). Lars Konzack (2002) provides an initial framework by outlining seven layers through which a game can be analyzed. The proposed seven layers were- hardware, program code, functionality, gameplay, meaning, referentiality and Socio-culture. (Konzack, 2002). Depending upon the focus of research, select layers can be used as parameters to analyse a game. This initial framework was further developed through works of Aarseth (2003), Hunicke et al.(2004), Consalvo and Dutton (2006), Fernandez-Vara (2015). Espen Aarseth outlines it lucidly that “For any kind of game, there are three main ways of acquiring knowledge about it. Firstly, we can study the design, rules, and mechanics of the game, insofar as these are available to us, e.g. by talking to the developers of the game. Secondly, we can observe others play, or read their reports and reviews, and hope that their knowledge is representative and their play competent. Thirdly, we can play the game ourselves. While all methods are valid, the third way is clearly the best, especially if combined or reinforced by the other two.” (Aarseth E. , 2003). Consalvo and Dutton further build and elaborate Aarseth’s formulation by developing a methodological toolkit for game analysis. They outline four features and sub features through which a game can be critically played thus enabling researchers to “develop research questions that look at ideological assumptions operating in a game or determine if certain theories can best help explain a game or series of games.” (Consalvo & Dutton, 2006). These four features include “Object Inventory, Interface Study, Interaction Map, and Gameplay Log.” (Consalvo & Dutton, 2006). Hunicke et al. (2004) proposed MDA framework for the study of games referring to Mechanics, Dynamics, and Aesthetics of a particular game. “MDA is a formal approach to understanding games-one which attempts to bridge the gap between game design and development, game criticism, and technical game research.” (Hunicke, LeBlanc, &

Zubek, 2004). The study broke the operation of video games into its three essential components,

*“Mechanics describes the particular components of the game, at the level of data representation and algorithms.*

*Dynamics describes the run-time behavior of the mechanics acting on player inputs and each other's outputs over time.*

*Aesthetics describes the desirable emotional responses evoked in the player, when she interacts with the game system.”*

(Hunicke, LeBlanc, & Zubek, 2004)

The broad categories outlined by MDA articulates the abstract practice of designing for not only better observation and recording of player-game interaction but also to “develop techniques for iterative design and improvement - allowing us to control for undesired outcomes and tune for desired behaviour.” (Hunicke, LeBlanc, & Zubek, 2004). In a recent development, Clara Fernandez-Vara produces a comprehensive breakdown for game analysis by dividing the game analysis into three areas “The Context, Game Overview, and Formal Elements... The context comprises the circumstances in which the game is produced and played, as well as other texts and communities that may relate to it... Game Overview focuses on the content, the basic features that distinguish the game from others and how it has been read, appropriated and modified by different audiences... Formal aspects studies how the text is constructed, the pieces that make it up.” These she calls the building blocks of video games. (Fenandez-Vara, 2015).

Several studies have effectively combined methods of ethnography and game analysis to provide rich accounts of gaming experience. One of the earliest works in this direction was Boellstorff's (2008) ethnographical study of the game 'Second Life'. Second life is a virtual world more than a game which has no goals and objectives rather as the name suggests it gives users an opportunity to live an alternative life in the virtual space. The study conducted by the author had a large canvas with three broad goals of-

- *to provide an ethnographic portrait of Second Life.*
  - *to demonstrate the potential of ethnography for studying virtual worlds.*
  - *to contribute toward a better understanding of virtual worlds in all their constantly transforming complexity.*
- (Boellstorff T. , 2008)

Objectives of the study were weaved in the actual playing of the game by the author by the avatar name of 'Tom Bukowski' as he records his activities, in-game chat sessions with other players and completely situates the process of research "wholly within Second Life". The author met no real-life game developers or players instead he chose to be the inhabitant of the game and conduct research completely within the domains of the virtual world to assert that "virtual worlds are legitimate sites of culture." (Boellstorff T. , 2008). Another such study was conducted by Bonnie Nardi (2010) within the virtual world of 'World of Warcraft' which followed the same methodology of conducting an ethnographical study by being an inhabitant of the concerned virtual world, however, in this study the author goes beyond the virtual world to conduct interviews and observe playing activity of other players as well. The study was conducted for a period of three years starting from 2005 till 2008 with following goals: -

- *To develop an argument about World of Warcraft that examines play as active aesthetic experience.*
- *To understand play in its contemporary digital manifestations.*
- *A third aim of the book is ethnographic reportage—interpreting experiences of playing World of Warcraft for those who will never play but wish to understand something of the role of video games in our culture.*  
*(Nardi, 2010)*

The study was conducted within the virtual world of the game as well as in two diverse geographical locations of South California and China giving a broader understanding of how virtual worlds and video games foster a culture that transcends the borders of the physical world. Celia Pearce's (2009) 'Communities of play' is yet another ethnographic study of 'Uru: Ages Beyond Myst' where the author has conducted on two levels- first as herself as a researcher interviewing players and player behaviour and activities in the physical world and secondly as Artemesia – her transludic identity- which exists in multiple virtual worlds of 'Uru', 'Second Life' and 'There' to conduct an ethnographical study strictly within the domains virtual world dealing with the player self and in-game communities. Interestingly, the work 'Communities of play' sports two authors – one the author herself, Celia Pearce and other as Artemesia, the transludic identity and the player self of the author. (Pearce & Artemesia, 2009).

*"In developing both this character and this method, I have also integrated Artemesia into the presentation and writing process for this research. Many presentations, most notably the thesis defense, as well as public talks, have been given partially or entirely in situ, in-game and in character, further reinforcing the project's performative positioning. In addition, a number of publications are credited as coauthored by Celia Pearce and Artemesia, prompting one publisher to request that Artemesia sign an author permission form, even*

*though she was well aware that Artemesia was a fictional character.*" (Pearce & Artemesia, 2009)

Abovementioned studies form the methodological context of this particular research; however, it deviates from the existing literature as this study attempts to apply the methodology of ethnography to study the game development and player-game interaction in the local context. Through the methodology of ethnography, the study makes use of multiple subjectivities to understand the motivation and vision behind designing a game which draws from local culture and how a game with local content interacts with the local players. In a country like India where video games still haven't completely shed off the stigma of being a negative influence, an ethnographic study of both designing and playing games influenced from local history and narrative makes for a unique and a novel case for research.

### **3.5 Conclusion**

Game studies have only continued to expand and both academicians and industry practitioners have contributed to the increasing repository of literature. (Wolf & Perron, 2014) (Wolf & Perron, 2003) (Wolf & Perron, 2009). Continuing studies of players and virtual worlds further highlight the dynamics of space and players' identification with it. It's evident that a proper understanding of video games will require perspectives of both design practice and user engagement. Video games is a vast and growing field of study. This chapter aimed to give a consolidated review of existing game studies corpus while at the same time also trying to contextualise the study within the purview of the existing literature. The chapter started with identifying major strands within game studies which are overlapping categories rather than being mutually exclusive. Within these major and overlapping strands, the study identified its position and elaborated upon the literature available on Independent games and

participative culture along with the methodological review of game studies. The review was helpful in marking out the gaps where this study can possibly fit itself both theoretically and methodologically.



## Chapter 4: Game I - Somewhere

### 4.1 About the Game

‘Somewhere’ is a narrative based single-player, first person, role playing, open-world exploration computer game. It is an anthology of stories based on the search of mythical city of storytellers by the name of Kayamgadh. The narrative of the game is set in the colonial India which is represented through abstract illustrations, assortments, and faceless characters. No one has seen the city of Kayamgadh. The city only exists in multitude of narratives and imagination of people. *“Set in the southern Malwa region in 19<sup>th</sup> century British colonial India, it traces the lives of several people as they search for pages of a fabled journal which charts a route to Kayamgadh”* (Oleomingus, n.d.). The collection of stories is distributed across various episodes where each episode tells a particular story about or related to Kayamgadh. Unlike popular video games, where activity of search and exploration usually leads to achievement of a goal or yields some reward in form of points.



Figure 20: Somewhere: The game by Studio Oleomingus

‘Somewhere’ circumvents the conventional structure of both video games and storytelling to create a rather unusual yet a unique experience. *"Somewhere is a storytelling experiment based solely on gameplay"* (Sigl, 2013) says Dhruv Jani who represents one half of Studio Oleomingus which conceptualised and developed the game. The other half of the studio is completed by Sushant Chakraborty who is a professional programmer. The duo has been working together since 2013 although they have always maintained the open collaborative approach towards game development “inviting people to contribute to our creations and in turn use code that they create, they also release most of their work without cost to a *“small but enthusiastic audience,”* informs Dhruv. (Nair, 2017). The game has been under development since and expects its first major episode release in summer 2018 on Steam platform. The episode is titled as ‘Under the Porcelain Sun’ and will be their first episode from Somewhere to get a major release. Prior to their major release, Oleomingus had already released three small playable demo episodes from the larger project of Somewhere and number of independent small experiments they did with game designing. These games and experiments they have made available for free to play on their website as well as several games hosting platforms such as ‘itch.io’, ‘indiedb’, ‘steam’ etc. Talking about the dynamics between the two Dhruv mentions that *“what I found very comfortable doing is working with a programmer so that I can concentrate on the visual or the narrative aspects of the game. So, I work with Sushant who is an excellent programmer.”* (Jani, 2017)



Figure 21: Screenshot from 'Under the Porcelain Sun'



Figure 22: Museum of Dubious Splendors



Figure 23: An Indivisible Margin of Error

The story of the game is embedded in the gameplay and the player has to play and interact with environment to reveal the story further and carry forward his quest for the city of Kayamgadh. Differing from the usual play and win approach of video games, emphasis of Somewhere is more towards exploration and “*generating a sort of mood base and ambient space where stories can be nurtured*”. (Jani, 2017). Dhruv admits that instead of rewarding his game demands attention and efforts from the players side to go through the story and afford enough time to carefully explore the game world and learn the controls of the game - “*For us the players specifically are more like story readers.*” (Jani, 2017). On starting any episode from the world of Somewhere, the player enters into an unusual space characterised by bizarre visuals accompanied by some text which explains the player about the place. The player then is supposed to move around and interact with objects and non-playing characters which reveals the story further. The player can interact with various objects such as books, photographs, and can also change characters through character flip mechanism. The interaction doesn’t provide any conclusive clues but provides material in forms of dialogues, written accounts that further complicates the search for the city of Kayamgadh. Rather than a game, Somewhere is more of a story about the search of a city revealed through the gameplay. If the user chooses to abandon the game at any point of time for whatsoever reason, player will never know the entire story, as the text of the story doesn’t exist independently. It’s embedded within the game and player input is essential for unravelling of events and dialogues which will construct a story.



Figure 24: An Indivisible Margin of Error

## 4.2 Game Development

Dhruv Jani, whose Ph.D. thesis project became a genesis for the ultimate game didn't have any prior experience of programming and video game development. Trained as an exhibition designer, Dhruv forayed into game designing when he *“was studying there and with couple of people over the internet we decided to do a couple of short games... just to see how games work”*. (Jani, 2017). Dhruv who has studied Exhibition and Spatial design from National Institute of Design, Ahmedabad explains his approach to video games:

*“I ended up choosing video games as medium through a rather tangential road. I was trained as an exhibition designer and I used to work with lots of programming and spaces... sort of rule driven construction. There was a lot of possibilities but you never explore it yet because programming was restricted to how spaces function, how material function, how volumes function but while doing that I realized, while playing*

*around with that kind of software that I could sort of - and despite I wasn't thinking about it as a video game - introduce storytelling into the little bit.” (Jani, 2017)*

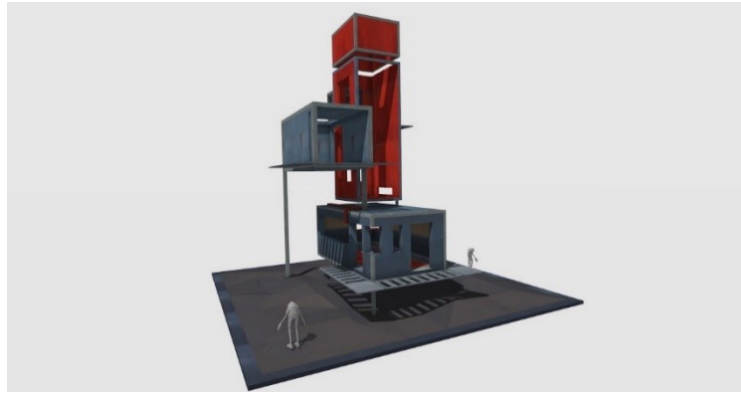
Dhruv's approach to video games, unlike industries, is not driven from a commercial perspective to capitalise market opportunities rather what is peculiar to his approach is his voluntary and experimental adoption of video games as a medium for his expression. Somewhere, as a video game for Dhruv and Studio Oleomingus is a “storytelling experiment based solely on gameplay”. Dhruv is aware of the sparse attention and “*general disinterest amongst people*” the work receives due to its unusual style of gameplay; however, it hardly bothers him and the studio as for them “*games are mediums of storytelling first*” (Sigl, 2013) and through the course of its development, ‘Somewhere’ has been able to find “roots into a genuinely interested community that seeks to look at games differently.” (Sigl, 2013). The game is more of a personal project rather than a studio production which has grown along with developers' creativity, learning curve and numerous collaborations with varied professionals. Dhruv readily admits that in fact during the course of developing Somewhere “*the procedure of building games was alien to us, and we blundered the best we could.*” (Chan, 2017).

Studio Oleomingus, Dhruv says was a “*very nebulous idea and I started using that phrase just oleomingus itself as a studio banner when I got together with bunch of friends at NID (National Institute of Design, Ahmedabad).*” (Jani, 2017). Working in tandem with his partner Sushant who hails from Cooch-behar in West Bengal and is a programmer by profession, Dhruv tells, he first met him online through Unity forums during his time in Khoj residency and since then the duo has “*sought to concentrate our work on the confluence of post-*

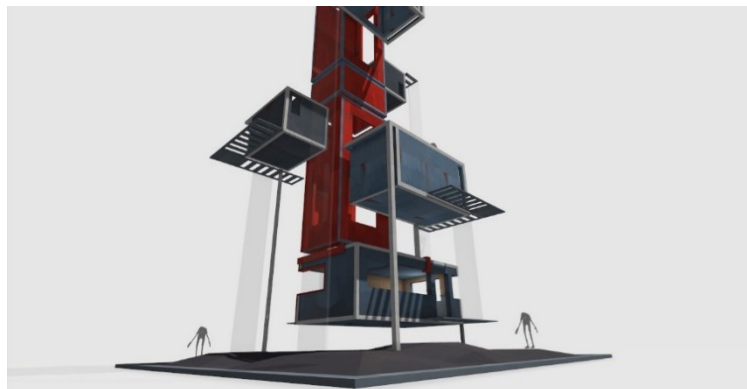
*colonial literature, speculative architecture, and games, combining avenues of investigation that interest us both. Somewhere, and the various stories that spawn from it, are indeed our first project.”* (Chan, 2017)

Before Somewhere, Studio Oleomingus had released their various experiments with video game designing for free on their website and game hosting platforms such as ‘itch.io’ and cargo collective. Some of the games which they released were - Oxygen, Mosquito, Menagerie, Soundscapes. These games were their attempts in weaving storytelling with rule driven behavioural aspect of video game programming and it was when Dhruv’s thesis project which “*had turned almost into a video game like project*” (Jani, 2017), got an opportunity to be a part of Khoj residency (*Of Games: Theatre In Code, 2013*) that Studio Oleomingus got its first formidable project and “started building Somewhere in its final form”. (Jani, 2017). Oleomingus’s page on social media website Tumblr documents the beginnings of the Khoj project as follows:

*“Hello, we are developing Somewhere as part of an art residency program at Khoj. It is a wonderful place where we are working with six other artists working on, discussing and debating video games! also, this is the first time we are really showing the game to an audience, the players, controls and all associated blunders are a new and wonderful experience. we will have a lot to show over the course of the program! - AUG. 22 2013”* (oleomingus, 2013)



*Figure 25: Early Sketches and Designing 1*



*Figure 26: Early Sketches and Designing 2*



*Figure 27: Early Sketches and Designing 3*



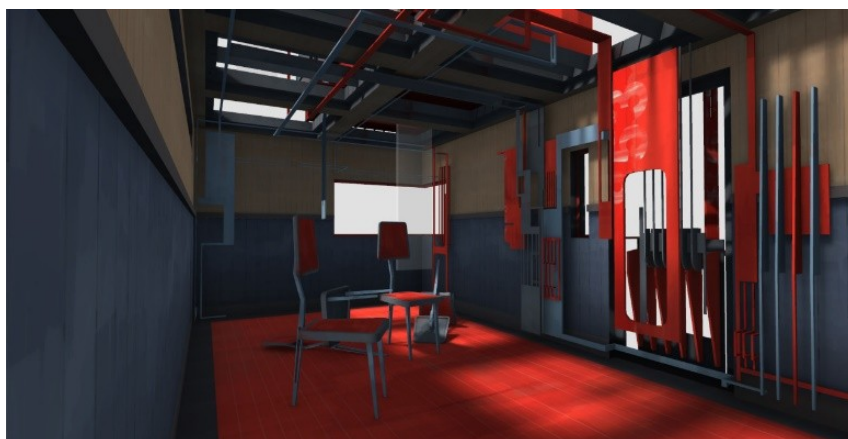


Figure 28: Early Sketches and Designing 4

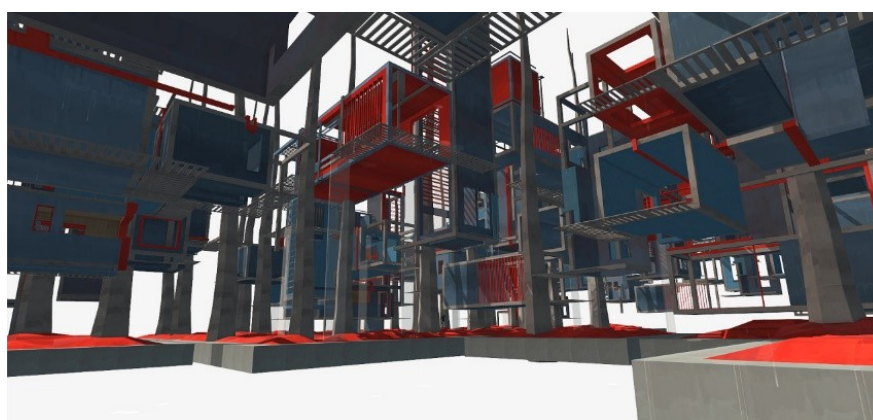


Figure 29: Early Sketches and Designing 5

Khoj residency was a huge platform for ‘Somewhere’ and recounting his own experience of Khoj residency in an interview, Dhruv mentions:

