Lost in Haze

Evoking appreciation for environmental awareness through concept art

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2017

Acknowledgements

Figure 1 Primary school students in the teacher's lead over the road, China, 2015.

Contents

| Abstract

The levels of air pollution in many of Asia's large cities and urban areas have exceeded the

standards set by the World Health Organization (WHO) and National Ambient Air Quality

Standards (NAAQS) (Oanh, 2012). In the northern part of China, the region of Shandong

province that I come from, air pollution has become one of the most concerning issues for

people. Moreover, the International Cancer Research Agency (IARC) has classified the

polluting haze as a carcinogen (WHO, 2015) with harmful effects on human health, so this

issue can no longer be ignored.

In this design research project, I combine my personal experience of living in a city affected

by air pollution, with my experience of visiting Tibet and experiencing its clear air and

attractive vistas. Within the paradigm of graphic design, using applied visual psychology

theory, interactivity theory, and a comparative analysis of key literary texts, I build a case for

using concept art to produce scene designs that illustrate the effect of increased air

pollution in China. I explain how perspective and colour are core to the design and artwork

in order to engage and illustrate the impact of air pollution for the viewer. I argue that

through the concept art created for a hypothesized fantasy story I can stimulate awareness

and understanding of this far-reaching problem.

Keywords

Concept art, environmental awareness, visual psychology, Utopia

2. Introduction

This project attempts to evoke appreciation for environmental awareness through concept art for a hypothesized story that could be used in an online video game.
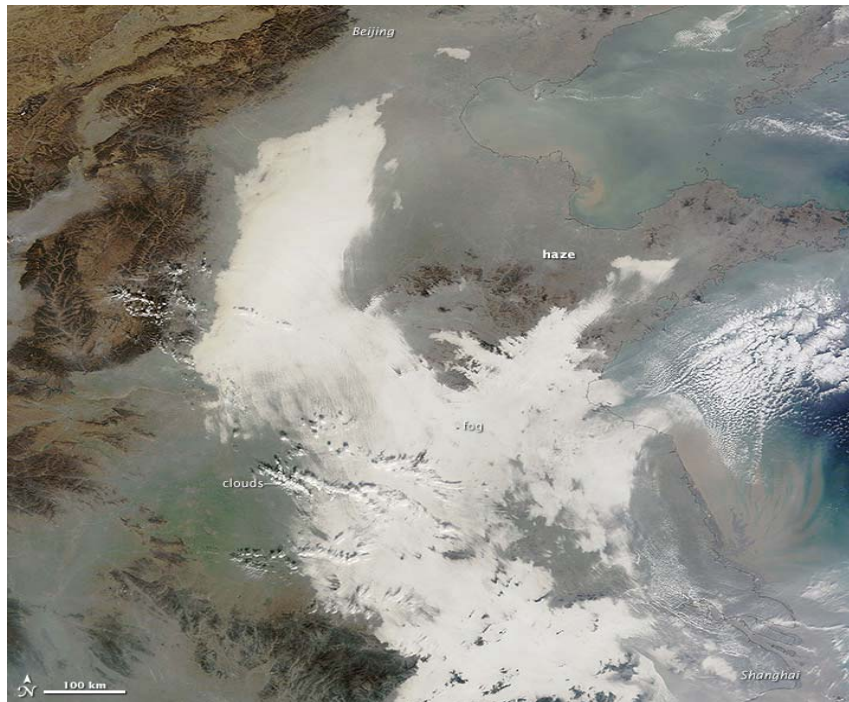
Figure 2 Image acquired by NASA's Terra satellite. December 7, 2013.

This image was taken on December 7, 2013 by the NASA satellite as it was flying over north-eastern China. The image shows thick fog extending from Shanghai to Beijing, distance of about 1200 kilometres (750 miles). The brightest parts of the image are clouds or fog, and the grey parts are polluted air-haze.

The hometown where I lived for more than twenty years is in Shandong province, which is in the grey part of this image. I feel strongly about the badly polluted environment of Northern China, and the serious effect of haze on its inhabitants. In my hometown, the quality of air is poor and my family members and I wear masks if we go out, even to the local supermarket in the next street. I asked my four-year old niece if she had seen a starry sky. Her answer,

that she had seen the sky on TV, made me sad, but it is true. In the city where I live everything is grey: the sky is grey, the glass curtain wall of the high-rise buildings is grey, we are accustomed to blurred views and feeling the pollution in our lungs.

In 2014, I visited Tibet. In China, Tibet is known as "the last piece of pure land in China" (Liu, 2017, para.1). The "pure land" has two meanings: Tibet is a plateau region with average altitude of 4 kilometres and the air is thin. Data gathered by the China Environmental Protection Agency shows that the air quality of Lhasa for 7 consecutive years exceeded 95% unpolluted (pure), with the number of days of good air quality in more than 345 days per year (Xinhua, 2014). Another meaning of pure refers to Tibetan's belief in Buddhism, and its central doctrine of being kind to others and having a pure heart (Harvey, 2012).
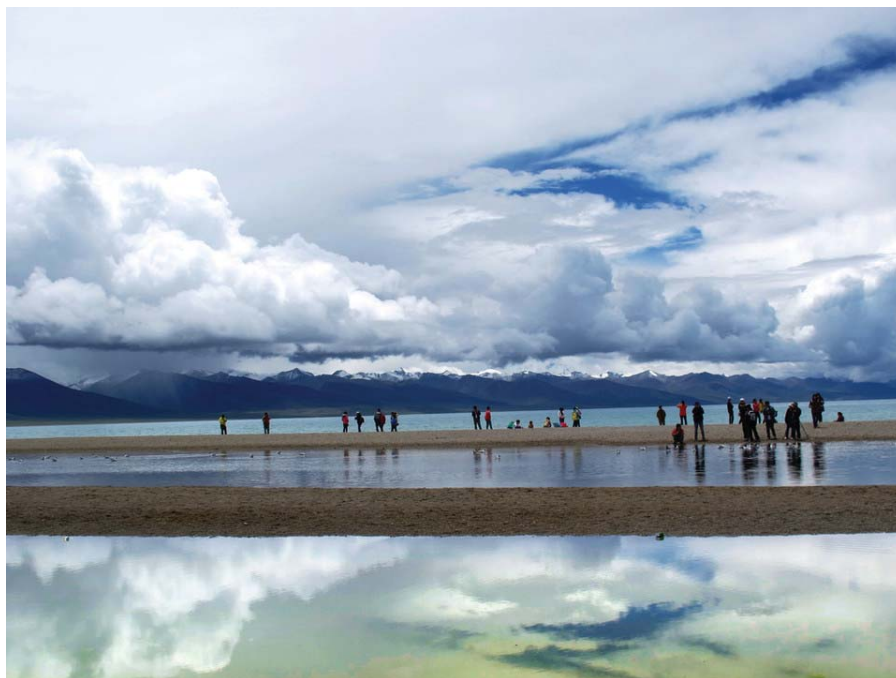
Figure 3 Namtso Lake, Tibet. Can Liu, 2014.

In Tibet, I discovered another world, one of pure colour. For most Chinese, Tibet is a mysterious, pure and beautiful tourist resort with different customs (Van, 2011). Visiting Tibet was, for me, a big shock. It was like having myopia and suddenly having glasses to wear - all the colours became clear. The sky is clear and blue. There are white clouds, snowy

mountains, clear lakes, and nature and human in harmony, like a beautiful picture. The impact of this visual experience affected me psychologically and caused me to reflect on why pollution in my hometown is so serious. The clarity of air and colours in Tibet prompted me to spend a long time thinking about what I could do to help bring attention to my hometown's air pollution. I considered that I could use my experience of the environment in Tibet, and my knowledge of animation design to help encourage people to take better care of the environment, especially with respect to air pollution. With this aim in mind, I set out to research whether I could use the concept art for an online video game to create an interactive visual experience, contrasting polluted and unpolluted environments, to raise awareness of air pollution.

3. Research Methodology

My research methodology uses the paradigm of graphic art, focusing particularly on concept art. I aim to evoke appreciation of the environment, and my target audience is those young Chinese who are growing up with serious air pollution, and who could be influenced by Western and Chinese cultural attitudes regarding the utopian ideal.

Initially, I define the type of air pollution (haze) that prompted this research, and the nature of the pure environment in Tibet (Utopia). I also identified literature that focussed on similar contrasting conditions, and analysed some concept art cases used in online video games in order to identify those with aspects that might be useful to me in developing my project. I had insufficient time or skills to fully develop a game and decided to focus on one aspect of the initial project – the concept art that could be used to support an online video game on the topic of utopia and environmental awareness.

I then considered how concept art could be used in this project, including whether existing games had a similar visual performance to what I wanted for my concept art. I analysed player and reviewer feedback to see whether the games' concept art indicated the use of interactivity or visual psychology, with the intention of using similar techniques in my concept designs. I considered which aspects of air pollution I could use in my designs, and developed a fantasy story line to support the concept art.

Having considered how to visually represent my story in concept art, I created and produced five pieces of concept art to illustrate the main themes of pollution and environmental purity. I then sought feedback from my fellow designers and tutors, and from a target group of young Chinese players, that I used to refine my concept art so as to meet my objective: concept art that draws players' attention to air pollution.