*“People we worked with at Khoj (an organization established to support contemporary art and emerging artists in South Asia, based out of New Delhi, India) and the artists we met were not only interested in exploring games as a valid medium of complex expression, but were also intimately familiar with development methods and the technical complexities involved. Khoj managed to bring together people as varied as filmmakers, authors, visual artists, and literature professors, who are working on and writing seriously about videogames.” (Sigl, 2013)*

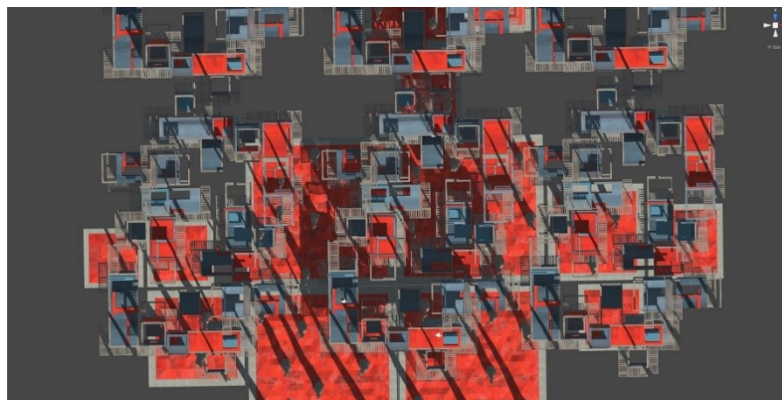


Figure 30: Game build presented at Khoj

The diversity of participation and collaborative nature has been a core component of the game development process. The exposure to like-minded community which viewed play and games beyond the scope of leisure proved to be an incubator for ‘Somewhere’ which was still in an early stage. It was within this residency that they found people who were genuinely interested and willing to contribute towards the building of game. They started releasing small demos and experiments on their website and game hosting platforms. - *“In first year... we released only six builds and accrued a couple of thousand dollars from people who are playing the game based on pay what you want system.”* (Jani, 2017). Khoj residency was also instrumental in giving ‘Somewhere’ its collaborative core being moderated through Dhruv and Sushant which is largely responsible for the form and style in which the game exists presently. Elaborating upon the diversity of team and collaborators involved in the making of ‘Somewhere’ Dhruv elaborates:

*“The team working on Somewhere is varied, both in regard to skill and nationality: Salil is a chemical engineer by profession, but he is a trained vocalist and pianist as well and is currently studying composition at Berklee college of music at Boston. Somewhere in its current form is programmed by Kevin Vargas. He is a programmer*

*and musician from Los Angeles. Austin Ashley from Detroit works on the animations for the games. We have also begun working with a Russian composer, Konstantin. Oxygen is being programmed by Sushant, a student of programming who also worked on Mosquito and the gravity mechanic for Somewhere... I myself am a final year student of design. I specialise in a form of architecture that studies the behaviour of temporary construction in public spaces.”* (Sigl, 2013)

Diverse range of perspectives on video games has brought along different skill sets to be used in tandem with game designing which is responsible for giving ‘Somewhere’ a typical form of style both of playing and visuals. Their blog on social media tumblr in particular has remained an active account since their days of Khoj residency and offers insight into their ideas, works of their time during Khoj residency during which they constantly initiated discussions, uploaded their artworks, sketches, game design demos and excerpts from their story. Apart from their tumblr blog, Oleomingus have been maintaining their presence in niche community through their website and blogs on social media platforms such as twitter and Instagram. Game hosting websites such as itch.io and lately Steam have kept them in touch with the few actual players who play and review their games.

In 2016, project Somewhere got further impetus when it procured a year-long grant from Indian Foundation of Arts (IFA) which just like KHOJ is a non-profit and independent organisation to promote research in arts and culture. In its description about Somewhere on its website, it assesses it as a “*work which challenges different boundaries and presents new challenges.*” (IFA, 2016). It further comments upon the emerging gaming situation in India – “It is evident that artists in India are warming up to the medium of gaming for creative

expressions, but being a nascent area of work, the results of such explorations are yet to be seen.” (IFA, 2016). The circles in which this game moved during its development most importantly established a clear vision for the game. Dhruv views his game studio working on the “fringes” of mainstream mode of game development and game consumption. He admits to the fact that playing Somewhere might turn out to be a boring experience for some players but that doesn’t worry them - *“We are very obnoxious about our games. We want the players to make a lot of effort to get into the game and if they do not bother reading it, they do not bother to going through the controls and learning the controls then we would rather that they not play at all. So, we don’t mind people not playing our games but we mind people playing our games badly... To us as a studio, games are mediums of storytelling first.”* (Jani, 2017)

Since their IFA grant which allowed them an opportunity to develop a “a 90 min long interactive fiction” things have only gotten a lot busier for both Dhruv and Sushant as they now juggle their time between game development and their personal and professional commitments. Game development is economically expensive and a tedious physical job, The game for most of its journey has been completely developed from personal funds aided through grants by Khoj and IFA. *“We started working at Khoj.. when we realised we found that there were people who were willing to contribute for game’s continued development ... we released some of our builds and accrues a couple of thousands of dollars from people who were playing the game based on pay what you want system... eventually we got work opportunities in Jaipur, Mumbai and that helped our core development budget.”* (Jani, 2017). Apart from these grants, while Sushant practices programming as a profession for a company in Ahmedabad, Dhruv remains busy with his teaching commitments and displaying game in relevant festivals and exhibitions. The teaching projects remain related fundamentally to the game as Dhruv elaborates *“So if it’s a lecture on architecture, we relate it with the game*

*architecture... Similarly, if it's a humanities lecture then the practice of storytelling and issues of post-coloniality are ready references from the game.*" (Jani, 2017). After Khoj residency they started working with a U.K based indie game publisher 'An Irregular Corporation' who now pays for the game development. The twitter handle of the game publisher defines it as an "A UK independent games publisher focused on creating and supporting original games for niche markets and communities." (IrregularCorporation, 2017)

### 4.3 Game Content - Weaving of Story and Play

Somewhere spawn various episodes based on the search of this mythical city which in itself is a fragmented world caught between intersections of time, populated with ruins as the player moves around in search of the lost city through multiple identities, shifting narratives and weaving perspectives. The search is made hugely complex given the ambiguous nature of oral narratives, human imagination and the practice of recording and writing history as well. This complexity has been explored throughout the game. As already mentioned about Somewhere not being a typical goal-oriented game, the branching narratives within the game only adds further layers by telling stories within stories. Dhruv himself comments on the exploratory nature of the game:

*You might be searching for a particular page that will eventually lead to Kayamgadh but each search in turn forms another search and the game eventually loops out itself because of its narrative structure and the whole exercise becomes an act of exploring how storytelling functions in context of contested histories. (Jani, 2017)*

For a game setup in the colonial India, the game-world sports a rather bizarre set of visuals. In fact, it's the visuals of the game that draws attention to the game in first place. The visuals create a sense of bewilderment as the player enters the room-like spaces of the game and tries to make sense of the upside-down Colgate tubes, suspended apples, table fans, tooth brushes whose bristles are made up of rolled-up newspapers. The player is left to wonder the relation of the visuals to the game as at first it seems to be just a random juxtaposition of objects against its symmetrical and colourful rooms. However, the visuals of the game follow the same fluidity and veering significance as akin to the narrative structure of the game. Just like

the narratives challenge the sense of authorship, protagonist, goals similarly the visuals of the game challenges the sense of static place and time.

The game is fluid and amorphous: If the narratives are characterised by their repetitiveness, fragmented voices and identities, the visuals are characterised by their abstractness and permeability. Game environment is a surreal landscape made up of patchy memories and fractured narratives all mangled up in the “*sudden rush of modernity.*” The game has references to iconic architectures such as Jantar Mantar and old forts and museums however “*to a person living in a hutment clinging to the walls of the fort, the fort is not architecture, it is as landscape. amorphous and trivial*” (Sigl, 2013) and therefore even those architectures can be dismantled and re-arranged like a Lego puzzle just like our memories. These characteristics are of essential importance to the state of post-coloniality which is constantly in a state of flux and consistently re-structuring the issues and debates around it with the passage of time. It is precisely for this reason that the game purposely “*limits the iconic and abstracts the familiar*” (Jani, 2017). The game on purpose refrains from using iconic representation as *Somewhere is actually not a game about colonialism - it's about a time of flux*” (Sigl, 2013) hence the disoriented and amorphous visual space which is an intersection between our post-colonial realm and modern reality.

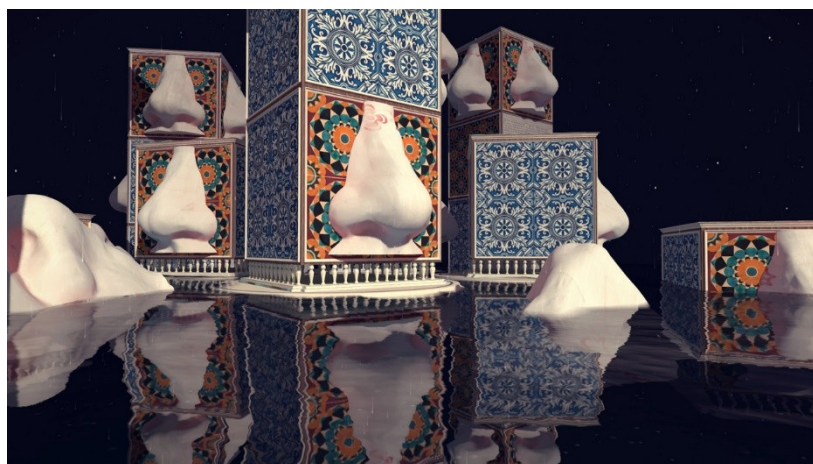


Figure 31: 'Under the Porcelain Sun' screenshot 1

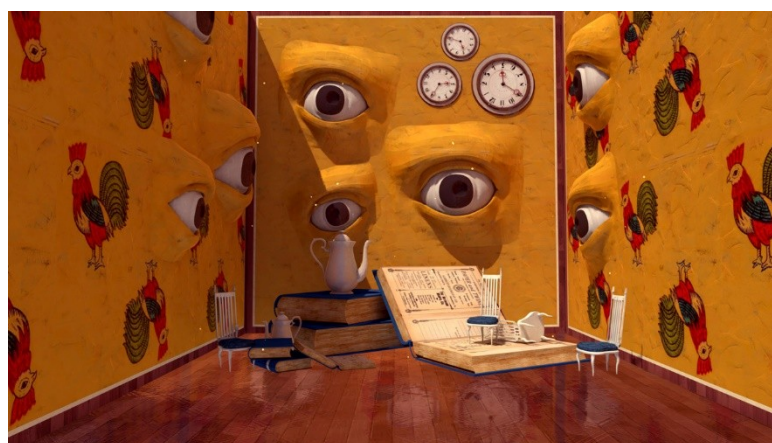


Figure 32: 'Under the Porcelain Sun' screenshot 2

Reflecting upon the complexity of the game, Dhruv makes an important point that the game is not complex because of its design but mainly because the very writing, recording and retelling of history in itself is a very complex process given the quantum of narratives and events involved. The game serves as an allegory to the marginal voices and vestigial spaces which were left behind during the course of build-up of history of dominion of India. In the search of the city of Kayamgadh, which doesn't exist except in the fragmented narratives of those who have only heard about it through fragmented narratives of others, the title of the game only serves to be reminder of the perpetual position of the player in the game and in larger perspective, the position of the marginal in contrast to the dominant. Player is an



essential character in *Somewhere* not because of the inherent need of player in decoding video games but because of the “*conflict that arises from the subversion of the role of a storyteller*” in the game (Chan, 2017). If the story within the game are fragmented narratives of countless people and voices who during the “*creation of a country were left untouched... and tried to interpret the sudden modernity of Independence through the lens of their entrenched beliefs*” (Sigl, 2013) then the player through playing the game tries to interpret and understand about the secluded pockets of colonial history through the lens of modernity.

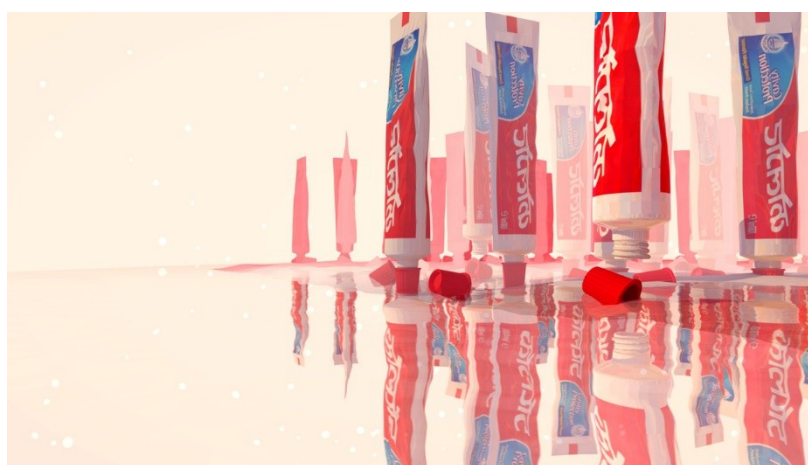
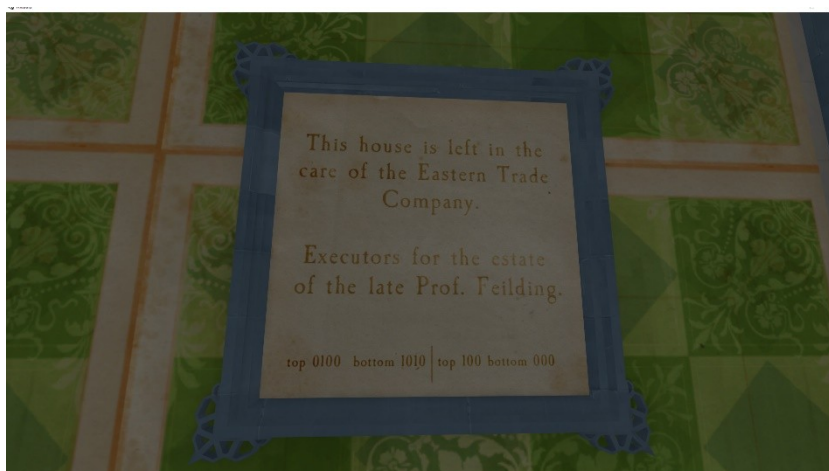


Figure 33: 'Under the Porcelain Sun' screenshot 3



Figure 34: Rituals Screenshot 1



*Figure 35: Rituals Screenshot 2*

The game involved both exhaustive writing, sketching and programming to produce the final version. Given the vast repository of narratives operating within the game, the narrative crux was credited to a fictional Gujarati poet and historian by the name of Mir Umar Hassan living in 19<sup>th</sup> century India whose writings have been ‘ostensibly’ adapted for the game. The works of Mir Umar Hassan thus provides an entry point into the story which then depending upon the choices made by the users branch out in specific directions. Within the writings of Mir Umar Hassan are weaved multifarious narratives of innumerable “colonized “other” deemed invalid by the colonial historians and storytellers.” (Mukherjee, 2017).

As soon as the player starts with his exploration of the game, Mir Umar Hassan soon gets lost as his writings merge in the journals of General Charles Henry Connington whose exploits are retold by Prof. James P. Greenfield. Their descriptions and stories about Kayamgadh merge with individual narratives of people from fictional places of Bhutagam, Bhuladesh, Khoyagam, Kotanaku etc who engage the player with their reminiscent and nostalgic utterances. As the game continues to spawn characters and narrative, the player follows the travels of Aziz and Azaam, a duo of thieves who trade in forgeries and are in the search of

city of Kayamgadh, (Dhruv, 2016). The players will follow the journey of these thieves through multiple identities and at most of times as not being Aziz and Azaam but rather as a character with whom they have flipped identities through their course of exploration. *"A player travels by becoming other people... As you navigate identities, you realise that each person you become is a figment of another character's imagination and a part of yet another story."* (Sigl, 2013). The character flip mechanism along with the sheer multiplicity of narratives attributes the game its essential characteristic of ambiguity. *"Our principal argument in creating Somewhere is to attempt an exploration of a particular form of fiction, one that we call "concentric fiction" where each node in the story spawns a repetition of authorship, and a series of nesting of narratives."* remarks Dhruv. (Chan, 2017).



Figure 36: Rituals Screenshot 3



Figure 37: Rituals Screenshot 4



Figure 38: Rituals Screenshot 5

To this pattern of storytelling is added the feature of gameplay through which the story unravels itself. The visuals, text and gameplay contiguously build up the fragmented post-colonial narratives. The gaps in the broken and imaginative utterances of the characters are filled through abstract visual art, permeable virtual space which has multiple access points through doors, books, photographs etc, and a player itself is creating a narrative moving through these portals and accessing abstract story spaces and absurd dialogues . Facilitated through material interfaces the player navigates the game-world individually and in due course making their own observations, associations and meanings with story of Somewhere -

*“Our game environments are split into ludic spaces and literary spaces... Spaces that act as theatre to a player’s enactments and spaces that change as you move through them... This is why none of the characters have a fixed sense of selfhood and the protagonist can sneak up on characters and “become” them. (Nair, 2017).*

On being asked about his personal motivation behind designing such an ambitious project, Dhruv replies that apart from experimenting with technical aspects of game designing working on Somewhere *“is also a very intricate exercise at trying to subsume melodious vernacular narratives from in and around the place where I live Daman and a lot of folk*

*stories that I have sub-cumulated or adapted from various different sources and also stories somehow are always about how stories are told, how history is recorded which is why also game takes place during the contested and sort of secluded period of colonial history”* (Jani, 2017) and video games as a medium were a perfect fit for his experiment as both the practice of oral storytelling as in the stories of Somewhere and Video games the absence of authorship is common. The central position of author is replaced by “an ever changing *Sutradhar* (storyteller / narrator) in the form of a player” and thus video games are an apt medium to tell ‘inherently fragmented stories.’ “Somewhere is a didactic game, but not a serious game. To players perhaps it will appear to be an uninvited window into the lives of other people. there can only be fragmented identities and silences in the narratives.”

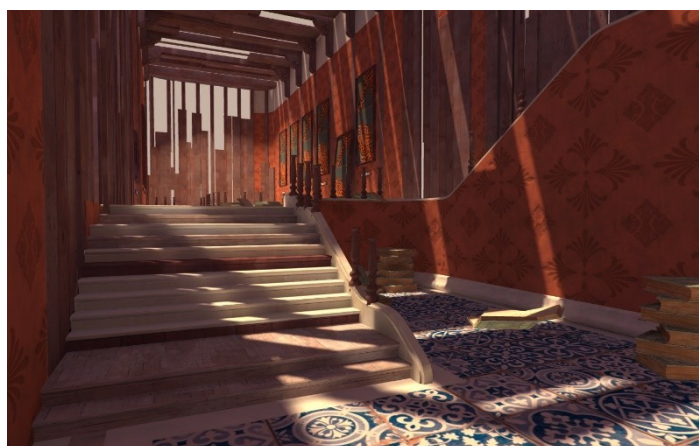


Figure 39: Under the Porcelain Sun' screenshot 4

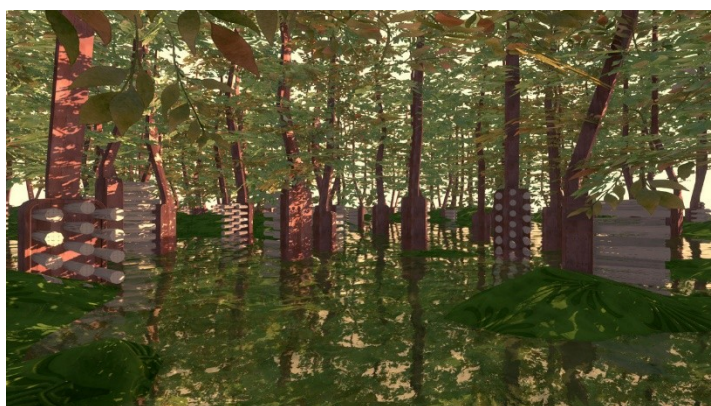


Figure 40: Under the Porcelain Sun' screenshot 5

Textual structure of the video game is alike machinic structures as formulated by Deleuze and Guattari in their seminal work 'A Thousand Plateaus' (1980). The usage of machine "not necessarily implies mechanical rather it implies fluidity" remarks Mukherjee, as the machinic assemblage is not only functional but also ideological and cultural. (Mukherjee, 2015 ). The concept of machinic assemblage is important to understand the multimodal discourse of video games. Often in popular conception video games are seen as wholesome single entity which in turn leads to their narrow understanding of being mere games with leisure as their main motive. However, for a broader understanding of games it is necessary to understand the multiplicity of participants in the video game assemblage which are independent working systems in themselves working in tandem thus imparting the unique expressive qualities of the medium.

Video games is not one medium, but many different media along with the player agency central to it- a feature common to computer-based productions highlights how the "functional differences among the mechanical parts play a defining role in determining the aesthetic process." (Aarseth, 1997, p. 22) It is this language of fracture both functionally and textually particular to the medium of video games responsible for its rhetoric. Video games are "characterised by multiplicity: they have a multiplicity of endings and game events take place in multiple points in time. Only by studying the multiple nature of video games is it possible to gain a fuller understanding... instead of binaries, perhaps a model that considers games as a multiplicity of assemblages would be more appropriate." (Mukherjee, 2015 ). Such an understanding of video games is useful in expanding the boundaries of the medium as it extends the metaphor of Huizinga's 'magic circle' (1949) to the procedure of game development wherein the heterogenous elements can be 'playfully' arranged for a particular expression and experience. Somewhere aesthetically utilises the assemblage structure of video games by weaving multifarious narratives in the fragmented mechanical structure of

the game as is evident in its visual style and gameplay. “Videogames, tell inherently fragmented stories and demonstrate great tolerance for how characters might occupy these places.” (oleomingus, 2013)

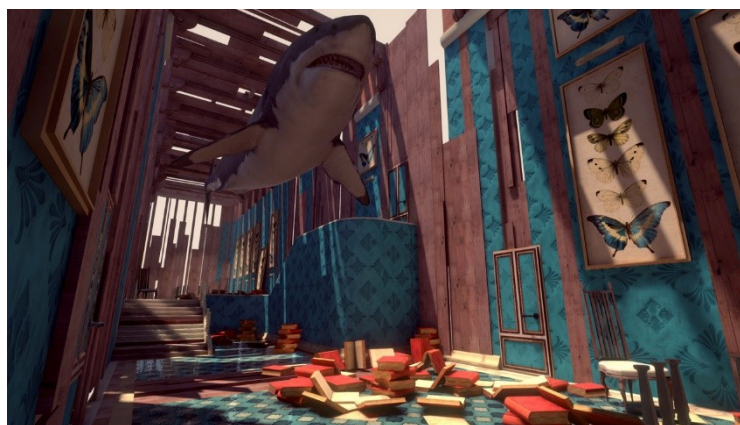


Figure 41: Under the Porcelain Sun' screenshot 6

Each episode of Somewhere is an example of intricate game designing. From writing of the story for Somewhere to designing of the game visuals and game-world the game borrows from a vast array of literary and architectural styles. On being asked about the influences and inspiration behind Somewhere, Dhruv cites a vast array of examples which has been influential in designing of Somewhere. The style of storytelling is strongly influenced by *“nonsense works of Sukumar Ray and Lewis Carroll or the theater of Girish Karnad, or the absurd world of Sarnath Banerjee... Or from within the beautifully told My Name is Red by Orhan Pamuk”* while the story writing and character sketches are inspired by *“the sympathetic characters of Malgudi from RK Narayan's world or the people from VS Naipaul's books, or Chinua Achebe's disillusioned men, and the Parsees of Rohinton Mistry's world. magical realist influence that you see in some of the writing, is from Haruki Murakami's ... and the works of Luis Borges... but the strongest influence has been the work of Italo Calvino, and his book The Invisible Cities. In-game architecture and visual style has been influenced through “incomplete, informal, absurd and repetitious works of Lebbeus*

*Woods ... Superstudio's continuous space and other experiments... Daniel Libeskind's machines... cybernetic work of John Faser and Gordan Pask and the work of Lars Kordetzky... but the closest reference would perhaps be Le Corbusier's poetic but brutalist work.” (Sigl, 2013).*

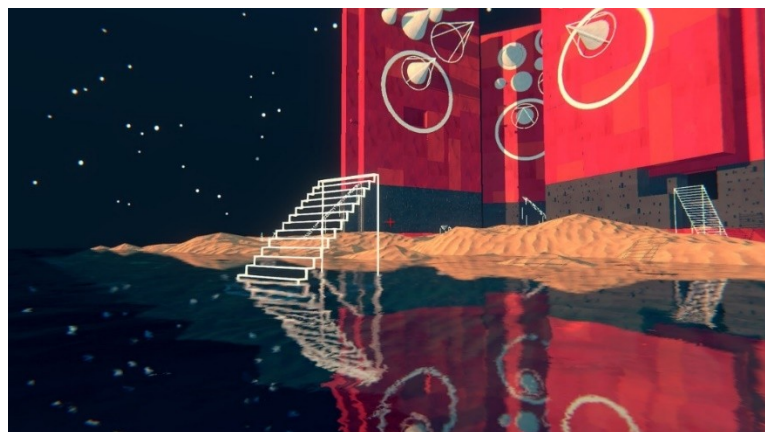


Figure 42: Indivisible Margin of Error

#### 4.4 Game Mechanics

‘Somewhere’ is a single player computer video game. It’s a first-person, text-based exploration game where the player can explore the game world through his point of view through point and click mode of interaction. In order to play Somewhere the player has to interact with two types of interface – The first one is the material or external interface through which player will perform the in-game actions. In-game actions can be performed either through the combination of keyboard and mouse or through a game controller. Though each episode of Somewhere has few game controls which are specific to a particular game episode but largely the palette remains the same.



The game controls are pretty basic and are easy to memorise even for an amateur video game player. When using the combination of keyboard and mouse, keyboard controls primarily the player movement which can be either controlled through the combination of 'W', 'A', 'S', 'D' keys or through the arrow keys and player interaction within the game-environment by pressing 'E' key. On pressing the 'E' key the player can perform several interactions such as engage in dialogue with other characters, pick up and place objects, open a book, switch on the radio etc. As mentioned above about the branching narratives within the game, the player can press 'R' for dialogue alteration. Thus, by pressing keys 'E' and 'R' the player can navigate through the nest of narratives. The character flip mechanism which is an important game action allowing the -player to change identities can only be executed when the player is hidden. The player can enter the hidden mode through pressing the 'Left Ctrl' and "hidden" is displayed at the bottom of the screen. However, if a player is spot while hidden then 'suspicious' or 'detected' will be displayed on the screen informing the player that character flip cannot be performed for now. Once hidden, the player can stealthily approach towards the other character from behind and then press 'SPACE' key which changes the identity of the character and player now is able to play as a different character and interact with the one he was before. The mouse controls the intuitive movements of looking around and click on objects to interact with them.

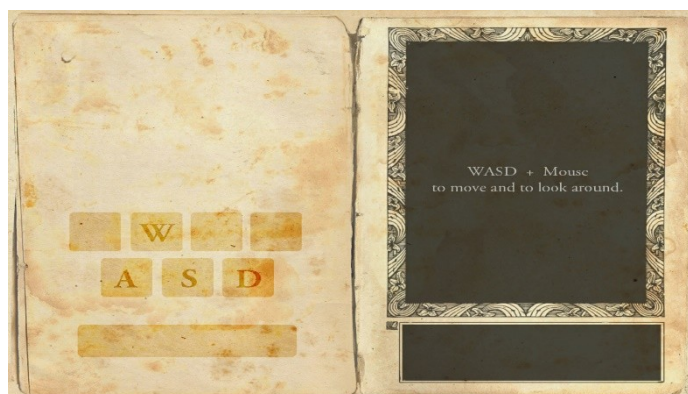


Figure 43: Game controls screenshot 1

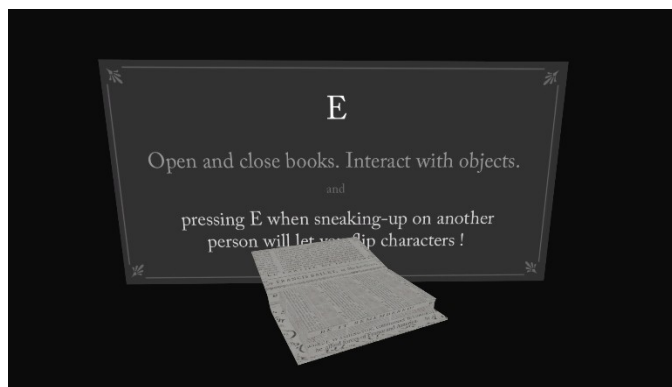


Figure 44: Game controls screenshot 2

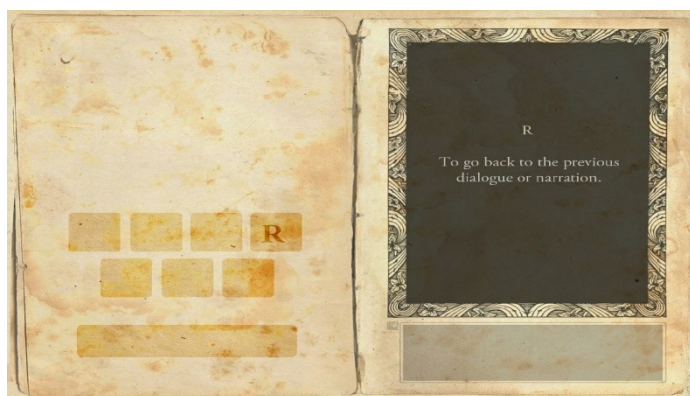


Figure 45: Game controls screenshot 3

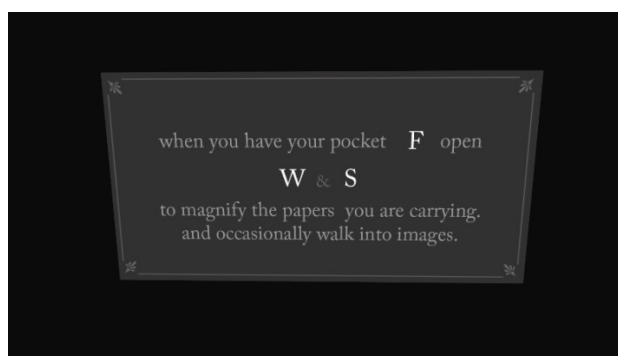


Figure 46: Game controls screenshot 4

The second mediating interface is the game interface which is again minimal. On clicking the game icon, a pop-up appears which allows the user to select the graphical output and modify game controls according to his preference. Once the user presses the PLAY button, the game has no in-game menu and it straightaway starts with introducing the set of game actions that a

user will be capable of performing in the particular episode with the corresponding key mentioned. The above information is embedded within the game-world itself presented to player either through a walkthrough before he enters the game-environment or through mentioned in the pages of typeset books through whose pages he will eventually enter the game-world. As mentioned in the preceding paragraph, major mechanics of moving around and interaction remain the same across all episodes, however few game actions remain particular to an episode.

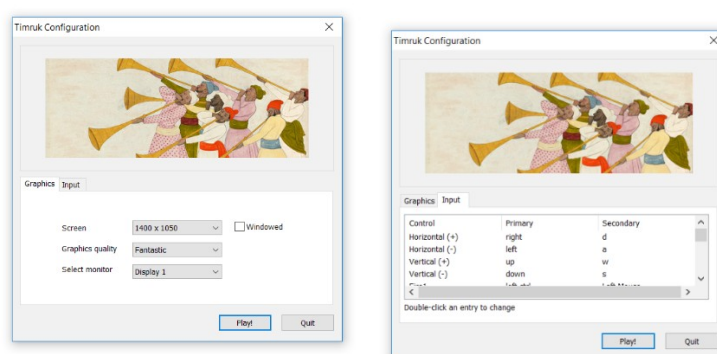


Figure 47: Game interface screenshot 5

The game mechanics are designed to be in sync with intuitive exploration of a player-cum-stranger who encounters the surreal landscape of Somewhere. Players can express their obvious curiosity or bewilderment by moving around with intrigue and pointing and clicking at the objects of interest. The player is supposed to explore the story-world through moving around and interacting with objects and characters placed in the game-world. The player enters as a stranger and as he keeps interacting he keeps finding new interactions and actions to perform which he has no idea about. Opening of a book might lead a player environmentally to a different location where he might get in a dialogue with a character. During the conversation, player has options to either progress with same stream of dialogue or opt for dialogue alteration. The mechanics of game complements the fragmented and absurd expression of the story. Changing identities between characters or the character flip

mechanics common to most stealth based games sees a quite innovative application within the game as an essential dynamic to the practice of storytelling.