As a concept artist, my project reflects me. It addresses an important issue. All of my works follow a clear order: determine the project application to online video game; select styles (genre); then follow the concept illustration (worldview, black and white composition, colour composition, atmosphere rendering, add details); and finally complete the work.
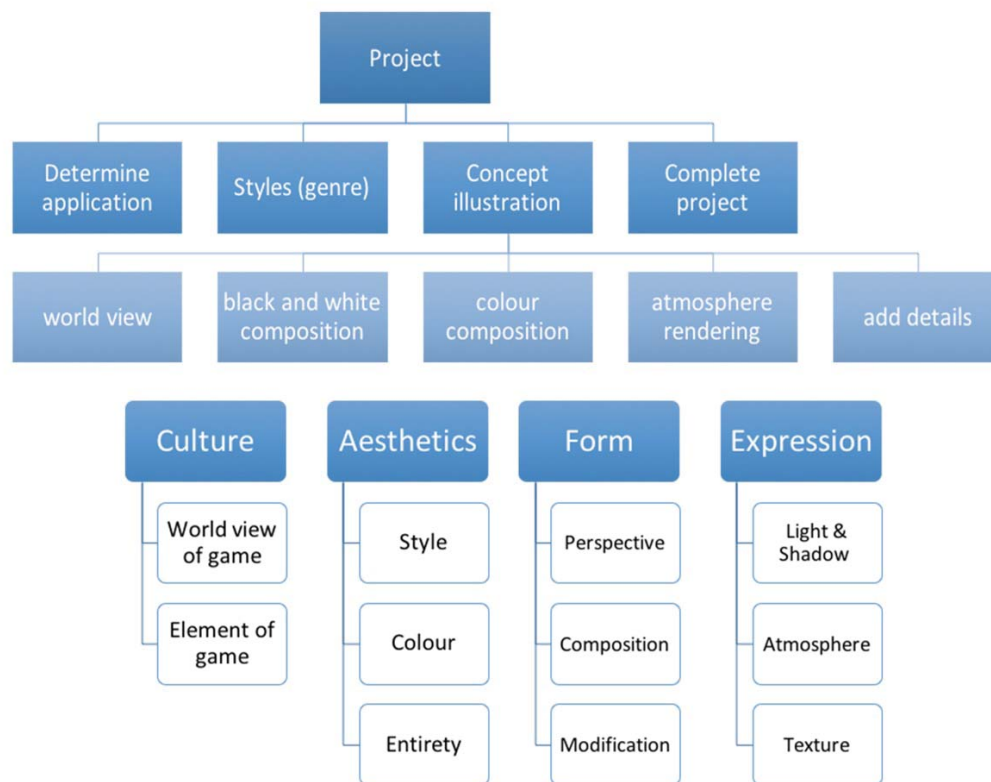

Figure 4 Flow chart of concept art project. Can Liu, 2016-2017.

Five pieces of research provide the background for my study: interactivity theory; visual psychological theory; the nature of air pollution; the nature of utopia in a cultural literary context; and concept art, including case studies of concept art used in online video games.

4. Theoretical Basis

My research indicated the need for some understanding of psychology in order for me to use concept art to achieve my aim of evoking environmental awareness in young people through an online video game. In particular, the potential of interactivity theory, and visual psychology are outlined in this chapter.

4.1. Interactivity theory

Interactivity theory is widely used in game basic theory (Weber, Behr, & DeMartino, 2014). Steve Swink defines this process as "input-process-output" (Swink, 2008, P.36). With input provided by the player, process is the interpretation of the system to the user's behaviour, according to the rules of the game set, and output being the game's response to the user's behaviour (Swink, 2008). This process is not like reading a book or looking at a moving picture, but requires the user to take an active part in it (Ulaş, 2014). Interactivity is a behaviour pattern, and the game itself is also a behaviour pattern, with the potential to convey positive and negative effects, a combination of entertainment and education (Ritterfeld, & Weber, 2006). At the beginning of the game, when players learn the rules, it is possible to influence them to develop a good attitude, related to game patterns. This attitude impacts the extent to which a specific behaviour will be learned and performed in the future (Bandura, 2009). A variety of interactive behaviours can influence the player to take a certain action, or be encouraged to go through a process, or to be discouraged or limited - in order to accomplish the goal.

In this project, the hypothetical background story was designed to incorporate positive educational messaging, such as awareness of air pollution, so as to affect the psychology of the player.

In order to achieve better interactivity effects, designers need to understand human behaviour and analyse the factors that influence and drive behaviours (Grodal, 2000). When linked to psychology, interactivity allows a designer to understand what kind of interactions people need and thereby create a design that has the capacity to change people's behaviour (Baranowski, Buday, Thompson, & Baranowski, 2008). In the following section, I discuss how understanding visual psychology, which is the study of human psychology and behaviour, can help designers more reasonably plan the next step in the design process (Fernald, 2007).

4.2. Visual Psychology theory

Visual psychology is the psychological reaction of the visual organs to the external image, and is a process conducted from the external to the internal. The process is complicated, because the rich exterior image and complex inner psychology both function in mutual connection and transition (Gregory, 1996). Different people's reaction to different images, the same people's reaction to the same images, different people's reaction to the same image, and the same people's reaction to different images produces different psychological outcomes. Outcomes are based on geographical and cultural characteristics, and so the process will produce different levels of psychological reaction in some groups (Richards, 2002). For example, for people who live in seriously polluted regions beautiful scenery is stunning and extremely beautiful. However, for people who have grown up in such an environment their response may not be so deep.

The way in which the colour, space, and expression of an art work is perceived depends on the mind of the artist and viewer. Psychology can help people understand the visual information embedded in an image. George Mather writes that, in terms of visual psychology, an art work is the output and the viewer's eyes and brain the input. Therefore, modern psychology makes an important contribution to people's understanding of visual art (Mather, 2013).

I argue that visual psychology could be a useful approach to generating concept art because, as Reavey has demonstrated in his study on visual methods in psychology, visual effect can have a motivational influence on individuals and help spread messages to the audience (Reavey, 2012). Further, the psychological effects of vision and visualization can be sustained for a long-term (Reavey, 2012). This means that concept artists can create and produce works that possess the potential of emotionally resonating with the audience and for that influence to continue. For example, visual approaches in psychology have been shown to solve some experiential issues, including the process of remembering (Middleton & Edwards, 1990; Middleton & Brown, 2005; Brookfield, Brown & Reavey, 2008).

Jackson's 1995 study shows that photographs, illustrations and other image forms make it easier for the audience to read, understand and express different emotions. Therefore, designs that combine visual and language information to create a richer content use visual language to more easily convey the emotional content (Reavey, 2012). Further, research shows that visual experience can successfully bring people into a specific environment and relate them to the topic (Gillies et al., 2005; Brookfield, et al., 2008; Reavey, 2008; Silver and Reavey, 2010).

In this project, I use the form of concept art to emotionally convey the issue of air pollution to the audience, thus affecting the audience's psychology. Part of the reason for emotionality expression is visual research findings that show that humans easily become immersed in what is seen as well as how the image is shown (Sweetser & Wyeth, 2005). In other words, the concept artist can use emotionality to best explore ways of engaging and immersing the audience in the designed world.

With this understanding of theories, my next step was to understand air pollution, in order to best depict it in the concept art.

5. Air Pollution

Air pollution, the result of rapid industrial expansion and growth at the expense of the environment (Zhu, Sarkis, & Lai, 2007), is one of the issues of most concern to people in China.

The air pollution affecting northern China has a certain characteristic - haze. Haze is an atmospheric phenomenon caused by dust, smoke and other dry particles covering up the clarity of the sky, and is the most obvious phenomenon of air pollution. According to the World Meteorological Organization (WMO) report (WMO, 2012), sources of haze particles include agriculture (dry weather farming), transportation, industry, and wildfires. Haze particles are particulate matter with the aerodynamic diameter below 2.5 μm (PM2.5). They reflect a lot of visible light and cause very low visibility. The diameter of the particles is a quarter that of the diameter of human hair, is invisible to the naked eye, and can easily be inhaled into the lungs and cause lung disease. According to Kim Oanh et al. (2012), in the city of Beijing the annual average of PM2.5 in the air is above 100 μg/ m³, which is much higher than the recommended value of 10 μg/ m³ (WHO, 2005). WHO claims that chronic lung disease is one of the risk factors for lung cancer and, according to 2012 Wangyi News reports, over the past 30 years China's lung cancer mortality rate has increased by 465%, and that while smoking and aging are still key factors, the carcinogenic risk is increasing due to the increase in particulates (Fan, 2015).

The level of air pollution in many of Asia's large cities and urban areas has exceeded the standards of World Health Organization (WHO) and National Ambient Air Quality Standards (NAAQS) (Oanh, 2012). A report from National Aeronautics and Space Administration (NASA) showed that in 2013 Beijing and other cities in China faced the most serious air pollution in recent history (NASA Administrator, 2015). In the winter of 2013, severe toxic air attacks in northern cities, such as the Harbin hospital, surged by 30%. In the same month, in Jiangsu,

an 8-year-old girl became the country's youngest victim of lung cancer, a condition blamed on pollution (Herman, 2013). At the same time, the Beijing Municipal Environmental Protection Bureau research data showed 175 days of air pollution in a year in Beijing (Dian, 2015). This means that for half the year people are breathing polluted air. Data provided by the China State Environmental Protection Department in 2014 reported 197 days of air pollution in Tianjin, 152 days in Shenyang, 125 days in Chengdu, 112 days in Lanzhou, and 265 days in Shijiazhuang (Kun,2015). The data shows that air pollution seriously affects almost all big and small cities in northern China.

In China, the war between humans and haze is an ongoing invisible war. Nowadays, as a result of scientific research, people are aware of the dangers but there is still the long process of environmental remediation. Although there is no way I myself can change this situation, I hope to raise young people's awareness of haze and the purity of clean air through my concept art design.