Commenting on the style of gameplay in *Somewhere*, Dhruv says,

*what is decided very early on was that we are not going to allow the player a large amount of authority in our game... there is going to be a lot of tacit interaction and hidden interaction which the players are not really aware of. For Oleomingus players specifically are more like story readers... the player is still the reader, we have simply given a greater amount of authority and option on how to read it further. The game itself is a formal exploration of storytelling and investigates the conflict that arises from the subversion of the role of a storyteller in videogames... dialogues that you see on the screen will radically change if you move environmentally in a different plane... There are bunch of collider boxes invisible to the player which trigger a set of numerical counter in the game and these counters sort of keep track of how much time you have spent on the game, where you are placed in the game, what environment you are looking at and based on the combination of those numerical counters need starts to modify some of the variables in the story so you see completely different interpretation of the same story if you play which sort of moves through the game little differently... and we enjoy this sort of control... So there is certain amount of invasion by the player as the reader of the story and it distorts... But it does not award the player overt control whether they select this branch or that branch which happens on a note to note basis where they have dialogue choices and certain basic story choices but a large amount of choice is done subconsciously by the player by things that interest them and sort of move in that direction and that opens a particular path in the game... we definitely fall in the simulation category more than the rule driven behaviour... For us the. We are trying to see if*

*we can take the digital format of the novel and then push it into different directions by adding programmable materials into assets. So Game's responsibility to interact with readers and telling the story based on their actions. That is central to how we work on our stories and I assume that it is essential to most people who work on interactive fiction. (Jani, 2017).*

## 4.5 Game Analysis

Though the major episodes of the game are due to release in Summer of 2018, the studio have released three small playable demo episodes from the larger game of Somewhere on their website and on game hosting platform of itch.io and Steam. These three episodes are:

- Rituals, Timruk and The Museum of Dubious Splendors. The researcher played all these three games and observations are documented as follows:

### 4.5.1 Timruk

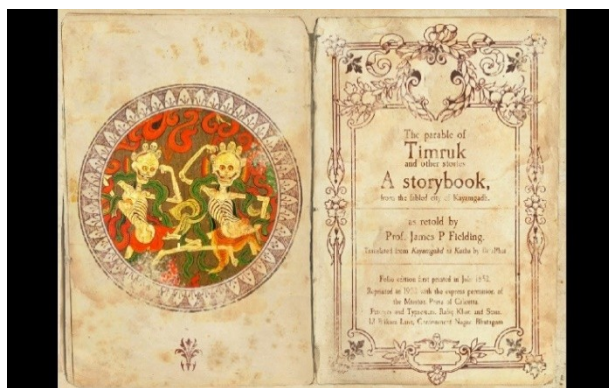


Figure 48: Timruk 1



Figure 49: Timruk 2

Timruk is a small playable episode from the world of Somewhere and is one of the initial episodes that Oleomingus released as a part of Khoj residency. Timruk is actually a story from the collection of stories believed to have originated in Kayamgadh.- The mythical city of storytellers. The game starts with player being welcomed as a stranger by the Sutradhar who is earnestly waiting to tell a story about the great Bashtu War in the Bashtu valley. The rulers of the valley were warring for ultimate power as “gates of Kayamgadh lay soaked in blood”. During the course of war, the feuding rulers imprisoned the artists of Kayamgadh out of fear that they will “consume all the precious supply of its red Mongolian ink” without which the “victorious pasha would not be able to commission great books chronicling his valor on the battlefield”. It was during this time of imprisonment that the master of the these 42 told them the stories to make their “imprisonment and ordeal nearable.” The parable of Timruk is the first story out of the seven parables.



Figure 50: Timruk 3



Figure 51: Timruk 4



Figure 52: Timruk 5

The story is about a ruler who is a connoisseur of literature and arts and how his son is inspired by a particular story told to him by one of the craftsmen in his kingdom. The craftsman's words become the second parable of the collection but the game never reaches towards telling of the third parable as the second parable never ends. In fact, the game never ends as the ending of the second story merges with the preceding one, the game loops back to the first story of Timruk and a player can either go over again and again resulting in a cyclic flow of storytelling and play through multiple identities and spaces. Finally, the player just closes the game forcibly as the game hasn't designed any natural conclusion in form of goals and achievements. The game will continue until unless the player quits on its own.



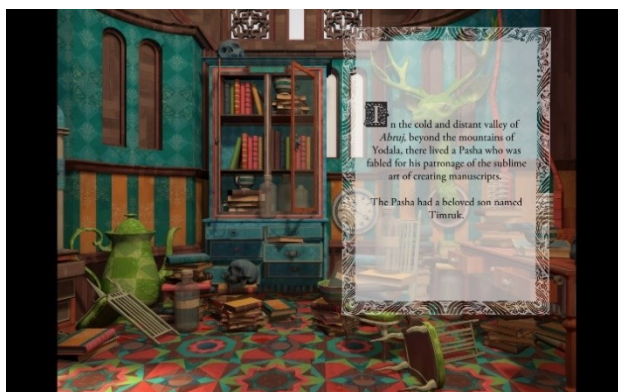


Figure 53: Timruk 6

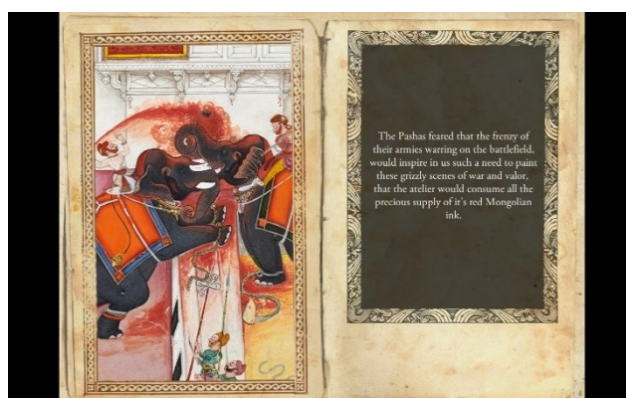


Figure 54: Timruk 7



Figure 55: Timruk 8

The duration of the game is small and the activity of playing is minimal. For majority of the time the player actions are restricted to just pressing the key for progression of the story. Although there is little to play, Timruk serves as an introduction to the general visual tone and the gameplay of Somewhere. The game itself plays out within the book of “The parable of

Timruk and other stories” which has been attributed only as a retelling by Prof James P. Fielding. The player enters the book and the story is told within the surrealist ruins of Kayamgadh alternated by the visuals of typeset pages of the book itself. The feature of interacting with non-playing characters such as picking a book or a photograph and enter into their world is a feature common with subsequent episodes of the game. The interacting objects are like portal which keep transporting the player into the world encapsulated within the pages of book or a photograph thus the player is not only navigating through the story but also through different worlds and perspectives.



Figure 56: Timruk 9

Somewhere’s experiment of concentric fiction is clearly evident in the authorship attributed to this text. Originally believed to be narrated by one of the storytellers from the city of Kayamgadh, the original version underwent several iterations as it was retold through generations, were found carved upon temple walls across BhulaDesh, and the imprints from the carvings were first compiled into written form by a traveling poet at the court of Rajah Brimanath at the Kotananku presidency in 1821. Amongst these shifting iterations of the story, the game also very subtly places itself as yet another iteration of the parable of timruk. Ultimately, one really doesn’t who the author is as the obvious branching and veering of

authorship and perpetual spawning of narratives and characters nullifies the centrality of the author.

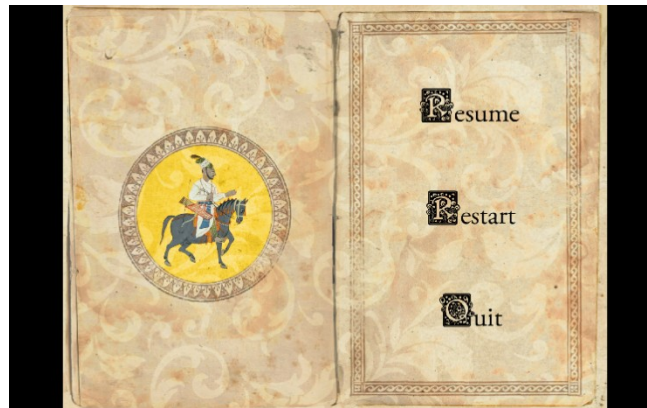


Figure 57: Timruk 10

### 4.5.2 Rituals.

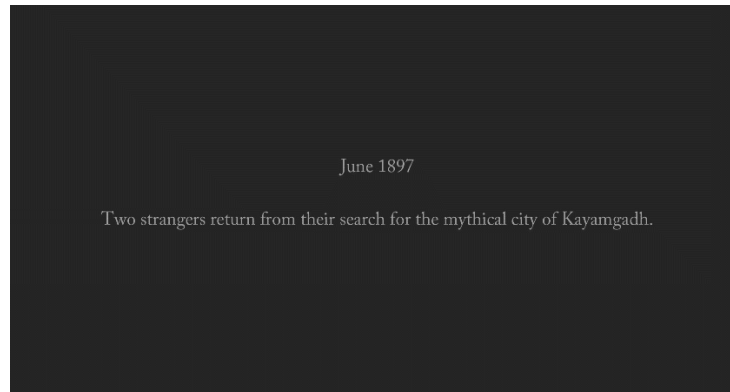


Figure 58: Rituals 7

Rituals have been described by Studio Oleomungus as the alpha-build or a test build of Somewhere build as a part of their Khoj residency. It's a small game but introduces the character flipping mechanism which will be one of the main gameplay features in the main episodes of the game. Rituals tells a story about two strangers who are hiding in the house of dead Englishman – Prof James P. Fielding- a subtle reference to the Fielding's writings which are a part of the canvas of fragmented narratives wherein the city of Kayamgadh exists. The strangers are trapped within Fielding's narrative of "The Siege of Matsyapur" as they discuss their futile search attempts in the search of city of Kayamgadh apparently guided by the Conington's journal- An English general who claimed to have visited the city of Kayamgadh.

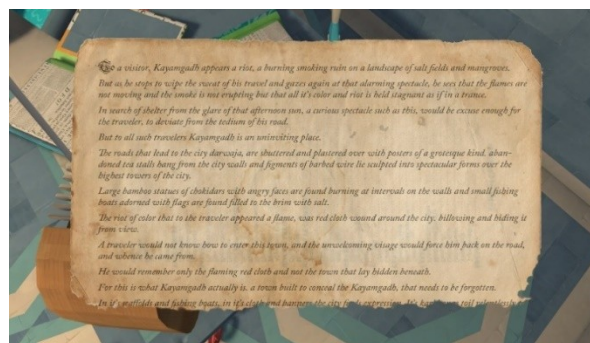


Figure 59: Rituals 8



Figure 60: Rituals 9

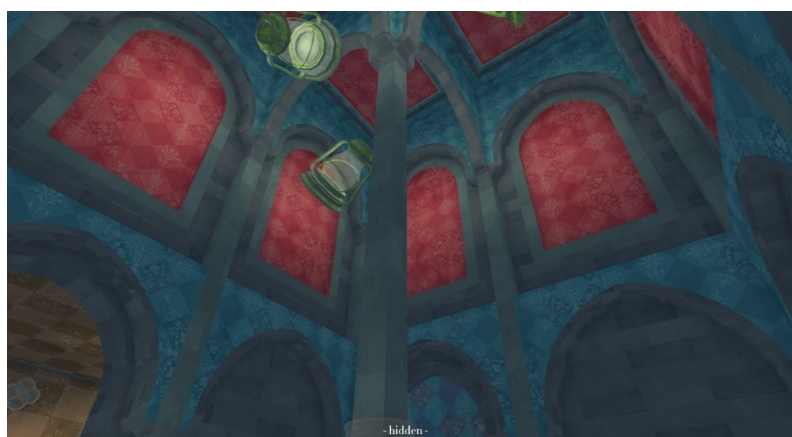


Figure 61: Rituals 10

The player plays as one of the two strangers and interestingly can switch between the identities of the stranger which in turn changes the perspective and hence the narrative of the story. As is characteristic of Somewhere, the story continues to spawn multiple perspectives without ever verifying the source and the player cum character keeps getting embroiled in the web of narrative spun through veering sources of authorship. The player never reaches anywhere but still remains Somewhere. Apart from the stranger, there are plethora of objects mainly books, photographs and pages telling further stories about the people and incidents of fictional places such as Bilkapur, Bhutagam which apparently lie en-route to Kayamgadh.



Figure 62: Rituals 11



Figure 63: Rituals 12

The extreme fluidity and its apparent absurdity of the game is a comment on the absurdity of idea of national history itself. Any text claiming to be a factual historical chronicle of a time is more likely to be an arbitrary and a forced closure within the expanse of unfathomable voices and happenings which soon become as “fictions constructing the reality around us.” (Joho, 2014). The journey of colonial India toward its independence and its subsequent journey is not about the nation but the people and objects who have been inhabiting that space time making associations and giving it meaning however now they exist only as “fragmented identities and silences in the narratives.”

As a comment on post-colonial nationalism, *Rituals* reveals that fictions construct the reality around us, while its mechanics show that other people’s fictions can infect one’s own sense of self. Hopping from character to character functions as more than just disorientation. The player is constantly aware of his intrusion as he invades each body, leaving behind a pervasive and disturbing sense of alienation. The concept capitalizes on the “language of fracture particular to games. A language that speaks so readily to the occupation of identities, and fragmentation of narrative.” (Joho, 2014).



Figure 64: Rituals 13



Figure 65: Rituals 14

### 4.5.3 Museum of Dubious Splendors.

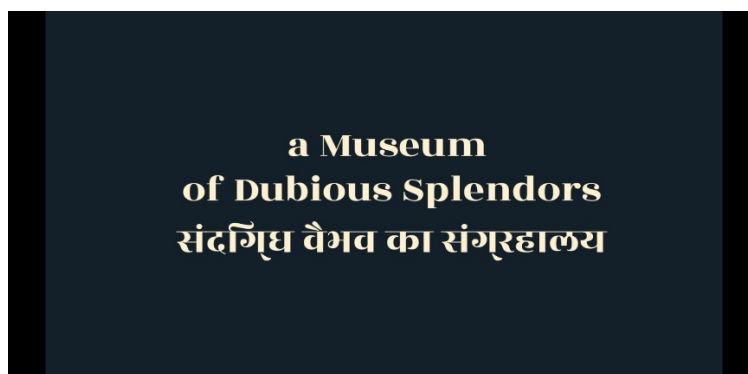


Figure 66: MODS 1

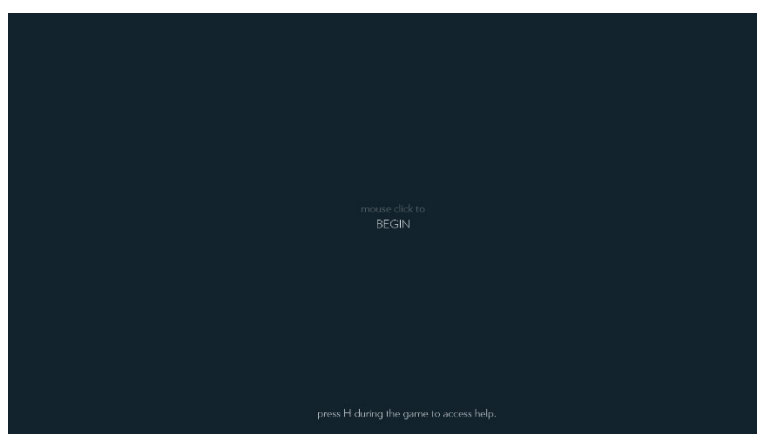
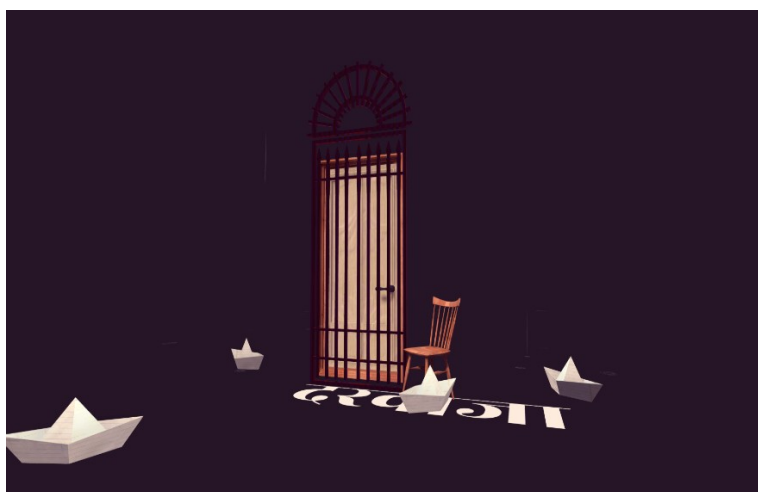


Figure 67:MODS 2

Museum of Dubious Splendors (henceforth referred as just MODS) is the third build that Oleomingus have made available on their website and on Steam for free to play. The build was a result of the grant through Indian Foundation of Arts in support with Technicolor India. Museum is a storybook from the world of Somewhere. Initially it seems the authorship of the storybook has been credited to the Gujarati poet ‘Mir Umar Hasan’ as the description of game itself states – “It is an adaptation of a series of essays written by Mir Umar Hassan, a Gujarati poet” (Oleomingus, n.d.) but by the end, the description with same conviction contradicts its earlier claim – “it cannot be said with any certainty that the text that we used for this adaptation was the original as written by Umar Hassan.” (Oleomingus, n.d.). The interactive



playable storybook is an “attempt to resurrect people from within the margins of stories that have never been recorded with any permanence — in that they are folklore-like, full of spurious histories that get told about each prosaic object on display,” said Jani. (Chan, 2017)



*Figure 68: MODS 3*

The game opens in a space purportedly a museum which houses rather rare and exquisite sculpture each having a story of its own. The player starts from a black screen from where he enters through a door and is introduced to a story which leads him to a room with multiple doors and at a corner of it a large scale abstract sculpture is placed. From multiple doors a player can choose to enter any one and will again be told a story about the sculpture the player is about to see in other room. The game requires a lot of patient reading and a player has nothing much to do physically than to just move around and enter the doors. In between moving through the doors, the player can interact with other objects as well which reveal the history of the museum itself and how these artefacts came to be in that particular place.

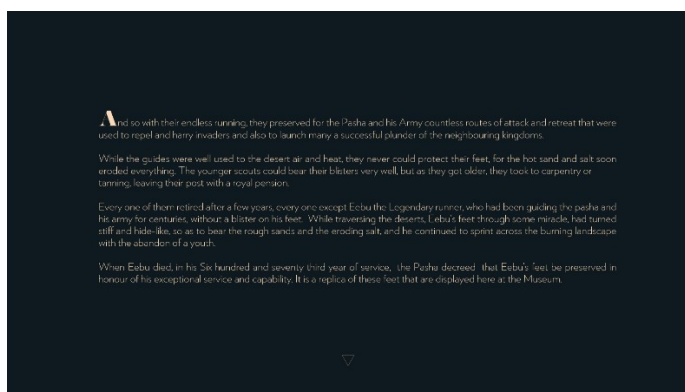


Figure 69: MODS 4



Figure 70: MODS 5

The game has an added feature of using a camera which a player can access by pressing a key. One can not only click photos of the bizarre yet engrossing visual space but the photos functionally in turn function as an in-game save which through which a player can directly access those rooms whose photo he has clicked when it plays next. Aesthetically this feature of accessing rooms through clicked photos allows the player to make its own associations with the game serving the purpose of fragmented memory akin to the fragmented narratives in the game. MODS uses the space of a museum to highlight the stratified foundations of history and problematises the materiality of an archival space. Museum is an encapsulation of not only sculptures and artefacts but also of narratives, stories and memories. It's a fluid and an amorphous space constantly being reshaped and redesigned with each act of telling and

retelling. A Museum of Dubious Splendors is what Jani calls a “ruminant on the nature of an archive of recollections.” (Chan, 2017)



Figure 71: MODS 6

## Chapter 5: Game II - Antariksh Sanchar

*Antariksha Sanchar is India's first major video-game, a beautifully-crafted experience in which you follow in the footsteps of a young mathematician learning to make sense of the cosmos. (Sheffield Doc Fest, 2016)*



Figure 72: Antariksh Sanchar

### 5.1 About the Game

Antariksh Sanchar or Transmissions in Space is a narrative based single player, third-person point and click adventure game under development by Quicksand Studios. The game is described as a “speculative adventure inspired by the vibrant cultures of South India” on its website. (Sanchar, c.2016). Set in South India, the game is an ongoing experiment to exhibit representation of Indian culture through video games. Interested in exploring the intersections between traditional arts and digital technology, the video game drew from rich resource pool of Indian arts and cultures. The game explores ancient south Indian culture and teachings through the eyes of child character Ramanujan- whose character sketch is inspired from

Srinavasa Ramanujan – a prodigious Indian mathematician and Jayalakshmi Eshwar – Internationally acclaimed Bharatanatyam dancer and also the mother of Avinash Kumar – the game developer. (Sanchar, c.2016)



*Figure 73: A snapshot from the game's website (AntarikshSanchar)*

The game is developed by Quicksand Studios along with the collaboration of two multi-disciplinary initiatives – (UnBox and BLOT!) to bring in a ‘unique perspective to a very popular form of media.’ (Kumar, 2017). The game has already made a history by becoming the fastest game from India to be ‘Greenlit’ within 15 days by Steam i.e. “it got the number of votes needed to guarantee a release on the highly popular and tightly curated Steam platform.” (Kappal, 2016) (Steam, 2016). The game has also been part of the prestigious Sheffield Doc/Fest and has made “appearances at a number of indie gaming festivals, including the Indie Prize Showcase in Tel Aviv and IndieCade festival in Los Angeles.” (Kappal, 2016).

Originally the game is brainchild of Avinash Kumar who graduated from NIFT (National Institute of Fashion Technology) and has a degree in toy designing. Avinash is also founder and head of Quicksand Studios - an interdisciplinary design and research-based consultancy based in cities of New Delhi, Bangalore and Goa. Antariksha Sanchar is an independent experiment funded through Avinash's finances and being developed with the help of Quicksand team. Recalling his early days as a toy designer, Avinash reveals:

*so, I used to be a toy designer before ... my first job... ending of college... in fact this studio started when I still was a toy designer... a lot of research we do here comes from my toy-design based on children products where you need to do a lot of research... participatory work with kids... my target group was babies, toddlers, and early childhood educations products broadly. (Kumar, 2017)*

Talking in relation with his interactions with someone as young as babies and infants Avinash reveals about the perspective involved

*“So that perspective of things is very different like there the biggest challenge was how do you design for someone who might not exercise same logical structure as you will ... older the child grows it becomes maybe easier for a designer because there is more logic in child and more mental models so you can target those... but for the younger and younger you go ... a real plaything as they call is really hard to make... It has no base to start with, the only base can only be a very pure base of a natural, innocent and untampered outlook towards the world.” (Kumar, 2017)*

The conception of play as revealed through Avinash's experience and learning resonates with classical texts upon games and play which proclaim play as one of the fundamental human activity which with the development of society and rise of socio-political structures got

modified and channelled in our daily interactions (Huizinga, 1949) (Caillois, 2001) (Suits, 1978). Avinash admits the challenge behind designing a simple toy - “There is a difference between an inventor and designer ... playthings needs to be invented.” (Kumar, 2017). His shift to digital is richly informed by the multifarious concept of play and video games are only a part of the larger transmedia project which aims to “look at old symbols of culture, mythology and try to integrate them in popular forms of media.” (Kumar, 2017). The eventual vision is to encompass diverse audio-visual medium in an interactive storytelling about Indian arts and culture.

*“The essential challenge, Avinash stresses, is to be able to tell a fragmented story through these media in a way that there’s always a sense of discovery embedded in them all... we want to do a music album, we want to do artworks, we wanted to do merchandise... our idea is that we want to tell a story which is only partly told in each of these mediums.”* (Kumar, 2017)

Antariksha Sanchar: Episode Zero is the “first episode of our transmedia cultural experiment – amplifying India’s timeless philosophies and vibrant mythologies” says Avinash. (Anon, 2016). The game requires no goals, high scores or level-based puzzles to progress rather it is an interactive exploration game where the player progresses through ‘pointing’ and ‘clicking’ at ancient figures and objects which can either initiate a conversation or dialogue or trigger small sets of puzzles which provide more information about itself once completed and thus the game keeps on revealing about South Indian arts and culture. The player is made to interact with the vast and variegated cultural assemblage by playing as Srinivas Ramanujan and Jayalakshmi Eshwar who themselves are important cultural personalities and have interesting character sketches to be explored.



Figure 74: Game Screenshot 1



Figure 75: AS 2

Inspired by the concept of outer space, ancient Indian philosophy, tradition and culture the game is a confluence of multifarious influences and references. Set in South India largely inspired by the city of Madurai in Tamil Nadu, the game draws from an expansive repository of “South India’s complex, multi-layered cultural identity” (Sinha, 2016) and tries to digitally recreate through popular medium of video game. From its narrative and characters to its in-game architecture and music the nuances of South Indian culture have been intricately recreated and replicated. The game follows the journey of a little boy named Ramanujan whose character is inspired and loosely based around Srinivasa Ramanujan – an Indian mathematician fascinated with the idea of dreams and outer space. Along with Ramanujan is his mother referred to as ‘Amma’ within the game who is a Bharatanatyam dancer and also a



housemaker. Guided around through player inputs Ramanujan ventures along with the player into an exploration of the culture, traditions, teachings and stories around him. The game is a playful exploration of the culture.

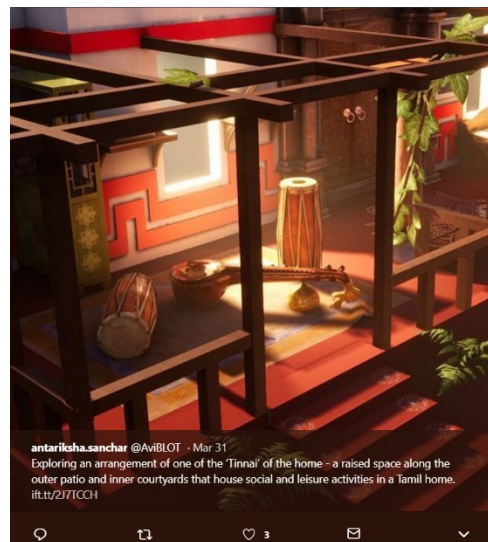


Figure 76: AS 3



Figure 77:AS 4

## 5.2 Game Development

The game Antariksha Sanchar has been under development since 2013. Originally conceptualised by Avinash, the game has been developed and co-produced with the support of Quicksand Gameslab, Unbox and Blot – a collective of three studios. While, Quicksand studios is founded and headed by Avinash himself the other two are collaborative initiatives within Quicksand Studios. Though none of them is a specialised game development studio, all three of them have been working at intersections of interdisciplinary research and innovation. The composite outcome in the form of video game is informed by individual creative ambition and vision of each of collective. Brief profiles of these studios on their respective webpages describe themselves as follows:

*Quicksand Studios – Quicksand is an interdisciplinary consultancy. We facilitate the creation of meaningful experiences through design research and innovation... Quicksand formalised a laboratory for play experiences with the christening of the Quicksand GamesLab in early 2013. Initiated as a seed funded project supported by the Arts & Humanities Research Council, UK (AHRC), and the British Council at the UnBox Festival 2013, Quicksand GamesLab is now working to publish its first indie video game in collaboration with creative powerhouses BLOT! - a popular electronic arts collective in India. (Quicksand, n.d.)*

*Unbox – Founded in 2011, Unbox celebrates action at the intersection of different disciplines. It is an attempt by Quicksand to build momentum around design thinking and inter-disciplinary collaborations as the means of driving more sustainable and impactful social and cultural change in India. (Quicksand, n.d.)*

*Blot – B.L.O.T. is the Basic Love Of Things—A collective that functions as an avenue for the independent work, and envisaged as a creative group that explores and creates*

*original content in various mediums such as sound, visuals, film, photography, art, fashion, food, and more. (Quicksand, n.d.)*



Figure 78: Game development collaboration

Engagement and interaction with New media and its intersection with other disciplines is one of their prime area of focus given its incredible scope (Castells, 2000) (Aarseth, 1997) (Jenkins, 2006) (Manovich, 2001). Their current project is to create a trans medial manifestation of Indian culture – an initiative which already is the first of its kind within Indian gaming scenario. Talking about the production strategy Avinash tells:

*Trans-media storytelling is an ingenious concept that holds enormous potential to reach a whole new target audience and consequently create dialogue between people that would otherwise never cross paths. (Kumar, 2017)*

Apart from the challenge of digitally documenting the Indian culture, other major inspiration for the game has been Avinash's mother – Jayalakshmi Eshwar who herself has collaborated on the game development process by recording some of the Bharatanatyam mudras for the game. Originally, Antariksha Sanchar was a Bharatanatyam dance production choreographed by Jayalakshmi Eshwar who is a well-known and acclaimed Bharatnatyam dancer.

*The starting point of the project was a dance production of the same name by my mother and Bharatanatyam dancer Jayalakshmi Eshwar... In this spectacle, she traces the idea of flight from small plants to insects to birds and finally to mythological concepts like Hanuman, the Pushpaka Vimana and the Vaimanika Shastra, an early 20th century Sanskrit text on aerospace technology.” Not only the theme was unconventional one for a dance production but “Eshwar also collaborated with Delhi-based audio-visual group B.L.O.T to provide background visuals and a more contemporary soundtrack. In the production, the Carnatic ragas that accompany a normal Bharatanatyam dance piece have been infused with electronic beats. (Anon, 2016)*



*Figure 79: Jayalakshmi Eshwar's with her students*

The contemporaneity incorporated within this traditional performance provided impetus to Avinash's ambitious trans-medial experiment. His collaboration in his mother's project provided useful narratives, visuals and artworks which directly or indirectly became part of the Antariksh Sanchar – the game and gave useful conceptual and methodological insights on how to “merge old symbols of South Indian culture, mythology and try integrate them in popular forms of media.” (Kumar, 2017)

Creatively coordinated by Avinash Kumar, the game has been under development since past 6 years and it has been an exhaustive and a challenging task. Being an independent, collaborative and a participative initiative the team was working on video game as their side project to their main professional commitments. Initially it was Avinash and Romit Raj (main programmer of Antariksh Sanchar) who started working on the project. Later on, the idea expanded and team enlarged as the idea was encapsulated within the creative visions of Avinash's design and research consultancy – Quicksand Studios. Kabir David who has been associated with both Quicksand and Antariksh Sanchar since past couple of years informs:

*Apart from a design and research consultancy firm the idea is also to use it as an "independent space where everyone gets to pursue the different interests they may have regardless of whether it has any impact on the client work that we do and there is a firm belief that any independent projects that you do in Quicksand will in some way or the other will have bearing on that work that you do with the clients as well"* (David, 2017).

The project of Antariksh Sanchar simultaneously also became a part of multi-disciplinary initiatives by Quicksand Studios – Unbox and BLOT. The diverse team of Antariksha Sanchar comprises of professionals from

*design background – product design, industrial design... graphic design... humanities scholars, social scientists, 3-D modellers and programmers, Sketch artists, Musicians... the main idea is to encourage a multidisciplinary work space for uniqueness and diversity of perspective where professionals and rookies alike can pitch in.* (David, 2017).

In an interview with Kabir David, who works in Quicksand Studio office in Delhi and is also associated with the game Antariksha Sanchar primarily as a writer, highlights a unique aspect of the game development team:

*One of the main things that Avinash wanted to focus on was to bring a team of rookies... people who haven't really dealt with video games before in order to bring unique perspective to a very popular form of media and I myself have not worked on video games in the past. I have played them to some extent and for me what caught my fancy was the fact that it told a very strong narrative. (David, 2017)*

For Antariksh Sanchar, Kabir has been involved in the process of script writing. His role was mainly to write a of lot of travelling and branching narratives which will “mainly be responsible to carry the player exploration forward through their interaction.” (David, 2017) He was also involved in developing character sketches of child Ramanujan and of Amma’s character which is built a “lot like Avinash’s mother and the things that she taught him”. (David, 2017). Kabir who himself comes from a literature background and didn’t have any experience working with video games before Antariksh Sanchar elaborates his experience working alongside the ‘Antariksha Sanchar’ team:

*For me it was quite an experience... I myself come from literature background with my graduation in English Literature from Delhi University... I came here mainly in writing capacity but overtime developed the sense of what the other work that was being done here... I was writing the script alongside the programmer Romit... You just realise what a huge task it is to build any kind of game and what different concepts do people require to come out with one individual output. (David, 2017)*

Despite the challenges, Antariksh Sanchar has been an interesting project to work upon as:

*Video games are a popular form for media and I think one thing we wanted to do is to look at our heritage, Indian traditions and culture through the lens of something that this generation can actually relate to and video games are one of them. (David, 2017)*

Avinash further adds-

*Whole idea of transmedia from the beginning was very exciting. we wanted to tell a story which was only partly told in each of these mediums. Idea was that I really wanted to tell a story that was fragmented and it was told in its own way depending on the medium and it was upto like people or whoever consumes which part of it or all together to make up what the whole story was.” (Kumar, 2017)*

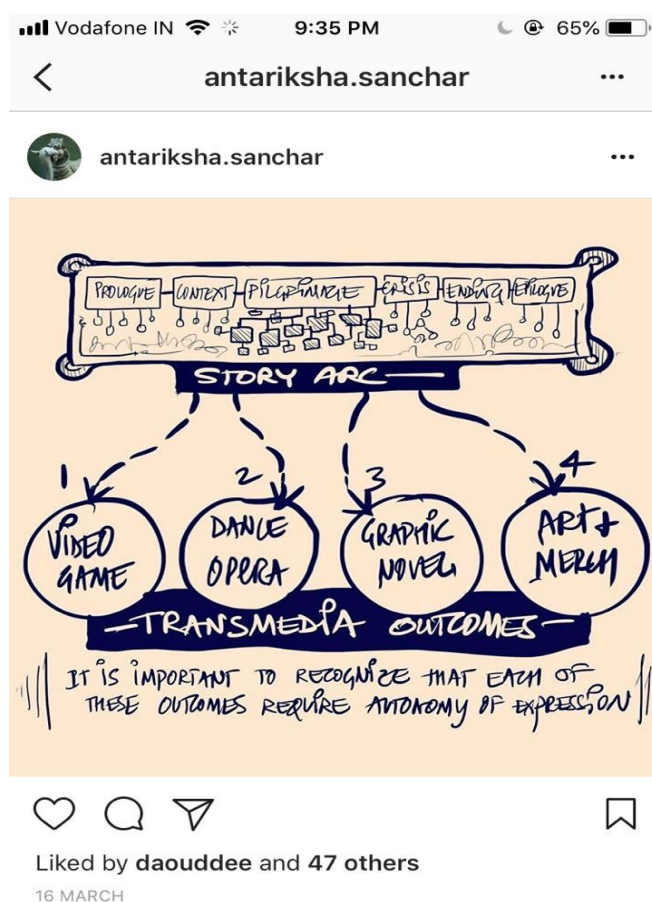


Figure 80: Storyboarding

Antariksh Sanchar has been “a very organic and an iterative process” (Kumar, 2017) as a result the game has turned out to be a fairly costly production. Apart from lack of funding, Kumar cites the exhaustive field trips and research for the game as prime reasons for the delay in release of the game. Giving an overview of team Kabir tells:

*I was doing the writing, programming was done by Romit and then you had the 3-D modellers... we had two musicians onboard, one of them was Hyderabad and another from Mumbai ... 3-D modeller was in Bangalore. We had another game director who was helping with narrative and everything who was in Ahmedabad, two concept artists were in Delhi.” (David, 2017)*

However, this also has been one of the biggest roadblocks during the development process that:

*it had to rely a lot on coordination and back and forth between two cities which wasn't the ideal case. Avinash did most of the coordinating between the cities... that way's process was slow and resource intensive... you need the money to coordinate and pay for the work everyone is doing.” (David, 2017)*

Avinash himself reflects on the financial hurdles:

*It's a question of budget... in your mind you're thinking of many more things and visualising right and in the 2D kind of in the scriptwriting you can go higher and you start storyboarding and writing better kind of ideas it's. then you start actually drawing and actually when you start doing stuff and you start modelling in 3D and you start kind of to make a game you know it is actually kind of going like that you actually are only here so the game is actually here maybe to people who play it maybe it will feel like it's here maybe pretty looking or whatever right but in a way it's nothing compared to what i have in my mind or what has happened even in the like*



*the Instagram feeds and all are maybe here maybe you'll see that comparison but and that's me over here but that is for me this is the biggest learning and also in the game that you know like there is a down deep downgradation of these things because you're one person and you're trying to do a 3D game and to start with but it is also the nature of how these things are because it all and that's why you realise that why game teams are so big why you need millions of dollars to make games. (Kumar, 2017)*

Apart from the financial hurdle, it was the exhaustive amount of research field trips that attributed to further delay in the development process. Avinash is aware of the exhaustive time and efforts being consumed in the process yet he is not bothered by the fact as he wants the game and the whole concept in particular to grow organically and have multiple insights and perspectives.