My research then led me to consider ideas about the ideal environment – Utopia.

6. Utopia — Literature review exploring cultural origin

After reviewing literature from both Western and Chinese cultures I identified and analysed two traditional stories that told of a similar experience to mine, to describe the contrast between my normal life and my experience of pollution free Tibet.

6.1 Utopia in Western literature

In his famous text *Utopia* (1516) Thomas More, founder of British utopian socialism, described utopia as an ideal, and imaginary country which is beautiful and where there is no dispute. More's utopia involves all aspects of Platonic thought system, including philosophy, ethics, education, literature and art, politics and so on. Utopia is generally used as a term to describe any imaginary and ideal society, and is also sometimes used to describe the attempts of today's society to try to turn certain theories into realization, or to describe goals that are difficult but not impossible to achieve (Davis, 1983).

My literature search led me to focus on stories of utopia of the kind I found in Tibet, for example James Hilton's *Lost Horizon* (1933).
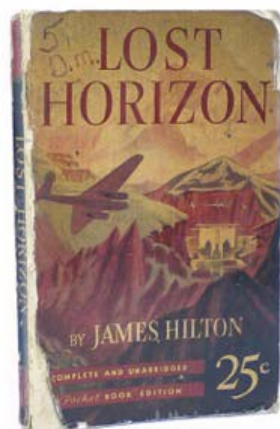
Figure 5 *Lost Horizon*, James Hilton, First Pocket Book 1st Edition, (1933).

Shangri-La is a term meaning 'the heart of the sun'. The Concise Oxford Dictionary states that the term arose during a troubled time of European history and defines Shangri-La as an imaginary earthly paradise (Bowker, 2000). In Western culture Shangri-La is a fictional place, a mysterious ideal utopian world (Campbell, 1991). The British writer James Hilton (1900-1954) wrote about this place in his novel *Lost Horizon* (1933). Hilton describes Shangri-La as a mysterious, harmonious valley that is located at the Western end of the Kunlun Mountains in an area in Tibet near China. In *Lost Horizon*, the beautiful and pure environment of Shangri-La is a synonym for paradise, a mythical, forever happy utopia, especially when compared to the outside world. The people who live in Shangri-La live long lives and grow old very slowly. Ever since publication, the word Shangri-La has become a symbol of eternity and place of peace.

Lost Horizon is set in the South Asian country of Pakistan at the beginning of the 1930s, and when one city (a fictional city) was facing riots. On May 20th Conway, Consul of the British Consulate, Vice Consul Mallinson, the American Barnard and missionary Miss Brynn Clou charter a small plane to evacuate this city and fly to Peshawar. During the flight, they discover that their aircraft has left the original west to east north route along the Himalayan mountains and that their pilot is not Fenner, but a weapon carrying stranger. The plane was hijacked, and they are barehanded and helpless. At night, an engine fault forces the pilot to make an emergency landing in a snowfield where there is no human habitation. On landing, the pilot is seriously injured, but the four passengers are safe. Before dying, the pilot tells the survivors that they have landed in Tibet in China, and that located nearby is the Shangri-La lama temple where they can find accommodation. On their way to the temple they meet an old man who can speak English and who is called Zhang. Zhang tells the survivors that they are have come to the Blue Moon Valley, the only way into Shangri-La. In the front of the valley is a pyramid-like mountain named Karakal. Accompanied by Zhang, the four

survivors climb the high-altitude mountain and, after a day's walk, find the lama monastery at the centre of Shangri-La.

During the survivors stay at the temple, the highest Lama and Conway discuss the social peace and tranquility and religious diversity of Shangri-La society. Although Conway is obsessed with the beauty and tranquility of the valley, and Miss Brynn Clou is willing to share her religion, Barnard wants to pursue his gold mining interests and Mallison wants to return to England for a wedding. When the highest Lama dies Mallinson takes the opportunity to leave accompanied by Conway. In the company of a delivery caravan Mallinson and Conway traverse mountains and ravines to the Hing house on the Tibetan and Chinese border. On the way back, Mallinson falls sick and dies, and Conway loses his memory. Conway's memory is, however, restored when he listens to Chopin's music on his journey back to England by boat. While listening, his face reveals a kind of unspeakable sadness, one that is "cosmic, distant, impersonal". One night, Conway disappears.

6.2 Utopia in Chinese classical literature

The next text that I have chosen to base my concept art on is from China and was written in the year 421 A.D.
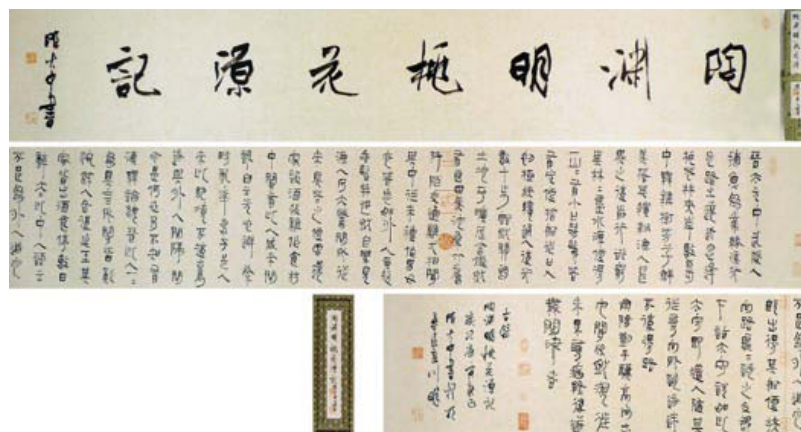
Figure 6 Calligraphy, Tao Yuanming, 421 A.D.

The poet Tao Yuanming (365-427 A.D.) wrote *The Tale of the Peach Blossom Spring* in 421 A.D. Yuanming lived at the end of the Eastern Jin Dynasty (266-420 A.D) to the early Southern Song Dynasty (960-1279 A.D.), a period of political instability, dis-unification and people dissatisfied with the reality of everyday life. In his allegorical tale, Yuanming writes of a community which, in contrast to the real world, is harmonious and peaceful and which expresses his yearning for a better life. Yuanming's allegorical tale titled The Tale of the Peach Blossom Spring has since become a classic in Chinese literature (Longxi, 2002).

Chinese text:

<p align="center">桃花源记――陶渊明</p>

晋太元中，武陵人捕鱼为业，缘溪行，忘路之远近。忽逢桃花林，夹岸数百步，中无杂树，芳草鲜美，落英缤纷；渔人甚异之。复前行，欲穷其林。林尽水源，便得一山。山有小口，仿佛若有光，便舍船，从口入。初极狭，才通人；复行数十步，豁然开朗。土地平旷，屋舍俨然。有良田美池，桑竹之属，阡陌交通，鸡犬相闻。其中往来种作，男女衣着，悉如外人；黄发垂髫，并怡然自乐。见渔人，乃大惊，问所从来；具答之。便要还家，设酒、杀鸡、作食。村中闻有此人，咸来问讯。自云：先世避秦时乱，率妻子邑人来此绝境，不复出焉；遂与外人间隔。问今是何世？乃不知有汉，无论魏、晋！此人一一为具言所闻，皆叹惋。余人各复延至其家，皆出酒食，停数日，辞去。此中人语云："不足为外人道。"

既出，得其船，便扶向路，处处志之。及郡下，诣太守，说如此。太守即遣人随其往，寻向所志，遂迷不复得路。南阳刘子骥，高尚士也，闻之，欣然规往，未果，寻病终。后遂无问津者。

Translation:

The Tale of the Peach Blossom Spring

In Wuling County, in the Dynasty of Taiyuan of Jin, lived a humble fisherman. One day, when he was sailing up a stream, the fisherman forgot how far he had travelled. Suddenly, he came upon a beautifully flowering peach forest growing on both sides of the stream. The fisherman was surprised by the magic effect of the forest and the fallen petals covering the grassy ground for some distance. He continued sailing up stream to the end of the peach forest to find the origin of the stream. There he found a mountain with light coming from a cave opening which, after tying up his boat, he went to explore. The entrance to the cave was very narrow, but after he took a few more steps the fisherman saw that it had suddenly become open and bright. The fisherman saw a wide flat valley, with neat rows of houses and farms with fertile fields, beautiful ponds, and mulberry bamboos. He saw farmers working in the fields and heard chickens and dogs. He saw men, women and children wearing the same clothing as in the outside world and everyone, including the elderly, appearing very contented.

The people in the village were greatly surprised to see the fisherman and asked where he came from. The fisherman answered in detail. The fisherman was invited to their houses, where he was treated to wine and chicken. Hearing of his arrival, the village people all came to see him. The villagers said that in order to avoid the Qin war their ancestors took their families and neighbours to this isolated place. Having sought refuge, they had never gone out and were now cut off from the outside world. The villagers asked the fisherman what the ruling dynasty now was, they did not know of the Han Dynasty (two centuries after Christ) or of the Wei and Chin dynasties (the third and fourth centuries). The fisherman told them all that he knew, and the villagers sighed upon hearing it.

After a few days, the fisherman leaves the village. The villagers bid him farewell and instruct him not to tell anything about them to the people outside. The fisherman leaves, and rowing his boat the way back, makes a mark everywhere he has left. On arriving back in his county, the fisherman tells the Prefect about his experiences. The Prefect immediately sends

someone to follow the fisherman and to look for his signs, but they are lost and so the way to the Peach Garden can never be found.

On hearing this tale, idealist Liu ZIji of Nanyang (376-396 A.D.) set out to discover the Peach Garden road, but died before he could fulfil his ambition. Since then, no one else has attempted to explore the Peach Garden road.

6.3 Analysis of Western and Chinese literature

Both *Lost Horizon*, and *the Tale of the Peach Blossom Spring*, encompass a profound philosophy, religion, and literary tradition. Each text describes an ideal utopian world, which for the people in the story represents an ideal society, and which also reflects people's discontent with real society (Chiang, 2009). When reality is disappointing, the Western trope Shangri-La is used to symbolize a future ideal of society (Masuzawa, 1999). In contrast, *The Tale of the Peach Blossom Spring* nostalgically evokes the memories of one of China's ancient societies (Longxi, 2002). Other Chinese writers also use literature to inspire hope in their readers (Chiang, 2009).

In my concept art project, I aim to convey similar effects to these tales – to reflect people's dissatisfaction with real society, and the search for purity and peace. Despite the passing of centuries between them, both authors use aesthetic psychology[1] to express their understanding of Buddhism, God and society, which lends their tales a unique spiritual character (Zhang & Wang, 2010). This is what the spirit of utopia is. I found that studying and analysing Western and Chinese representations of utopia and the lost ideal land helped inform my concept art and design generation.

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[1] Aesthetic psychology is a branch of psychology that studies and interprets the law of psychological activities in the process of human being. The so-called aesthetic mainly refers to the generation and experience of beauty, and psychological activities refer to people's knowledge, feelings, meaning. Therefore, aesthetic psychology can also be said to be a study and interpretation of the generation and experience of people's aesthetic perception, emotion, meaning of the activities of the process, as well as the law of personality tendencies (Zhou, 2005).

7. Concept art

Concept art is the form in which illustrations are used to convey ideas and stories for film, online video game, animation, and comic books. Concept art is also called visual development or concept design (Shamsuddin & Islam, 2013).

Today's concept artists primarily use digital technology to generate different styles of digital painting, specifically designed for display and interaction with computer software and digital tablets. In this practice-led project, I assume the role of the concept artist. I apply my knowledge of digital painting to conceiving the game and creating concept art scenes for a hypothetical fantasy story that combines elements of *Lost Horizon* (1933) and *Tale of the Peach Blossom Spring* (421 A.D.).

Good concept art allows audiences to have a wonderful visual experience. There are many styles of concept art, such as aestheticism, magic, science fiction, fantasy, realism, and absurdity (Wenpeng, 2015). Based on the theoretical research and literary exploration, I decided that my project would be better suited to combining the styles of fantasy and realism. Also, concept art generally includes a lot of symbolic elements and figurative details, each of which may look tiny but which have many references and implied meanings (Wenpeng, 2015). Shamsuddin and Islam, and Wenpeng's views encouraged me to pursue concept art to convey the ideas contained in my story, and to inspire changes in behavioural attitudes.

7.1 Use of concept art in video games

In thinking how to visually represent utopia and purity to the audience in order to influence their feelings, I considered that I should express these ideas in a way that the audience is willing to accept. As well as referencing the literature of the past, current media must also

be employed. When it comes to influencing societal change, such as combating air pollution, I propose that interactive experiences could be effective in that they help spread the message to large audiences. Even though there are many forms of media that contain such themes, such as online video games, the ideas are only secondary to the game's main mechanics. Video games are not a simple visual media (Greenfield, 2014). Such games may lead people to momentarily escape from the reality of their own environment into a fictional one. However, in China today there is a large group of online video game users who live in air polluted cities without really thinking deeply about the impact of the haze on their health. In order to motivate this group of people to want to change their environment, it is essential that the concept artwork focus on the message of environmental protection rather than providing escape into a utopian world.

Concept art is widely used to create fantasy art for online video games and includes creating storytelling, game world view, landscape, character, and atmosphere (Stoneham, 2011). And the concept artist has to consider these elements of game, which help contribute to the overall scene (Wenpeng, 2015). In my project, I hope to separate these elements of the game design. I hope to re-examine and modify them so that the audience feels that these game materials have been reformed into an entity that gives the game meaning and leads to a unique playing experience.

In citing Weitz's open concept argument that "not all art should work for the same property, and it should be an open concept" (Adajian, 2005, pp. 39-56), I also hope my project can show how concept art can lead the audience to more in-depth thinking, as well as the more open spirit of the interactive art media such as online video game. Next, I will analyse some examples of concept in online video games.

7.2 Case analysis of video games

In addition to researching online video games to help with the atmospheric rendering of the environment, I also researched game reviews to help inform my study. The games include the titles *Silent Hill* (1999), *Resident Evil Apocalypse 2* (2012), and *Radiation 4* (2015).

Figure 7 *Silent Hill* screenshot.

Silent Hill is a series of horror games developed and produced by Konami (Japanese: サイレ ント ヒル) , that focus on role shaping, atmosphere building and psychologic suggestion. The video game story is similar to the film, and similarly uses a simulated realistic approach. A key feature of this game is the atmospheric rendering of the fog, which blocks the game character's vision. The tone and colour chosen by the designer is deliberately low. The visual experience for the game player is one of repression and terror, as well as extreme depression. The background story involves the nature of good and evil. The content invites players to explore ethical behaviour in relation to religion, psychology, and other mysterious aspects. By playing this game, players can feel a sensory experience similar to real life (Feixiang Games, 2013).

Figure 8 *Resident Evil Apocalypse 2* screenshot.

Resident Evil Apocalypse 2 is a horror game developed by the Japanese Capcom company. In designing this game, the company launched Virtual Reality (VR) technology version and widescreen display, thus increasing the visual impact and affect for game players (Gamesky, 2013). The image taken from this game can be considered as a piece of concept art. In addition to placing the focus in the centre of the compositional triangle, the concept artist has employed a low angle view, dark grey colour, and a weak beam of light to represent the atmosphere of terror. Some players of this game reported that it was difficult to imagine living in this kind of environment, and that it caused them distress.

Figure 9 *Radiation 4* screenshot.

Radiation 4 was developed and produced by Bethesda Soft works. As with the former two concept art images, the dominant colour employed by the concept artist is monochromatic and low in tone. In addition, the faintly lit atmosphere means that the game player cannot see the distance. The game story centres on family affection, human nature and people's feelings for one another. Playing *Radiation 4* is different to playing fast online video games. In this game players can change the plot through their behaviour. Through immersion in the game play and game world, players learn not to give up hope even though the environment appears sinister (Gamesky, 2015).

The primary reason for selecting these game examples is to show how concept art can evoke emotions through atmosphere and realism.

There are also several games, such as *The Legend of Sword and Fairy* (1995) and *The Peach Garden* (1995), that depict a fantastic fairyland. In contrast to the examples above, the concept art of these games employs pure colour to symbolize purity and clear vision. Playing these types of games is one of visual enjoyment.

Figure 10 *The Legend of Sword and Fairy* screenshot.

The award-winning The *Legend of Sword and Fairy* was developed by Chinese Dayu Information Company, and published in 1995. In 1995, the game won the Best Role-Playing Game award from the magazine *CEM STAR* and the Golden Bag Game award from *KING TITLE*. *The Legend of Sword and Fairy* was also at the top of the Best PC Game List of the *New Gaming Era* magazine in 1996 and, for ten years, topped the My Favourite Single player PC Game list in the *Pop Software* magazine (PCGames, 2011). The background story of the fantasy game is touching. The game art is attractive and employs pure, saturated colours to convey the sense of the ethereal. Game players are not only invited to complete the game task but are invited to become immersed in the fantasy world and the protagonist's feelings. The game caused great repercussions in Chinese society. In 2015 Tencent games news reported that *The Legend of Sword and Fairy* is not just a series of games, it represents a milestone in Chinese game design (Tencent game, 2015).

Figure 11 *The Peach Garden* screenshot.

In the fantasy game *The Peach Garden*, the attractive colour and foreground and background elements are the biggest features of the game concept art. The colour employed in the foreground is bright and intense, and the objects illustrated in detail. The background colour is more monochromatic to show distance and the objects less clear. The game background story comes from Chinese classical literature which Chinese people are familiar with. In addition to focusing on light, the concept art employs classical Chinese motifs the moon bridge, flowing water, peach trees, pavilions, and waterfalls to create a mythological dream space. The game aims to awaken paradise in the hearts of the players (Sina Games, 2011).

After playing this game, game players said that the fantasy environment was excellent and that the design was outstanding for its cultural connotation. In contrast to immersion in apocalyptic urban game environments, players of *The Legend of Sword and Fairy* and *The Peach Garden* are immersed in the visual aesthetic of the natural environment. The player's psychological response to this aesthetic is therefore quite different. While the apocalyptic and horror games lead game players to want to escape, the brightly coloured fantasy games

invite players to linger. Nevertheless, both game genres successfully use colour, perspective and symbolic motifs to engage players in the story and the ideas contained in the story.

I argue that online video game concept art can assist players enter into the spirit and values of the game story. The concept art of many good online video games, such as *Fantasy Westward Journey* (2003) and *Legend of Sword and Fairy* (1995), is culturally informed and often employs literary tropes (figurative devices), to describe a pure land, such as the utopian ideal found in the Western story *Shangri-La* (1933) and the Chinese story *Tale of the Peach Blossom Spring* (421 A.D.). I considered how I might employ such tropes in generating concept art aimed at motivating players to think about their attitudes and behaviours regarding air pollution.