*Doing the research to create this game was just the greatest pleasure... "to do justice to the accomplished craftsmen of South India" has led to collaborations of all kinds some sustained like with programmer Romit Raj from the beginning as well as with Tejas Nair of Press Play, the Mumbai-based studio who has helped with adapting the sound for videogame and central sound design besides architects, artists, painters and specialists in 3D characterisation. "I travelled around Madurai; Dakshinachitra in Chennai, a museum of South Indian houses; visited the National Museum in Delhi; and made tons of sketches." (Anon, 2016).*

The best reference to their development work are their social media accounts on Instagram and Twitter where they constantly update their progress on almost day to day basis. Their accounts are an ethnographic collection of all the visuals, artworks, music, and research work

which has gone in the development process. Their accounts are rich reflection of their vision and their efforts and also a vital platform to include follower feedback and participation right in the development stages which also “gives us an idea about our target audience.” (Kumar, 2017).

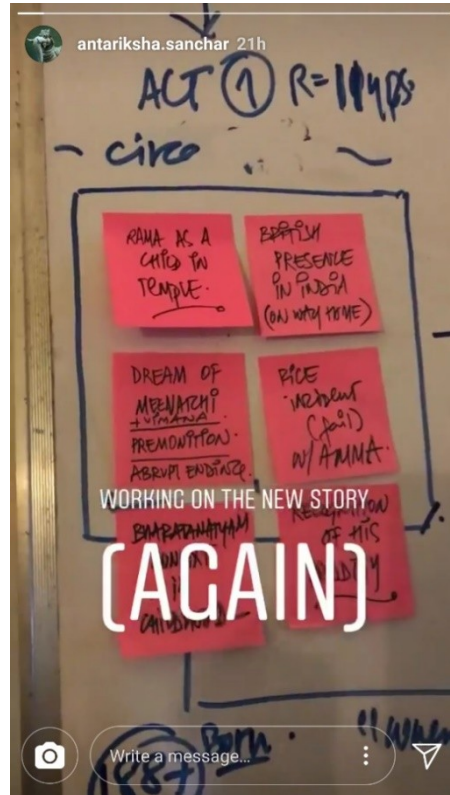


Figure 81: Storyboarding process 2



Figure 82: One of the Research trips of A.S. team

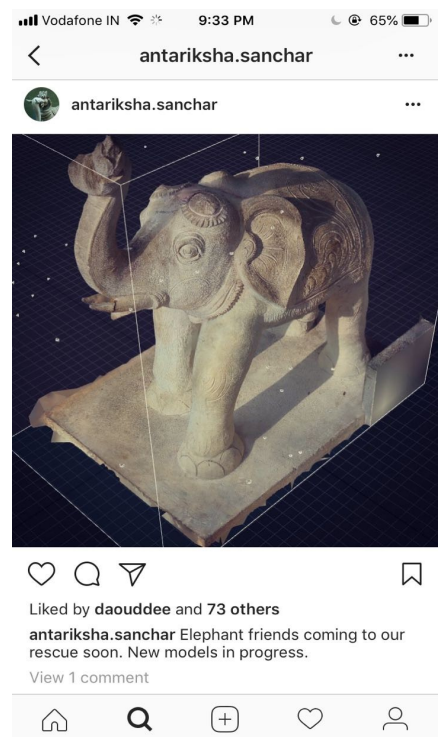
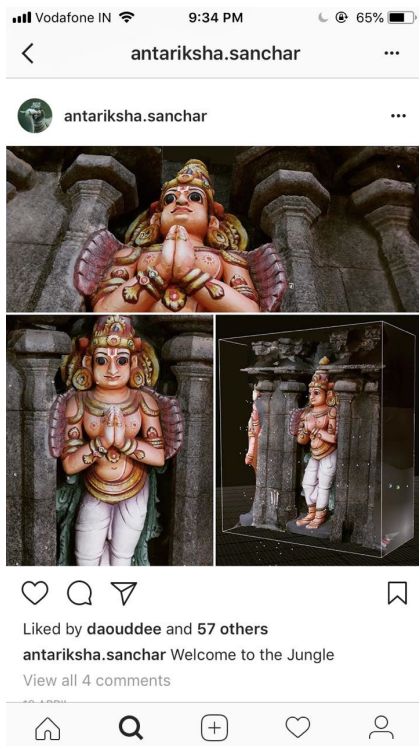
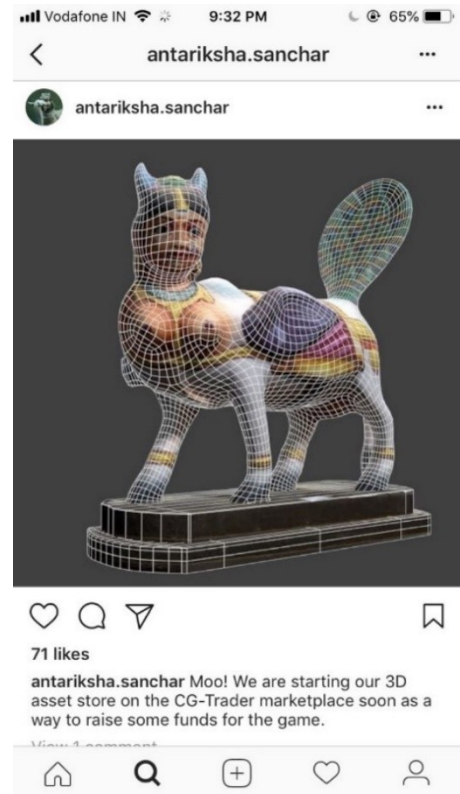


Figure 83: AS Development Blog

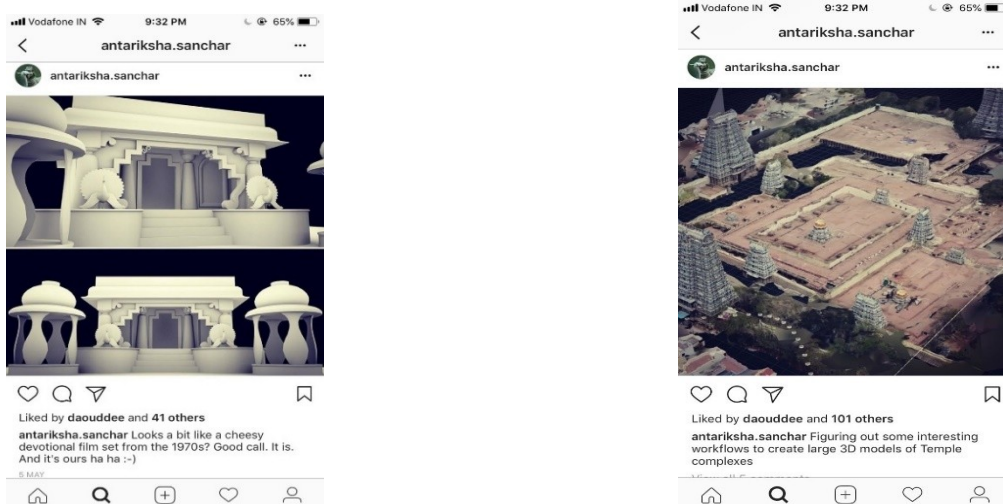


Figure 84: AS Development blog 2

Game’s exquisite visuals and interactive display has won plaudits at international festivals and exhibitions. Interesting thing about these festivals is that none of them is a conventional video game festival rather these avenues focus on the innovative artefacts being produced at intersections of art, culture and technology.

*“We have got selected for about 10 festivals. We got greenlit on steam which was great. Unfortunately, for all these things you need the funding to go there and present and the organisers aren’t always ready to give that funding but it was great to put ourselves out there.”* (David, 2017)

The game gathered appreciation and accolades at acclaimed events, one of them which was Sheffield Doc Fest, 2016 – one of the largest international documentary festivals held annually in Sheffield, United Kingdom. A demo version of the game called as ‘Episode Zero’ was an exhibit in the festival showing the results and process of documenting Indian culture through popular media such as video games. The game got further boost for its development when it was ‘greenlit’ by the Steam platform (an international and popular game hosting platform) just within 15 days and in the process becoming the fastest Indian game to receive

the required number of votes. This opportunity will provide not only a release platform for the game but also the much-required financial assistance for game development. Apart from Sheffield Doc fest, the game has been a part of other cultural festivals such as “EyeMyth” media arts festival, Red Bull Artist Summit, Japan Media Arts festival and iVentures Toronto to name a few.

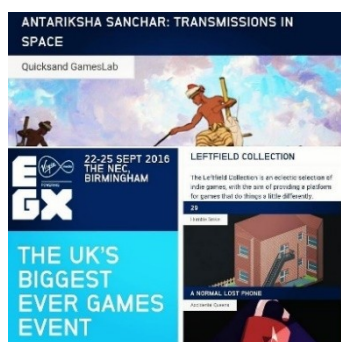
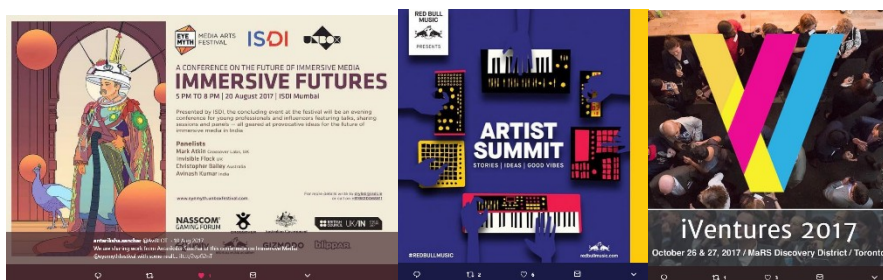


Figure 85: AS festivals and workshops

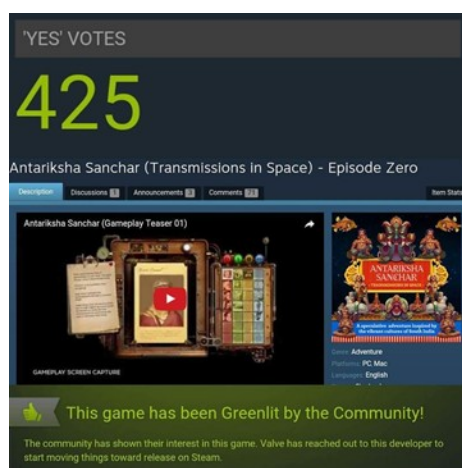


Figure 86: Steam Greenlit

Multidisciplinary exposure and a collaborative workforce has lent completely different temperament and characteristics to the development of the game. Avinash has kept the whole development process completely transparent and welcome user reviews and informed critiques. It is his firm belief that to design something as vast and expansive as Indian culture, one needs to ensure a similar amount of participation for fresh and multitudinous perspectives. This is one main reason why Antrakish Sanchar is a collaborative project – to infuse the diversity and multiplicity of digital material and medium along with the aesthetics of Indian art and culture.

*The beauty of multidisciplinary projects is that no single team member is pigeon-holed into doing exclusively one kind of job. A graphic designer could take some time off to delve into archaeology or a sound engineer could engage more with architecture; these roles are free to keep switching around in a world of constant bilateral feedback. (Kumar, 2017)*

On future plans, Avinash informs via twitter that the first episode of the game: Episode Zero will hopefully be released sometime in late 2018 at Eyemyth Media Arts festival. Once the game is released, Antariksh Sanchar team will look for the diversification of narrative, Kabir David informs:

*“Apart from video game we are also looking at utilising this narrative for other things... from small toys to other such merchandise... using it more as a franchise because video game is only one representation of what this whole narrative seeks to convey... We are looking at creating more of a narrative script-based platform for the mobile and tablets. We have also been struggling with the 3-D aspect of game and that takes a lot of resources and a lot of time making the 3-D environment... It would be more the idea rather than replicating the same environment as it is. A format that is more appropriate for a mobile or a tablet – transmedia storytelling” (David, 2017)*

### **5.3 Game Content – Weaving Story and Play**

The prime motivation behind designing the game was to engage with vastness and multimodality of Indian culture and adapt “our traditional and ancient expressions to our imminent digital culture; retaining them for future generations in an innocent and inspirational form.” (Sinha, 2016). In that way a “typical idea of videogame definition doesn’t fit with the game like Antariksh Sanchar” informs Kabir who himself prefers to call Antariksh Sanchar

*“as an immersive storytelling experience rather than a video game because video game aspect of its what people would relate to most while playing... There’s a lot more that’s going on in terms of script and those conventional ideas of interactivity*

*and gameplay doesn't figure in that form in Antariksh Sanchar... while playing Antariksh sanchar player explores more of philosophical themes and concepts as well as history, heritage and things like that may or may not be covered by a typical video game.” (David, 2017)*



Figure 87: Branching Narration

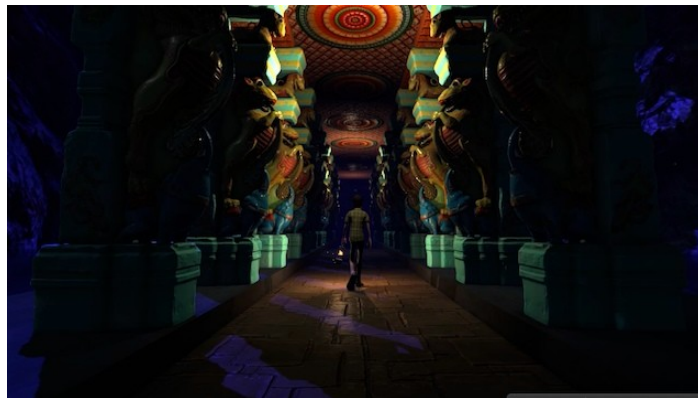


Figure 88: Dream Corridor

The game-world apart from being visually captivating is also highly networked and layered space as a lot of information is hidden in the form of dialogues, puzzles, inscriptions, concept cards which the player has to interact with to get the sense of progression. The game relies on the diversity and multi-referentiality of the Indian culture to keep the players interested. Originally conceived out of a Bharatanatyam rendition of a 20<sup>th</sup> century text - Vaimanika Shastra which talks about ancient aerospace technology, the concept of flight became an



essential metaphor to construct a world that could hold all these elements and the characters of Ramanujan and Amma tied it all together.”

*“The idea of game came organically through how you represent the South Indian narrative... idea was to explore Ramanujan’s life in early 1900s and his family and the things he went through. Ramanujan as a mathematician claimed that he got most of his theories in his dreams and that was one of the key ideas that Avinash wanted to explore in the game... A lot of concept art was developed- sketching, different contraptions – idea of automatons, life in a temple town of Madurai... temple culture is a very inherent part of it and how do you represent traditional architecture, culture and activities in the setting.”* (David, 2017)

Ramanujan’s intriguing character in real life itself was a major inspiration for the character of child Ramanujan in the game who imbibed the fascinating mysteries and objects of his namesake. One such object was Ramanujan’s diary.

*“When I came across the life and times of Ramanujan, what struck me most was the story of his lost notebook, and his own accounts of the role of his dreams on his theorems. His short life was inspirational and brimming with supernatural aspects, and this made him suitable for an adaptation”* (Kumar, 2017)

One of the main narrative tools in the game is a journal which the child Ramanujan uses to record discoveries from his dreams and viewings of outside space through his telescope.

*“To Kumar, Ramanujan shows that journeying into the future often requires one to look back into the past. The protagonist still embodies Ramanujan’s complex “relationship to the natural world, the spirituality of his community, and his mechanical inventions.”*

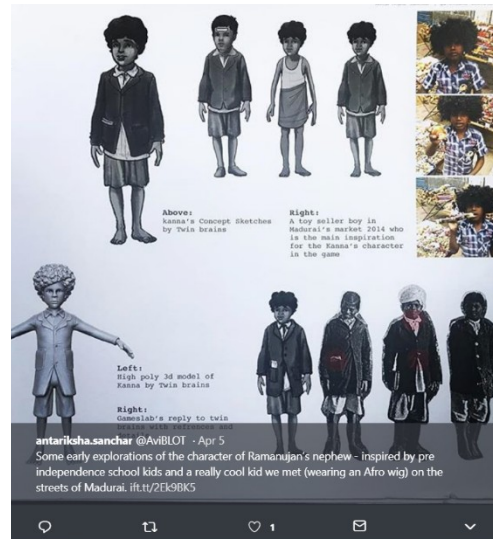


Figure 89: Ramanujan character sketch

The characterisation of Ramanujan’s Amma has been based around Jayalakshmi Eshwar – Avinash’s mother and a Bharatanatyam dancer. Within the game, “She possesses a secret communication protocol based on Bharatanatyam that becomes a crucial aspect of the game mechanics,” informs Avinash. Jayalakshmi Eshwar herself is a collaborator in the game development process and has also recorded certain Bharatanatyam mudras for the purpose of the game:

*Bharatnatyam mudras were recorded through a device known as Kinect which enables the user to do skeletal tracking and record live actions. To convey the full complexity of Bharatanatyam, a classical South Indian dance, Kumar used an affordable but time-consuming setup with a Microsoft Kinect and motion-capture body suit. The process was divided into three stages: capturing the face for expression, the body for bone movement, then finally individual fingers for important hand gestures.*

*Their motion-captured movements animate many of the game’s characters. Clothed in a red cotton sari during rehearsals, her hands communicate*

*through mudras, a religious gesture, which the player must translate in one of the game's puzzles."*

Overall gameplay involves interacting with the objects and other non-playing characters and solve the puzzles mainly emanating from Ramanujan's book and Amma's Bharatanatyam mudras. "We wanted the interactivity to come through the puzzles that we could make for the game as well as the script and the dialogue and the whole point and click thing of having multiple choices for an answer and based on which the narrative changes. So those are our main avenues of interactivity for the game."

The overall game mechanics might be simple but the main challenge was to design the aesthetics of cultural confluence which was indicative of the multiplicity within Indian culture:

*"trying to make an indian game i think it was very important in the way to explore the craziness of in a small part of india and explore what it could mean to have that craziness where there is you know like in indian culture and indian society chaos contradictions dysfunctionality all these things are very accepted, you know madness is accepted right and all like many things are accepted in the way that western society does not provide us."*

Avinash regrets the limited exposure of general audience towards art perception:

*"we've all grown up in a very wrong way looking at certain models of aesthetics and certain models of film making and game design or art which are like minimised abstractions of what the world is or what the complexities of the world are."*

As a digital artist, Kumar believes that:

*“India’s culture and creators can contribute a wealth of compelling, underexplored stories to the world. With the plethora of local, regional, and national sub-identities across India’s landscape, the possibilities for fresh stories are endless.”*

#### **5.4 Game Analysis**

The game employs the simple mechanics of point-and-click interaction. The player is required to move the character through the arrow keys or the joystick and interact with the game world through pointing and clicking at it. The game’s main focus was to build an immersive game-world with simple game controls wherein the player through game characters can roam, explore and interact with the game-world and in this process of playing learns more about Indian art, religions, philosophies and culture.

The player moves around as child Ramanujan and along the game as the player partakes of Ramanujan’s curiosity as they move around the picturesque south Indian landscape. The player encounters several puzzles which he has to solve to progress further. Apart from puzzles there is a lot of interaction involved with human characters involved as well. Human characters in the games though cannot be controlled by the player yet are an integral part of the game as they help in giving the game world a context through their stories and dialogues. These human characters within the game are inspired from the traditional joint structure of Indian families and mainly constitute the voice of elders – such as grandparents, spiritual mentors etc. who pass on their wisdom to young Ramanujan. At one point of time, Ramanujan also engages himself in conversation with the idols of ancient Hindu deities. The game is inundated with innumerable references to ancient Indian culture both in practice and

architecture. The game draws its inspiration and influences from the South Indian state of Tamil Nadu and draws from the rich and varied styles of architecture, literature and living styles of people. The most exhaustive part of the game was in fact the research done which involved a lot of travelling, observation and replication of the same for the creation of game world. Ranging from temples to house construction the game has attempted to incorporate the south Indian architectural nous during digital recreation.



Figure 90



Figure 91

Music is another very important element of this game as folk and Carnatic music score sets the atmosphere of Indian cultural space. The game world is an open exploration space where diverse type of material converges. The player doesn't have much to play in conventional sense of achieving goals and eliminating enemies and obstacles and both Avinash Kumar and Kabir David admits to the fact that the gameplay has a pedagogical value and the major target

audience of the game apart from casual gamers are the “students or any willing learner who wants to understand more about Indian culture.”

Talking about his game Avinash reveals that although Antariksh Sanchar is designed as a video game, he doesn't subscribe to its conventional notions and the actual aim is to make games as expressive and visually interesting as possible. The ultimate idea is to explore video games as viable modes of communication which are not only visually and aesthetically pleasing but also convey a meaningful transaction between player and the game and endorses participatory or collaborative culture. The team behind the game has been transparent about its development process and keeps sharing new assets and material being created for the game through game's social media accounts. The users also get a chance to download the 3d models and prints uploaded by them on their websites and social accounts.

‘Antariksh Sanchar’ is scheduled to release in October, 2018. Reflecting upon his journey and progress of the game, Avinash accepts that he might be afar in designing exactly as what he has thought in his mind, however he has no doubts about the effectiveness of the medium as he concluded his interview with this:

*I am very far away maybe 15-20 years away from maybe making something of an artwork or something that i feel like i have accomplished a combination of beauty and Indianness... I feel like the attempt in the game is there to do it... ultimate dream is to create an inspiring Indian narrative that celebrates the puzzling magnificence of Indian culture in a secular, interactive and accessible format. (Kumar, Interview with Avinash, 2017)*



## **Chapter 6 – Emerging Possibilities**

Since last couple of decades, the field of game studies have contributed largely in developing the discourse of video games charting its contours, scope and potential and while the subsequent studies have delineated a parallel approach towards game designing by presenting formidable cases and arguments supporting the expressivity of the medium, the informed argument hasn't really pervaded the sphere of popular culture. The dynamicity and flexibility of video games is duly acknowledged as even in most AAA and commercial games the boundaries are being pushed in terms of graphics and gameplay. With advent of computer generated reality such as virtual reality, augmented reality, game experience is becoming visibly more immersive and engaging.

The most recent example has been that of Pokémon Go which became a phenomenon worldwide at the time of its release. Playing a video game while actually being able to move around the physical location was a novel experience in itself and the concept of building a game around the highly popular Pokémon characters assured mass appeal. However, almost a year after its release the frenzy cooled down as the game saw its popularity rapidly decline as most players stopped playing the game once the experience became too familiar. The pervasiveness of leisure activities makes development of leisure and entertainment-based games a highly profitable venture, however majority of these games “remain competitive in nature and very few of the makers are thinking of other kinds of experiences that include reflection and contemplation” leading ultimately to a formulaic procedure of game designing.



In recent times owing to increasing digital mediation (Hepp, 2015; Couldry, 2013) and emergence of multifarious media cultures (Hepp, 2015), the approach towards designing media products is now being gradually informed by the local cultures, histories and individual participation. (Jenkins, 2006). The medium of video games which largely has been associated with mass entertainment and popular entertainment since then has diversified and exploring ways for embedding serious and non-trivial expression within video games. Several examples of such diversification and experimentation exist internationally where video games have been used for the purpose of education to serious culture awareness and representation. These independent projects have projected new avenues for the medium through its multi-disciplinary intersections.

In the emerging video game market of India there has been an understandable rush by both international and local game developing companies to tap into the massive revenue source however emerging popularity has also encouraged a small and thriving community of game developers who don't only want to experiment with the medium but also use the digital technology and play as a tool for their expression. An in-depth analysis of the selected video games from India – Antariksh Sanchar and Somewhere- might well be the examples of a similar approach from Indian independent gaming scenario. These projects, though still awaiting their major release during the time this study was done, are nonetheless visible evidences of their novel and unique approach towards game designing contrary to the dominant leisure driven gaming scenario of India. This approach is not exclusive to selected projects but is shared by a small and thriving community of independent developers who are working on the 'fringes of the game community' which is informed by the multimodality and creativity of both the expression and the medium. Such intersections at an early stage of

Indian game scenario offer an overview of possibilities and new avenues the medium can possibly offer.

The study identifies four such emerging possibilities:

1. Culture representation and documentation
2. Academic courses and interdisciplinary research avenues
3. Game Designing and Player engagement
4. Video games as Art

### ***1. Culture Representation and Documentation***

Cultural representation in video games is not a new practice. In fact, games have been borrowing extensively from variety of cultures and sub cultures. However, such representation has often been problematised for appropriating and stereotyping the heterogeneity of cultural participants (Malkowski & Russworm, 2017; Shaw, 2014). More than representation, cultural cues have been used as prosthetics to make the game more familiar and relatable to masses without exploring the nuances and politics behind representation. Within the growing video game scene in India, the use of Indian culture signifiers has been primarily to persuade the potential players into playing something which is popular and masses are already familiar with. Video games based upon Bollywood movies, cricket, kabbadi etc. is an example of playful adaptation of popular culture.

With reference to the selected games in particular, video games as a medium is being used in a novel and innovative manner where one can notice a marked emphasis towards adaptation of personal expression into a video game through the signifiers of Indian culture. The post-

colonial explorations of ‘Somewhere’ and reflections on traditional south Indian culture and arts in ‘Antariksh Sanchar’ is an attempt towards documentation of Indian culture through making it playful. The role of player in such games is not limited to its gratification through entertainment, rather a player is expected to engage with the value embedded in the game.

Anna Anthropy (2012) a game designer and scholar reflects upon the fact that formulaic methods of game designing and production offers a very limited perspective of what video games are capable of and it is exactly this attitude that has pervaded the collective conscious. Video games are often misconstrued as perpetrators of violent and aggressive behaviour whose only motive is to rake in huge profits at the expense of playful behaviour of growing up teens and children and although game scholars and designer have time and again highlighted the difference between the game content which is represented on screen, and the technical aspect of programming the game, however these works are still limited within the academic circles.

Since the turn of the decade, the configurative aspect of video games has been brought to fore by emergence of serious games whose emphasis is more on the expression embedded within the game. The emergence of indigenous games from around the world has been a significant example of this development. Games like ‘*Honor Water*’ by Elizabeth LaPensee, ‘*Never Alone*’ developed by Upper One Games, ‘*Qalupalik*’ developed by Pinnguaq Technology Inc. etc., are designed around specific indigenous communities such as Inuit community inhabiting the Arctic regions and similar communities spread across Canada and United States to create an awareness about their rather obscure cultural practices. These games re-tell the stories, teachings, mythologies particular to these communities within the interactive

space of video games, thus utilising the activity of ‘playing’ to communicate about their beliefs, hardships and style of living along with the highly obscure and endangered cultural praxis.

These games are also first-hand documents which instead of merely presenting the information through audio-visuals, also allows the user to learn and understand about these unfamiliar communities by engaging in the cultural practices themselves through the mode of playing the game while simultaneously also being a digital archive of the physical culture.

Among emerging international examples of serious engagement with the medium, selected video games from India for this study reflects similar engagement - “Over the past few years of studying game systems, we have begun to proliferate our practice to address architectural, pedagogic and literary concerns, that can be simulated, archived or computed using game methods” (Nair, 2017) reveals Dhruv Jani, the game developer of ‘Somewhere’. During its initial gameplay, the game seemed to be about traversing through various fragmented story worlds but multiple sittings of play revealed the implicit political expression within the game dealing with the idea of post-colonial identity in India. Delving mostly into the regional folk narratives and fictional writing, the game employs abstract representation of the collective history inspired by the concept of ruins and fragmented memories. Postcoloniality has been discussed majorly in the realms of humanities and social sciences, however, Somewhere is one of the first if not the first video game which formally employed the strategy of gameplay towards the inquiry of post-colonial identity albeit in a playful manner. “Somewhere” is not a radical shift in literary method. It does not alter either the method of interactive storytelling or centuries of literary tradition, says Dhruv. “What it does do though, is it adds, incrementally to our understanding of how a traditional literary method responds to being told within an

interactive space - and tries to delineate what stories are best suited to being told within game spaces,” he adds

‘Antariksh Sanchar’ the second video game discussed in the study deals with more tangible aspect of Indian history through digital replication of south Indian cultural artefacts and architecture. The game remedies the problematic area of appropriated and stereotypical representation common in mainstream games. The game had officially been selected for Sheffield Doc fest in 2016 which is a premier documentary festival held in U.K. and which hosts novel and experimental modes of documentation. ‘Antariksh Sanchar’s demo version called as ‘Episode 0’ was selected for the exhibition in the section of ‘Alternate Realities’ in the festival. The game explores the ancient architecture and art by trying to replicate the physical objects through sketching and 3-D modelling. Apart from basic designing procedure, Bharatanatyam dance moves had been recorded for the purpose of game through the Kinect motion sensor. The details of cultural artefacts and architecture has been researched extensively with a real intention, as Avinash himself admits in an interview – “to explore how a new media format such as video game can be used to transmit the depths of Indian culture”. (Kumar at Sheffield Doc Fest, 2016)

Touted as India’s first cultural video game by several media outlets, the game’s page on the Steam website had initiated a discussion on “What are the challenges of expressing Indian culture in Video Games?” The question raises some important issues pertaining to cultural representation and wonders why a source as rich and diverse as Indian culture has not been harnessed by Indian video games.

*“Indian culture and expressions, which we are concerned with, in our game, are woefully under-represented in global video game culture, and even more so in our local video game industry... it's quite common to accept these as diluted, caricatured, mutated and often mis-representative of the source cultural inspiration... What are the barriers that have prevented a more vibrant expression of what has inarguably been a significant force of intellect and creativity for thousands of years?”*

The ensuing discussion broadly cites two factors responsible for ‘woeful under-representation’ of Indian culture i.e. i) The accessibility to game developing tools and ii) Market forces. Avinash Kumar sees the project of Antariksh Sanchar as a response and remedy to under-utilisation and stereotypical representation of Indian culture. The game was always meant to document Indian culture though not strictly in a documentary style but in a playful manner “Our project connects these ancient expressions to our imminent digital culture; retaining them for future generations in an innocent and inspirational form.” (Kumar, 2017)

## **2. Academic courses and interdisciplinary research avenues**

Introduction of game designing and game research as a formal course in the universities abroad has seen an upward trend. Universities such as ITU, Denmark; University of Bergen, Norway; M.I.T, United States of America; Concordia University, Canada; Goldsmiths University; United Kingdom are some of the reputed institutes providing opportunities for interdisciplinary research upon video games. Increasing number of universities are also including the game studies programme for their respective graduate and undergraduate programs.

This trend is conspicuous by its absence in India given that none of the major universities in India have a dedicated research program or otherwise for the study of the medium. With video games becoming increasingly popular and the research into the emerging diversification and its subsequent application can make video games a viable interactive platform for serious expression through playful activities both in rural and urban sector. (rural cite)

Introduction of game studies as a formal academic discipline encourages sensitisation and a greater awareness towards the need of engaging with the society in a constructive manner

*“If I look at my friends in other countries especially across Western America, they are all programmers and then they become game developers which is peculiar right? I think part of this has to do with how programmers have failed to integrate into positions of cultural authority in our country. Our programmers are a little bit distant and little bit removed from the need of storytelling and needs of commentary political or otherwise whereas in schools that I studied for example Nit and colleges like that there is a persistent need to engage with the society and with community. That is something you are simply taught in most art colleges and that is something you can carry into video games easily because its storytelling is very similar to film or animation or comic making etc. (Interview with Dhruv Jani, 2017).*

The example of indigenous games as cited above initiated from the departments of education itself. Elizabeth LaPensee who is actively involved in the production of cultural and indigenous games is a professor at Michigan State University. Her projects have been collaborative projects which involves both the member of the particular community on whom game is being developed along with her students who apart from assisting in game

development are also gaining first information through the key members of the community. Another such example is the game '*Tjinari*' which is a game about the indigenous aboriginal community of Australia. This game too has been created through cooperation between two educational centres in the form of Australian National University (ANU) and ARC Centre of Excellence for the Dynamics of Language (CoEDL).

The selected games for this study '*Somewhere*' and '*Antariksh Sanchar*' though independent games have gained considerable recognition from national and international centres of art and interdisciplinary research. '*Somewhere*' has been a part of couple of art incubators within India supported by not for profit organisations Khoj and Indian Foundation of Arts (IFA) and '*Antariksh Sanchar*' is being developed within the aegis of Quicksand studios which itself is an inter-disciplinary consultancy. These engagements with centre of learning are sparse and mostly done on individual level and there is a need to introduce such engagements at the level of universities and colleges to provide exposure and awareness at a large scale to the interested students right at the introductory level of game designing, writing, sketching etc.

Game designing presently rests largely in the domain of either applied computer sciences or as short-term certificate courses where the technical skills pertaining to the programming and coding employed in designing software are prioritised over conceptualisation and aesthetic engagement with the game content and its playing. Avinash cites this lack of aesthetical engagement as a primary reason why "we are struggling to create those pieces of work which reflect our society and our culture." (Interview with Avinash Kumar, 2017) While programming remains essential to the process of game designing, the "actual hard reality of it



is that to find yourself and to distil a part of yourself or to distil somebody else or the beauty around you.” (Interview with Avinash Kumar, 2017).

### **3. Game designing and Player Interaction**

The association of practice of game designing solely and strictly with a computer programmer is flawed assumption at least when considered in context of ‘Somewhere’ and ‘Antariksh Sanchar’ where both the developers had no prior experience or knowledge about the practice of game designing themselves however they learnt about the procedure while working on it and made a conscious deviation from the path of mainstream game development. The practice of designing computer-based media is only partly technical which uses programming skills and tedious coding. The other half is informed through a multitude of perspectives which guides the creative vision of the game and is important in designing the game content and its playability.

In context of game designing, while the coding decides the rules-based interaction of video games, the content and playability gives those actions meaning and context, making video games an expressive and engaging medium. Game development of the selected games has been an iterative process for their developers. By their own admission the process of negotiation between the digital aspect of programming and physical and tangible aspects of

culture was in itself a 'playful' process. Since their initial conceptualisation the game has been under development since at least past 3 years with no overbearing pressure of meeting deadlines for game release and distribution. The idea behind a gradual and iterative process is to let the game design come out as organically as possible and not rush it for the sake of profits. The ultimate idea of both the games is to deal with realistic aspects of Indian culture in a playful manner.