In China today, there are tens of millions of young people who live in the haze of air pollution without really thinking deeply about it. These people may have never experienced life without haze, and tend to escape from the pressure of their life by playing online video games. I argue that concept art for these types of games can bring about change in people's thinking. I intend to use colour, perspective, composition and symbolic Chinese motifs to convey the concept of utopia and purity as well as the journey from a polluted world to a lost land of hope. My aim is to educate young Chinese on the importance of the environment and to motivate them to want to make a change for the better.

In addition, I considered the importance of visual psychology and visual contrast in influencing the player. According to Lieberman (2006) online video games can cause players to become immersed in an interactive world, so that they escape momentarily from their own real environment into a fictional one. In their inspirational article on the video game *Metal Gear Solid V*, Melissinos and O'Rourke claim that the charm of the game is that it creates another world for the game player, and gives the player another kind of experience in this world. In addition, to create a game which can move a player, it is the driving force of

all developers (Melissinos & O'Rourke, 2012). By using visual contrast to influence

psychological change, I aim to inspire players to think about the reality of the environment

they are living in. My goal in creating and producing the concept art is to make people

realize that if they do not protect their environment it will get worse and worse.

8. Lost in Haze concept art

8.1. Inspiration source

Because my concept art attempts to realistically portray the environmental issue of air pollution and haze, I first sourced online images of air pollution in China's cities. These images became the point of departure for further development and inspiration. I spent a long time collecting the source material and recording the concepts that emerged from analysing the material sourced from books, magazines, film, animation, video, painting, computer generated art work, and photographs. I then sorted the imagery into subjects (city pollution, natural scenery, fantasy game scenes, object etc.), which I then saved in different folders. Although this organization is complex it allowed me to quickly find the appropriate reference sources and inspirations for my concept art work (Figure 12).
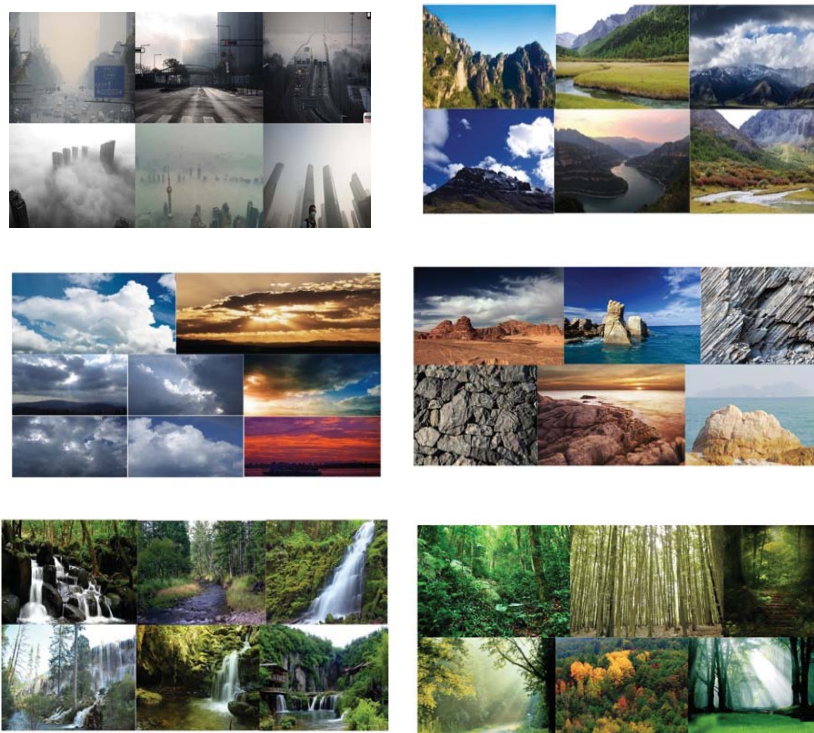

Figure 12 Materials collection. Can Liu, 2016-2017.

8. Lost in Haze concept art

8.2. Storytelling

In addition to the concept art, I created a background story on the themes of utopia, purity, and environmental protection. The story is based on my personal experience of living and breathing in the fog and haze associated with serious air pollution. In winter every year, the haze will become very heavy so that my elderly family members often get sick and I need to take them to the hospital. In winter, the hospital is usually very crowded with many sick people. The coughing that comes out from the hospital corridor is, for me, unforgettable. In that moment, I feel that the people of my hometown will be threatened with even basic survival if the fog and haze cannot be controlled. My background story is, therefore, like a survival game where the protagonist has to fight the dark forces in order to survive and protect the endangered environment.

Synopsis:

The protagonist knows that his body is diseased and that he has not long to live. He also knows that his disease is caused by air pollution, which he fears and from which he cannot escape. Knowing this, he falls into depression. He falls asleep and dreams of being in a mysterious pure land, in which the inhabitants are relaxed and peaceful. But the good times do not last long. From afar, he watches the dark forces of pollution strike again and the villagers struggle to protect their pure land from those forces.

Story introduction

Prologue: Pain

The rain beats on my body, flows down my hair and sticks on my forehead. The paper I am holding in my hand breaks and falls to the ground. I look around. I see the tall cement forest

that I live in, and passers-by walking quickly and all wearing gas masks. My heart is aching. A few days ago, I didn't feel well, so went to the hospital for a check-up. The results gave me a shock because the doctor told me that I have not long to live!

Chapter one

After the diagnosis, I drag my exhausted body back home. I am dizzy and tired and so fall asleep. When I wake up, I discover that my apartment surroundings have changed. I open the door and am stunned to find myself entering a mysterious space. The reinforced concrete high-rise buildings have disappeared into a pure land that has snow-capped mountains, a very blue sky, original forest, waterfalls, and birds hovering in the sky. A mysterious temple is clearly visible in the distance. I rub my eyes. I can't believe it's true. I can't wait to explore this beautiful place with scenery like paradise. Like standing on cotton candy, I walk along the road to a village. The villagers are honest and kind. They enthusiastically invite me to visit their home where they share with me their Buddhist beliefs so that I quickly integrate into their simple life.

The villagers tell me that they have come here to escape the dark forces of the highly polluted chemical factories, and the concentrated haze of the pollution bombs and biological experiments conducted on their hometown. They love their home, but the environment has been destroyed by the dark forces of pollution. So, in order to survive they have escaped to this place that the outside world does not know.

Chapter two

The good time, however, doesn't last for a long. One day, black smoke is seen slowly drifting in from the distance. Factories are seen spreading to this far-off land, and the blue sky is slowly turning grey from the factory smoke. The villagers begin to panic. They did not expect that their pure land would also face the risk of being destroyed. In order to survive this land, I and villagers begin a battle with the dark forces of industrial pollution.

8.3. Design concepts
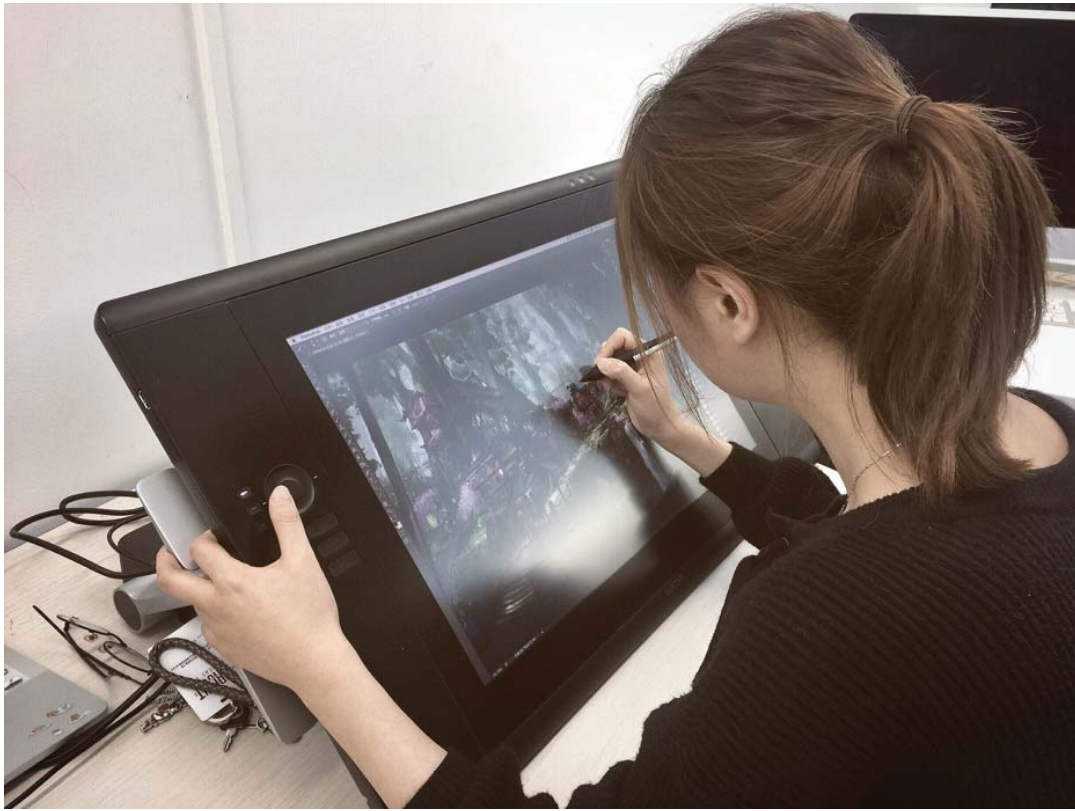
Figure 13 Concept art illustrating on digitizing tablet. Can Liu, 2017.