Mainstream game development procedure is a streamlined process packed with deadlines. Avinash Kumar, cites one problem within the present mainstream mode of game development that there are reward structure and incentives for employees to finish the game as early as possible which according to Avinash is a big roadblock towards developing of original and innovative game which essentially is an iterative process and required considerable investment of time and resources. Established game studios seldom take the risk of such an investment in order to capitalise on the emerging market to gather their share of profits. Independent genre of games often have their own unique approach towards game development owing mainly because of the lack of resources.

Open access culture is one of the examples of such an approach. As the word suggests, 'open' signifies the free distribution of resources to interested users who can redistribute it further. It also allows interested users to modify the existing software in case of some flaw or if they want to experiment with something new. The creative credits remain with the original author but the collaborative works such as of modifying the game and similar activities undertaken by other users is also acknowledged. The decentralised sharing and dissemination of information encourages the participative culture within the medium. As opposed to the

mainstream game development whose development procedure is a secretive affair, open access culture is a transparent process and both these games as discussed in the relevant chapters dedicated to them, make active use of social media to not only share the majority of the development process but also inviting interested readers and players to collaborate in the development process either through game testing, sketches or through a simple feedback.

Wilson and Sicart (2010), talk about the concept of ‘abusive game design’ which is an “alternative design practice that challenges conventions of normative game design. Specifically, abusive game design challenges the notion of “player advocacy” – an ideology that inevitably allows the language of consumerism to outshine the particular human beings who design and play games.” In other words, the concept of abusive game design doesn’t follow the consumerist motivations behind designing of a game rather it seeks to create a dialogue between the designer and the player through the utilising the strategy of gameplay. Such an understanding of game design redefines dual aspect of game design and its playability.

In context of player interaction though both games employ a rather simplistic mechanism of point and click interaction to explore the game world, nevertheless, the player agency in these games has been attached a significant value by giving player the role of main explorer cum narrator. For instance, ‘*Somewhere*’ uses gameplay as an agency to transform a player into an active explorer within the game who not only is playing through the stories but in turn also reflecting upon his post-colonial identity. Similar views are echoed by Avinash Kumar stating that “while reading books and watching films there is a gap which we try to fill through our interpretations... in video games these gaps are filled by player agency.” Keeping in line with

the idea of abusive game design these games initiate a dialogue with the player rather than challenging the player to achieve goals and high scores. Player participation in these games thus can lead towards the build-up of interactive discourses where players can not only engage in interactive exploration of their culture, heritage and issues but also add value to the activity of playing through employing it in a constructive and meaningful manner.

#### **4. Video games as Art**

The relevance of video games as art form has been debated for quite some time now. Late critic and professor Roger Ebert famously meted out a stinging criticism upon video games as art. According to him the moment when one acknowledges video games to be an art form “it ceases to be a game and becomes a representation of a story, a novel, a play, dance, a film. Those are things you cannot win; you can only experience them”, thus implying that its actually the playability of the game which hinders the video games from being an art form. The pursuit of the reward structure and the visuals of the game was an apparent trivialising and decorative factor for Ebert aimed primarily to rake in profits by the game industry. In contrast of accepted art forms and art works which aimed at original thought and expression, video games are merely entertainment sources and existing only as pseudo-art form. (Ebert, 2010)

Since then Ebert's statement has been vehemently debated upon and has been convincingly refuted by various scholars. Apart from international opinions on the subject, within India the most pertinent reply is forwarded by an art organisation itself. Indian foundation for Arts (IFA) in its epitaph acknowledged the novelty of the medium of gaming in India yet it also states that *"the medium of games encompasses many areas of creativity that hold great promise. It is feasible with digital gaming today to open up multiple possibilities in terms of its audio-visual experience and challenging its rules and story boarding."* (IFA, 2016). Dhruv Jani the game developer for 'Somewhere' argues that its quite complex to understand game systems as art forms owing to the different modalities of accepted art forms and video games. He states:

*"Games are an alien art form, and unless the creator can embed familiarly in subject or visuals or method, games can often be rather alienating... Videogames are already an art form, they are a medium capable of expression and engagement. But they also derive character from the very strong subculture that creates it, and the incremental nature of their creation. Most videogames are strongly dependent on the ones prior to them in their execution of their mechanics or their technology, information and techniques which is freely shared and made readily available. This is not an aspect they share with the art-world, the blurring of authorship, a democratic appeal and (especially with indies) the manner of their dissemination, make videogames distinct from the practises of an established art-world, while keeping them well within the definition of an artistic practise."* (Interview with Dhruv Jani, 2017).

## CHAPTER 7 – Conclusion

During the past six decades since the invention of video games, it has emerged as a popular source of entertainment in the contemporary society. Globally video game industry rivals the Hollywood in terms of revenue generation. Though in India, video gaming is yet to overtake other popular entertainment forms like television and films, it is fast evolving as the preferred leisure activity cutting across all segments of population. In less than 30 years since its arrival in India, video games and gaming has traversed a journey from initial dependence on global imports and outsourced contracts of international gaming studios to local production. At the same time, it has displayed a wide variety of genres and ingenuity. An interesting case of such a demonstration has been in the field of independent video games popularly known as indie games, which the current study sought to examine. A genre which has always been on the margins of the mainstream game development, indie games has been a result of experimentations since 2010 with the idea of serious expressions through video games. Often dubbed as ‘serious games’ within the gaming circle, this trend in game designing seeks to explore the scope of video games beyond entertainment. Several examples of the same exist on international level which are an evidence of how games are being used for cultural awareness, political awareness and artistic expression among other things.

The current study sought to explore the serious turn of expression in video games emerging in India and aimed to identify the emerging possibilities afforded by the medium. Foregrounding the study against the above-mentioned context, the first chapter opens with explanation of the term ‘*video games*’. Commonly understood as only a mode of entertainment, the opening section argues against this notion for a broader understanding of

the term. The term video games signify multiple things at once. Apart from being a game, the word also signifies the *technology* used to develop and play these games, the *economy* generated through game production and distribution on a global level and the *culture* which has spawned around the activity of playing video games.

The next section of chapter 1 gives an overview of contemporary Indian gaming scenario. It contrasts the present state of Indian industry with the emerging trends in gaming in India and identifies the problem areas highlighted by the onset of recent trends. A broader understanding of video games which sees game designing only as a medium capable of embedding serious expressions informs the characteristics of recent trends. The turn towards serious video games is mostly visible in the independent genre of video games and the study contextualises the problem statement within the gap of global turn towards designing of serious video games and lack of documentation about its scope and the development process within India. Following the formulation of research problem, it becomes pertinent to understand the indie games sector in India guided by the following research questions i) How is value addition happening in game designing by Independent game developers in India? ii) Sources of local content used in game designing? iii) What is significant about game play in Indie Game and how are they played? iv) how Indie games in India are shifting towards serious cultural and political expressions? v) What is the process of the development of these games? vi) How is the process different from the Industry games?

For the study of aforementioned phenomena an ethnographical study of two video games from India was undertaken along with their game analysis. Analysis of video games for research activities is not a commonplace activity especially in India, where very few studies

exist and the field of study is yet to emerge. Video games as unit of analysis requires playing of it as an essential part of 'reading' the text. Moreover, unlike cinema and books video games only reveal their content when played otherwise the content remains inaccessible. Within the purview of game studies, the activity of playing in itself has been recontextualised as an attitude or a behaviour which signifies an approach rather than as a mode of entertainment. Video games from India namely Somewhere (2018) and Antariksh Sanchar (2018) were chosen for the study. The study used ethnographic research design along with the methodology of Game analysis to gather data pertaining to the process of game development and game playing. Methods employed were that of in-depth personal interviews with the game developers of the respective games along with myself playing the game to analyse the game for its content and game play.

Chapter 2 gives a brief historical overview of video games both nationally and globally. To elucidate the growth and evolution of video games in India, observations were drawn from own auto-ethnographic account complemented with similar accounts of few other Indian players. The auto ethnographic account is further corroborated by similar accounts of few other players (Majumdar, 2015; Mathews, 2016), the scanty literature available upon Indian video games (Shaw; 2013; Mukherjee, O'Donnely, 2008) and the recent media reports and media statistics. (KPMG-FICCI, 2017; NASSCOM, 2016&2017; CII, 2016&2017; TRAI, 2016&2017).

The main aim of this chapter was to familiarise reader with the history and core concepts of video games. Following section breaks down the diverse variety of games into 5 types:  
i) **Platform based division** divides the game according to the devices they are played upon on



e.g.- computer, mobile and consoles ii) **Development based Division** classifies the game depending on their mode of production i.e. industry development and independent development iii) **Action based division** classifies game on the basis of actions required to perform within the game such as shooting, racing, point and click etc. iv) **Player and perspective-based division** classifies games on the basis the number of players required to play the game such as single player and multiplayer games while perspective based division classifies the games based on point of view from which player plays the game e.g. first player, third player etc., and finally v) **Idea based division** classifies the game on the basis of the idea represented through its story, characters and play e.g. political games, cultural games, educational games etc.

The chapter further demystifies the core concepts of i) **game mechanics** which deals with how the challenges and levels will be designed within a game and how a player is supposed to play those challenges, ii) **game aesthetics** deal with aspects such as study of style and form of the game and user response emerging through playing of the game, and iii) **interactivity** signifies the degree of freedom afforded by the game for user participation.

Chapter 3 is the review of existing literature upon video games to contextualise the theoretical and methodical framework for the current study. Indicating the diversity in existing literature, the study identifies the major strands in game literature which broadly deals with i) games; ii) players and, iii) culture which are loose and overlapping categories. **Study of games** involves critical analysis of games and also studies their development process along with exploring new avenues in related fields of game technology and game designing. **Study of players** involves the study of user participation with video games. User

participation has been studied at both individual level and at the level of community engaging themselves in gaming. These studies focused on how the players engage themselves in activity of gaming and produce meaning for themselves. One of the major sub-strands within study of players has also been about the assessment of impact and effect of gaming on its player and society at large. *Study of culture* analyses the cultures spawned through interaction with video games. As mentioned earlier that video games is a polysemic term, therefore, owing to its multifarious interactions the activity of both game designing and game playing has not only seen a gradual assimilation within the popular culture but also have spawned various sub cultures of gaming which are working on the fringes of mainstream game development. This strand of studies takes stock of the diverse set of cultural practices set in motion by the invention and subsequent popularity of video games.

Succeeding the overview of existing literature, the study contextualises the literature against the problem statement and the subsequent section deals specifically with the literature upon Independent video games and the participative culture. The section talks about the independent culture in general which has a considerable presence in the relatively older mediums of cinema and music. In context of video games as well there has been a substantial independent production, however, not enough documentation exists about it in the academic circles. The existing studies upon video games have debated upon the politics behind the term indie and contrasted between understanding of independent games both as a culture and a genre. Other studies have highlighted the characteristics of independent games, however, region specific studies pertaining to independent production of games including India has almost been negligible. The documentation of the existing literature was effective towards obtaining the research gap which indicated towards the scant availability of literature upon video games in India.

The last section of the chapter deals with a review of methodologies employed in the field of game studies. Earlier studies were mostly empirical studies whose aim was to measure the impact of video games. Later on, post 1990s, there was a qualitative turn in the examination of video games and studies employed methods of textual analysis, ethnography, auto-ethnography and game analysis. More recently the emphasis has been on practice-based research through game designing. This study employed the methods of ethnography and game analysis and the studies employing similar methodologies were reviewed.

Chapter 4 in the dissertation dealt with the case study of the first video game titled 'Somewhere' developed by an independent gaming studio by the name of Studio Oleomingus. This game is a first person, text-based exploration, computer game. The game was analysed on the parameters of its development, content and gameplay. The study revealed the development process which was funded through personal resources and the procedure of game designing has been mostly done through collaborative efforts. The motive of the game, as revealed through personal interviews with game developers, is not to earn profits but to convey a 'playful' message to players about the history of India. The content of the game has been inspired from Indian history and more specifically colonial history of India. The game through its audio-visual presentation and game play attempts to communicate the post-colonial expression through the voices of multiple and marginalised characters and fragmented narratives of characters whose voices couldn't be a part of mainstream Indian history. For instance, majority of the in-game characters and the name of places mentioned in the game are either nameless or have never been heard. Moreover, the

player can also change characters with others by sneaking up behind them. This emphasises the permeability of identity and the basic dilemma present in the post-colonial discourse.

Unlike the conventional video games played on phone or computer such as Temple Run, Pokémon Go etc, the game has no goals or objectives and is a text based open world exploration game which subtly takes a dig on the idea of a unified ‘one’ history of India.

Apart from sharing the process of designing and financing their game, the developer also discussed about the festivals, exhibitions, workshops etc. where the game has been presented. Choosing the games which were in their development stages gave a detailed picture of how both the practical and aesthetical factors are merged together. In the subsequent sections I have discussed the content and the gameplay of the game. As mentioned, the game has no goals. The player is guided by the on-screen stories and dialogues and interacts with non-playing characters and objects such as books and photographs. The gameplay of the game is simple as well, as it involves just basic moving around and simple mechanism of point and click with other in-game characters.

Chapter 5 is the case study of the second video game titled ‘Antariksh Sanchar’ developed by independent gaming studio by the name of Quicksand Studios. This game is a first person, text-based exploration, computer game. This game is about representation of Indian arts and culture, especially South Indian culture through the popular form of media in video games. The protagonist of the game is inspired by the character of the extraordinary mathematician from India – Srinivas Ramanujan and renowned exponent Bharatanatyam dance for India – Jayalakshmi Eshwar. The game depicts the India of 1900s and the cultural and artistic

expression and mysteries of South India are conveyed through the Bharatanatyam mudras of Jayalakshmi Eshwar and the fantastical and uncanny objects possessed by Ramanujan.

Antariksh Sanchar is an independent game developed through personal resources of the game developers without any backing of major studio. The game designing procedure has been a collaborative affair. Similar to the first case study of 'Somewhere', this game also is an exploration driven one rather than having conventional goals and objectives. The game draws inspiration from Indian culture for its influence and while 'Somewhere' sported abstract scheme of visuals, visual scheme of Antariksh Sanchar is more pertinent to documentation and replication of cultural artefacts. The game development team is made up of highly diverse professionals ranging from professional programmer, dancers, musicians and sketch artists. The development process involved exhaustive fieldwork and research to recreate South Indian culture and characters within the virtual space of video games. The game is also thus documenting the physical culture into digital format where not only it can be played with but simultaneously get archived as well. Originally planned as a computer-based game, the game plans to diversify into a transmedia narrative where different episodes of game can be played across computers, mobiles and tablets.

Game controls are similar to 'Somewhere' as it utilised the point and click method of interaction to explore the game world and interact with other non-playing characters and objects in the game. The interaction either initiated a branch of story or dialogues to be followed or initiated a puzzle which needed to be solved before a player can move further ahead in the game. A lot of information is also embedded within the gameplay of Antariksh Sanchar as the player keeps interacting with concept cards and short videos which gives the

player more information about important Indian figures of 1900s and artistic references that the game has borrowed.

Following the case study of both the games, Chapter 6 compared both the games and contextualised the findings within the larger set of global game scenario. Indian games ‘Somewhere’ and ‘Antariksh Sanchar’ are an attempt at communicating about Indian cultural expression and values in a manner which is both interesting and non-trivial. Developers of both these games admit the fact of substantially less audience interested in their games yet this general apathy against these games is more because of the unusual way in which the medium of video games have been utilised rather than the game itself.

Indian culture has been a subject of representation for many other contemporary Indian games as well, yet those representations have been given a form of competition. In the above-mentioned games however, the topic of Indian culture was utilised to express the topic’s own debate and challenges in a playful manner yet also embedded with a pedagogical value. ‘Somewhere’ utilised the debate of Indian history and identity along with post-colonial reality to design a video game around it. The multimodal characteristics of the medium itself are apt to capture a multimodal discourse of history with both having multiple access points to enter the discipline. Similarly, ‘Antariksh Sanchar’ too borrows material from Indian culture and aims to blend the ancient and modern culture and values through the medium of video games. ‘Antariksh Sanchar’ has been also working on creating a virtual reality (V.R.) experience with an aim to further create an immersive world wherein the player can get an immersive experience of living in an India they haven’t seen and experienced. None of these games promise any sort of entertainment or fun in its conventional sense yet both the games through

ludification of culture have forwarded a unique and novel approach towards communication through video games in 'playful' manner.

After comparing and contrasting both the games, the study came up with four emerging possibilities which the medium of video games opens up in India. i.e. **i) Culture representation and documentation** explores the scope of video games in documenting and archiving the tangible and intangible aspects of culture through digital replication **ii) Academic courses and interdisciplinary research avenues** proposes the introduction of game studies in academic curriculum of Indian universities and colleges to create sensitisation and awareness about engagement with society and culture during game designing **iii) Game Designing and Player engagement** explores the collaborative role of both designer and player in creating a meaningful dialogue **iv) Video games as Art** explores the application of the medium towards the formulation of interactive discourses.

Overall, through the case study of the two video games, the research was able to make an observation that the recent emergence of independent video games from India herald the serious turn in video game development which focuses on extending the utility of the medium beyond the scope of entertainment. This is in sync with the international trends in game studies which are fast moving away from the conventional notions of video games and actively researching about its scope through interdisciplinary research to redefine the utility of the medium. This study is also a testimony to the immense potential in the concerned discipline for further research and exploration. For this study although only two games were concerned, however, many similar games are still in the development pipeline and have the potential to be viable platforms of communication along with more popular medium of

cinema and television. The current trends and observations within the field definitely merits a close observation.



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