After writing my background story, I set about creating five concept artworks that are based on my own experience, and which illustrate the protagonist and key scenes and moments in the story.

Protagonist design

Walking around a Chinese city it is common to see people wearing masks, especially in winter. As an ordinary mask does not exclude tiny pollution particles, so people often wear a professional isolation mask resembling a gas mask (Figure 15).

My protagonist wears an isolation mask to represent this reality and to also symbolize the effect of concentrated air pollution. To achieve the right look and feel, I produced several concept designs of the isolation mask with the protagonist's features obscured, which I then shared with my classmates and tutors, some kiwi friends, and by email, my friends back in China (Figure 16). After this face-to-face and digital sharing, I selected the design judged to be most powerful and closest to reality (Figure 17).

Figure 14 Chinese wear face masks to tackle air pollution, picture from BBC News, 2016.

Figure 15 Young man wearing an isolation mask, Wang, 2013.

Figure 16 Isolation mask concept design. Can Liu, 2016.

Figure 17 Protagonist concept design. Can Liu, 2016.

Breathing Pain

Together with the source material I had earlier collected, the roads in my home city in Shandong province China went to inspire the first scene (Figure 18).

Based on my analysis of game case studies I chose one point perspective, which is popularly used in digital game painting (Taylor, 2002), to produce a line sketch of the city scene. I then followed an important step in digital painting and emphasized the contrast between black and white. Altering the contrast between background, middle ground, and foreground results in a stronger image and, as colour was a key feature to convey the story atmosphere, I chose lower saturation colours to render the gloomy feeling of the polluted city.
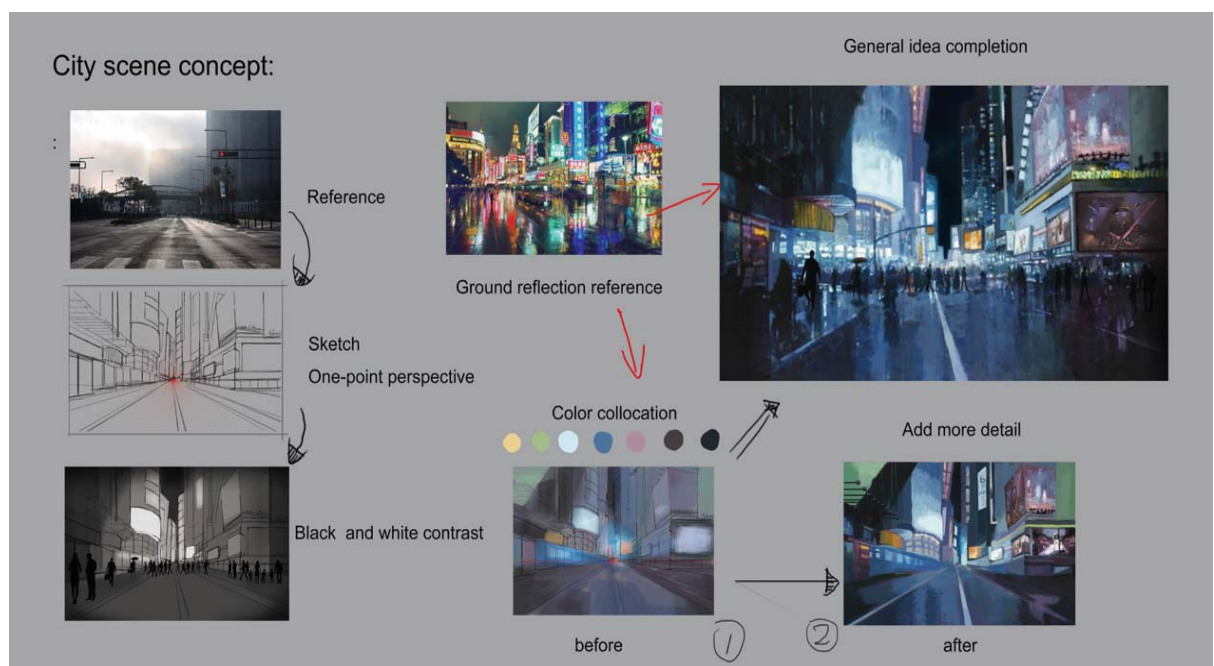

Figure 18 City concept design process. Can Liu, 2017.

Figure 19 Different background colour contract. Can Liu, 2017.

Figure 20 Breathing Pain scene. Can Liu, 2017.

The first scene that I designed and produced for my fantasy story closely relates to my lived experience and shows life in a polluted city. My intention in this image, is for audiences to have the feeling of being mentally and physically uncomfortable. Everything is blurred. You can imagine the claustrophobic sensation of wearing an isolation mask, breathing in stuff through your nose and throat, and feeling dizzy. In the background high-rise buildings with lot of lights and LED billboards emphasize the feeling of a bustling city where everyone is super busy, walking fast and indifferent to everyone around them.

Lost

For this scene, I researched the living conditions and feelings of young millenials living in China's big cities. My project is targeted at young Chinese game players, and so my protagonist is hypothesised to be a young male white-collar worker living in a big polluted city.

I discovered that a large number of young adults who live in the big cities in China face the same life style problems. In China, there are more than 24 million people in need of employment every year, but reports show that employment only averages about 12 million people (China human resources development report, 2013).

Oppressed and stressed are words that regularly feature in Chinese millenials' blogs and daily chat (China Daily, 2012). Not only does this group face serious air pollution, they feel pressured because the pace of life is too fast. I therefore chose the keywords lost and oppress in searching for inspiration for this second scene. China's densely populated cities makes living spaces very small and compressed, and the high intensity of work pressure oppresses city dwellers as well (Figure 21). My concept art for the lost scene is intended to convey the feelings of compression, helplessness and loneliness. Young millenials who live in this situation may want to escape, but have no way of doing so. A report about life in Hong

Kong illustrates the issue (Guan, 2013), as does this photograph of one of the 'ant tribe' (Figure 21). Gu Xin lived in Hung Hom, Hong Kong, in a residence described as 6 square meters of flat-share and a monthly rent of HK $4200. (Nandu News, 2013). The media label for people who live this way is the ant tribe.

Figure 21 Gu Xin in his Hong Kong apartment. (Nandu News, 2013)

Figure 22 Lost scene. Can Liu, 2017.

This dimly lit interior scene is intended to show the protagonist 's life on his day off. In his messy, tiny rented room he sits dejected at the computer table. Some of the small objects in the room have implied meanings. The instant noodles on the table, for example, symbolize the protagonist's fast-paced life; the technical books suggest time spent studying to avoid being eliminated by the intense competition at work; the single bed and small cabinet symbolize living alone; and the isolation masks on the table and bed symbolize the bad environment.

The pictures on the two computer screens contrast sharply with the room's appearance and atmosphere, and symbolize the protagonist's desire to escape to a better place. To convey the depressive atmosphere, I chose to use dark green and grey colours similar to the Japanese horror game aesthetic as well as low colour saturation. This scene is contrasted with the next scene which is designed to symbolize the mysterious pure land that the protagonist desires to escape to.

41

Escape

Figure 23 Escape scene. Can Liu, 2017.

In the scene, Escape, there is an obvious shift in the composition and scenery. The concept art is inspired by Western and Chinese literary descriptions of a far off and hidden utopian land in *Lost Horizon* (Hilton, 1933) and *The Tale of the Peach Blossom Spring* (421 A.D.). For the protagonist, this land is unattainable and, in contrast to his everyday life, a fantasy, and so it has been designed and painted similar to the Chinese games analysed for this thesis. In Oriental cultures, the depiction of a fairyland is symbolic. I therefore used traditional Chinese motifs water, moon bridge, pavilion, temple, and peach tree to symbolize the idea of the pure and mysterious land.

To further emphasize the purity of this place for the protagonist, I placed a temple at the centre of the composition. The temple is inspired by my visit to Tibet. In this scene, it is meaningful because it represents knowledge, wisdom and education (Figure 24). By making the temple a focal point of the composition I suggest that it is a place that the protagonist

must travel to in order to gain information about how to protect and save the environment

(Figure 25).
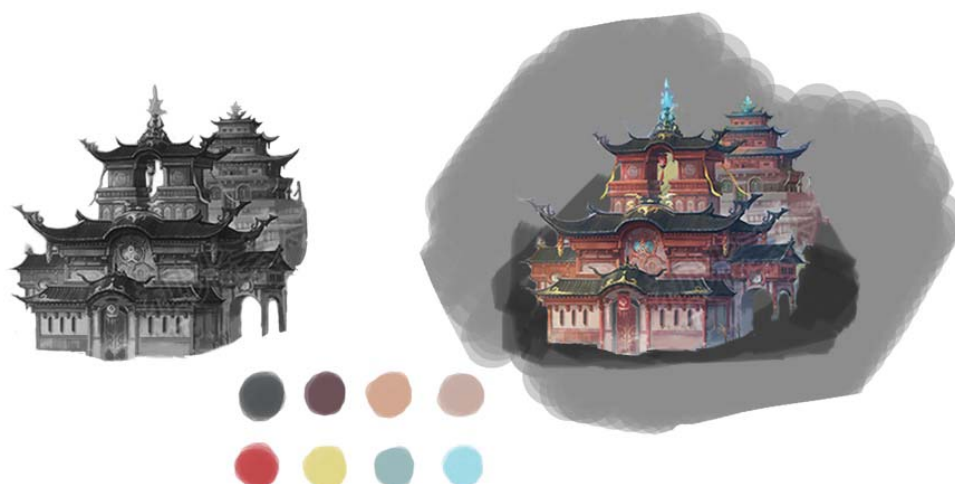

Figure 24 Tibetan temple. Wang, 2014.

Figure 25 Temple concept design. Can Liu, 2017.

Paradise

Figure 26 Paradise scene. Can Liu, 2017.

In this fourth scene, the protagonist is invited to visit a rural village in this utopian paradise.
In contrast to the reality of the protagonist's lonely life, and the indifference he experiences
from living in the city, the village represents the close society that he longs for. For this
composition, I again chose one point perspective. In this scene, though, the view is from
below the village and represents the feeling of people walking upwards and towards hope.
To further symbolize this, I chose to paint the scene in green colour and bright colours. The
green colour also representative of environmental protection (Micheal,2012), life, hope,
peace and health (Birren, 2016).

For the buildings, I drew inspiration from the style of wooden building traditionally used by a
Chinese minority people (Figure 27). Such houses use a primitive construction method and
are still found in the mountainous regions of China (Figure 28). In contrast to the cement

buildings in the city, these wooden buildings imply that in utopia village life is simple and harmonious. In the literary texts, utopian society is described as peaceful and quiet, in contrast to the world that the protagonist inhabits. So, this scene is designed to capture the paradise the protagonist longs for.

In the final section, I discuss the concept art produced for the scene Nightmare Strikes.

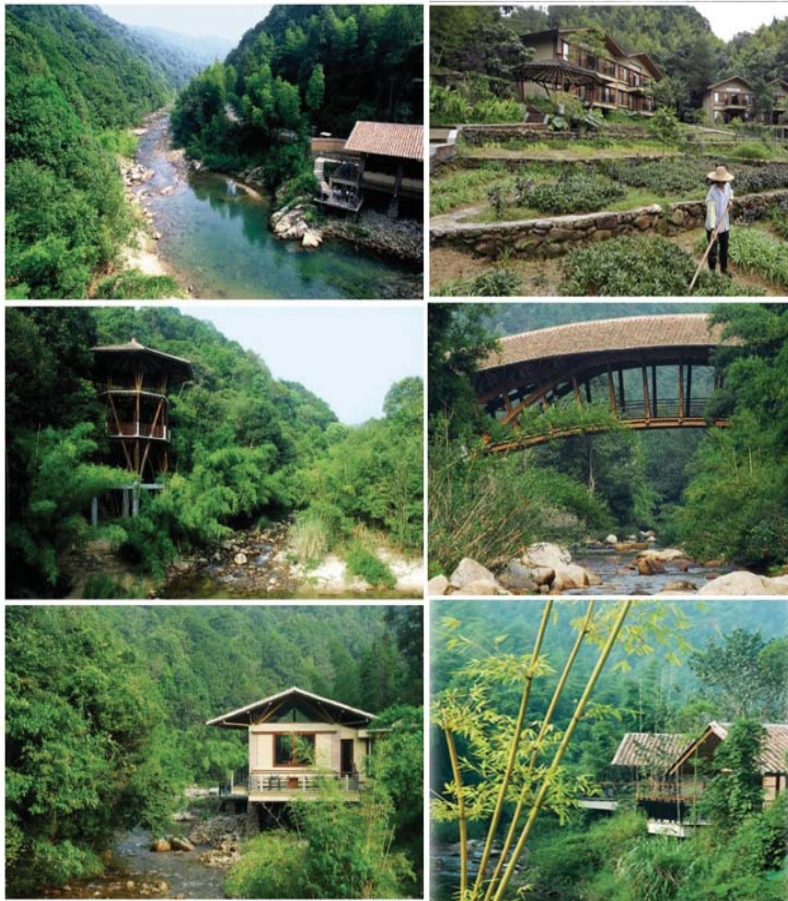Figure 27 Village building concept inspired by minority Chinese wooden architecture. Can Liu, 2017.

Figure 28 Traditional wooden buildings, Longmen county, Guangdong Province, China.

Nightmare Strikes

Figure 29 'Homecoming' Series - Steel Foundry at West Hartlepool. Don McCullin, 1963.

Don McCullin's photograph of the industrial north of England gave me a lot of inspiration for the final concept art scene Nightmare Strikes. The monochromatic photograph harshly portrays the environmental effect of industrialisation on the countryside. It also shows the devastating effect on local people's lives. In this photograph, a mother pushing a pram in the foreground contrasts with the pollution of a distant factory. I wanted my final concept art scene to have a similar effect to McCullin's image to make people aware of the effects of air pollution.

Figure 30 Nightmare Strikes scene. Can Liu, 2017.

This last scene is designed and painted to show the pure environment of the hidden utopian land under threat from pollution. In this composition, I used bird's eye perspective to show the effects of pollution on the beautiful land, and positioned the protagonist to the right of the scene. From this high point, he can see the black smoke emissions coming from the factories in the distance; he can see that the blue sky has turned grey and that the clear water has also become grey and muddy.

In the concept art, I deliberately used colour and tone to convey the transition in the atmosphere from high purity to low purity, and to convey stress and tension. My intent was

to convey impending danger and threat thereby simulating the stimulation of emotions in online video game design (Yannakakis & Paiva, 2014). The pollution in the distance is painted to evoke feelings of insecurity, and so prompt audiences to realise that their natural landscape is under threat from air pollution. By conveying the potential danger in images, and generating this emotion in audiences within the story setting, I let people use their imagination, and evoke their awareness of environmental issues subconsciously. Such awareness is more meaningful than simply designing entertaining scenery for a story. It can make people come to realize that we need to pay attention to environmental problems generally, and not just within the moment in the game.

9. Discussion and Conclusion

This project was motivated by my personal experience of increased air pollution in China and how concept art for an online fantasy video game can make young Chinese realize the significance of this environmental issue. It led to designing and producing the concept art work Lost in Haze. The five concept artworks combine my personal experience with research into the effects of air pollution on human health and society, interactivity theory, visual psychology and concept art and design techniques. To understand the psychological approach needed for this project, I researched the current situation facing young Chinese and identified the stress and depression they face from living in crowded cities with polluted air, poor accommodation, poor employment, and rapid pace of life. My comparative analysis of two literary texts on the subject utopia provided insight into Western and Chinese understandings of this trope, and allowed me to write a background story appropriate to the target audience. Using these texts as a basis, I produced scenes that also were inspired by my research into online video game scenes. The Lost in Haze concept art work attempts to connect the audience on an emotional level.

At all stages of the project development, I received useful and detailed feedback from my supervisors and other design students. This feedback helped me to work step by step to gradually modify and refine my concept designs. (Figure 31).

Figure 31, Design modification process. Can Liu, 2017.

In China, whether in large cities or rural areas, the protection and management of air pollution is a serious matter for the whole of society and, in particular, young people. Concept art is a way for artists and designers to take a lead in promoting clean air or any other social issue. I, a young generation designer who likes to find ways to address problems, argue that this project demonstrates the possibilities for an online video game to let players realize the significance of environmental protection and inspire them to reduce their contribution to air pollution. There are limitations to my research, because my personal ability is limited to the technical production of the concept artwork, so I was not able to produce a fully designed game on the theme of air pollution.

The market prospects of online video games are very good in China, as China has the largest online gaming market in the world (Hao, 2010). In 2007, China's online gaming market was about $970 million US dollars, with more than 36 million players (Vivian, 2008). Online video game designs require concept art. I believe that this medium has the potential to transfer

the designer's ideas and experience to the audience. So, I am encouraged to continue to explore concept art to tell the story of air pollution, and imagine and create another wonderful world for the audience.

10. References

Adajian, T. (2005). On the prototype theory of concepts and the definition of art. *Journal of Aesthetics and Art Criticism, 63*(3), 231–236.

Baranowski, T., Buday, R., Thompson, D. I., & Baranowski, J. (2008). Playing for real: video games and stories for health-related behaviour change. *American Journal of Preventive Medicine, 34*(1), 74-82.

Bandura, A. (2009). Social cognitive theory of mass communication. *Media Psychology, 3*(3), 265-299.

Birren, F. (2016). *Colour psychology and colour therapy; a factual study of the influence of colour on human life.* New York, NY: Pickle Partners Publishing.

Bowker, J. (Ed.). (2000). *The concise Oxford dictionary of world religions.* Oxford, UK: Oxford University Press.

Brookfield, H., Brown, S. D., & Reavey, P. (2008). Vicarious and post-memory practices in adopting families: the re-production of the past through photography and narrative. *Journal of Community and Applied Social Psychology,* 18, 474-491.

Brown, S. D., Reavey, P., Cromby, J., Harper, D., & Johnson, K. (2008). On psychology and embodiment: some methodological experiments. *The Sociological Review, 56*(2), 197-215.

Campbell, F. F. (1991). Shangri-La: Utopian bridge between cultures. *Utopian Studies,* 3, 86-91.

Chiang, S. C. L. (2009). Visions of happiness: Daoist utopias and grotto paradises in early and medieval Chinese tales. *Utopian Studies,* 20, 97-120.

Davis, J. C. (1983). *Utopia and the ideal society: A study of English utopian writing 1516-1700.* Cambridge, UK: Cambridge University Press.

Daw, N. W. (1984). The psychology and physiology of colour vision. *Trends in Neurosciences,* 7(9), 330-335.

Dian, Z. (2015). *Film highlighting pollution woes vanishes from China's Internet.* Retrieved from
 http://www.stuff.co.nz/world/asia/67081472/film-highlighting-pollution-woes-vanishes-from-chinas-internet

Fan, Y. G. (2015). Lung cancer in urban China. *Cancer control,* 7, 88-93.

Feixiang games, (2013)*. Silent Hill HD collection*. Retrieved from
http://www.fxxz.com/k/jijinglyx/

Fernald, D. (2007). *Psychology: six perspectives.* California, U.S.A: Sage Publications.

Flanagan, M., & Nissenbaum, H. (2014). *Values at play in digital games.* Cambridge, Massachusetts, UK: MIT Press.

Fung, A. Y., & Liao, S. X. (2015). The emergence of youth culture in China and the rise of the Chinese game market. *Video Games Around the World,* 119.

Gamesky, (2013). *Resident Evil Revelations special administrative area.* Retrieved from
http://bbs.gamersky.com/forum-1767-1.html

Gamesky, (2015). *The game Radiation 4's screen and story experience, the platinum players to get starts experience.* Retrieved from
http://www.gamersky.com/handbook/201512/689252_3.shtml

Gillies, V., Harden, A., Johnson, K., Reavey, P., Strange, V. and Willing, C. (2005). Painting pictures of embodied experience: the use of nonverbal data production for the study of embodiment. *Qualitative Research in Psychology,* 2: 199-212.

Greenfield, P. M. (2014). *Mind and media: The effects of television, video games, and computers.* New York, NY: Psychology Press.

Gregory, R. L. (1996). *Eye and brain: The psychology of seeing.* Princeton, New Jersey, U.S.A: Princeton University Press.

Grodal, T. (2000). Video games and the pleasures of control. *Media entertainment: The psychology of its appeal,* 197-213.

Gurjar, B. R., Molina, L. T., & Ojha, C. S. P. (Eds.). (2010). *Air pollution: health and environmental impacts.* Boca Raton, U.S.A: CRC Press.

Hao, Y. (2010). *China's online game revenue tops the world.* Retrieved from
http://www.chinadaily.com.cn/bizchina/2010-06/23/content_10010928.htm

Harvey, P. (2012). *An introduction to Buddhism: Teachings, history and practices.* UK: Cambridge University Press.

Herman, W. (2013). *2013 will be remembered as the year that deadly, suffocating smog consumed China.* Retrieved from https://qz.com/159105/2013-will-be-remembered-as-the-year-that-deadly-suffocating-smog-consumed-china/

Hilton, J. (1933). *Lost horizon.* UK: Macmillan.

Kun, W. (2015). *China pollution conclusion.* Retrieved

from https://prezi.com/nlenc1v4shpg/air-pollution/

Lenin, V. I. (1912). *Two Utopias*. Retrieved from

https://www.marxists.org/archive/lenin/works/1912/oct/00.htm

Lieberman, D. A. (2006). What can we learn from playing interactive games, in P. Vorderer

and J. Bryant (eds). *Playing video games: Motives, responses, and consequences,*

(pp.379-397). Mahwah NJ, Lawrence Erlbaum Associates Inc.

Liu, Y. (2017). *Tibet eco-business card: Let 'the last piece of pure land' more 'net'.*
Retrieved from
http://www.top-news.top/news-12796746.html

Living with stress (2012). *China Daily.* Retrieved from

http://www.chinadaily.com.cn/china/2012-12/12/content_16009304.htm

Longxi, Z. (2002). The utopian vision, east and west. *Utopian Studies, 13*(1), 1-20.

Magikarp. (2013). *Game Silent Hill reviews.* Retrieved from

http://www.metacritic.com/game/playstation/silent-hill/user-reviews

Mather, G. (2013). *The psychology of visual art: Eye, brain and art.* Cambridge,

UK: Cambridge University Press.

Masuzawa, T. (1999). From empire to utopia: The Effacement of Colonial

Markings in Lost Horizon. *Positions,* 7(2), 541-572.

Melissinos, C., & O'Rourke, P. (2012). T*he art of video games: From Pac-Man to mass effect.*

    New York, NY: Welcome Books.

Micheal, C. (2012). Green is the colour. *Journal of Academic Methodologies, 259*(26), 18.

Middleton, D., & Brown, S. D. (2005). *The social psychology of experience: studies in*

    remembering and forgetting. London, UK: Sage Publications.

Middleton, D., & Edwards, D. (ed.) (1990). *Collective remembering.* London, UK: Sage

    Publications.

More, T. (1516). *Of a republic's best state and of the new island Utopia.* Hasbsburg

    Netherlands: More.

NASA. (2015). *Air Quality Suffering in China.* Retrieved from

    https://www.nasa.gov/multimedia/imagegallery/image_feature_2425.html

Nitsche, M. (2008). *Video game spaces: Image, play, and structure in 3D game worlds.*

    Cambridge, MA: MIT Press.

Oanh, N. T. K. (Ed.). (2012). *Integrated air quality management: Asian Case*

    Studies. U.S.A: CRC Press.

Paul, W.S.A. (2004). *The game the Resident Evil Apocalypse 2 review.* Retrieved from

    http://www.imdb.com/title/tt0318627/

PCGames. (2011). *The Legend of sword and fairy game award introduction.* Retrieved from

http://game.pcgames.com.cn/item/2769.html

Phillip. (2014). *The game the Resident Evil Apocalypse 2 review.* Retrieved from

http://www.gamersky.com/news/6706/

Reavey, P. (2008). Back to experience: material subjectivities and the visual. *Key*

note address at Visual Psychologies. UK: University of Leicester. 4.

Reavey, P. (Ed.). (2012). *Visual methods in psychology: Using and interpreting*

images in qualitative research. New York, U.S.A: Psychology Press.

Rhodes, L. (2012). *Don McCullin at the Tate Britain*. Retrieved from

http://myechoinggreen.blogspot.co.nz/2012/04/don-mccullin-at-tate-britain.html

Richards, G. (2002). *Putting psychology in its place: A critical historical overview.* New York,

NY: Psychology Press.

Ritterfeld, U., & Weber, R. (2006). Video games for entertainment and education. in P.

Vorderer and J. Bryant (eds). *Playing video games: Motives, responses, and*

*consequences, (pp.*399-413). Mahwah NJ, Lawrence Erlbaum Associates Inc.

Shamsuddin, A. K., Islam, M. B., & Islam, M. K. (2013). Evaluating content based animation

through concept art. *International Journal of Trends in Computer Science,* 2(11), 818-

830.

Sina Games, (2011) *The peach garden game review.* Retrieved from

http://games.sina.com.cn/thyj/index.shtml

Silver, J. & Reavey, P. (2010). Body dysmorphic disorder and the life narrative. *Social Science and Medicine,* 70: 1642-1647.

Stoneham, B. (2011). *How to create fantasy art for video games: A complete guide to creating concepts, characters, and worlds.* New York, NY: Barron's Educational Series Inc.

Sweetser, P., & Wyeth, P. (2005). Game flow: a model for evaluating player enjoyment in games. *Computers in Entertainment (CIE)*, *3*(3), 3-3.

Swink, S. (2008). *Game feel: A game designer's guide to virtual sensation.* Amsterdam: Morgan Kaufmann Publishers/Elsevier.

Taylor, L. N. (2002). *Video games: Perspective, point-of-view, and immersion.* Florida, U.S.A: University of Florida.

Tencent games, (2012). *Out of the ordinary Legend of the storm, the latest version evaluation.* Retrieved from http://games.qq.com/a/20120709/000228.htm

Tencent games, (2015). *Poetic twenty years close to The Legend of Sword and Fairy.* Retrieved from: http://games.qq.com/a/20150603/043202.htm

Ulaş, E. S. (2014). Virtual environment design and storytelling in video games. *Metaverse Creativity, 4*(1), 75-91.

Van, S. S. (2011). *Tibet: a history. New Haven*. U.S.A: Yale University Press.

Vivan, Y. (2008). *Marking a play for China's online games.* Retrieved from

  http://www.zdnet.com/article/making-a-play-for-chinas-online-games/

Watts, J. (2012). *Air pollution could become China's biggest health threat, expert warns*.

  Retrieved from

  https://www.theguardian.com/environment/2012/mar/16/air-pollution-biggest-threat-

  china

W.H.O, (2005). *Indoor air pollution and health fact sheet no.292.* Retrieved from

  http://www.who.int/mediacentre/factsheets/fs292/en/

W.M.O, (2012). *Air quality and pollution.* Retrieved from

  http://asrizamjauriehunisel.blogspot.co.nz/2016/07/chapter-12-air-quality-and-

  pollution.html

Weber, R., Behr, K. M., & DeMartino, C. (2014). Measuring interactivity in video

  games. *Communication Methods and Measures, 8*(2), 79-115.

Wenpeng, W. Maoyang, L. & Ying, W. (2015). Secrets of scene design: rules, techniques and

  insights. *Harrow Middlesex*, UK: CYPI press.

Xinhua. (2014). *Tibet's air quality good last year*. Retrieved from

  http://iq.chineseembassy.org/eng/zt/jrxz/t1165044.htm

Yannakakis, G. N., & Paiva, A. (2014). Emotion in games. *Handbook on affective computing,*

  459-471.

Zhang, J., & Wang, Z. (2010). Notice of retraction the inspiration to modern landscape design

from *The Story of Peach Blossom Spring. In Computer-Aided Industrial Design &*

Conceptual Design (CAIDCD), 11th International Conference on. 2, 878-883. IEEE.

Zhu, Q., Sarkis, J., & Lai, K. H. (2007). Green supply chain management: pressures, practices

and performance within the Chinese automobile industry. *Journal of Cleaner*

Production, 15(11), 1041-1052.

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