

**HOMETOWN: Exploring Escapism Through Meta-Narrative**

by

Andrew J. Wiedner

A final project submitted to the  
Graduate Faculty of North Carolina State University  
in partial fulfillment of the requirements for the  
Master of Art + Design

North Carolina State University - College of Design

Raleigh, North Carolina

Spring 2020

Committee Members:

Marc Russo, Chair

J. Mark Scearce

Chris Martens

## **TABLE OF CONTENTS**

ABSTRACT	1
PROJECT BACKGROUND	3
FOUNDATIONAL THEORIES	9
Cultivation Theory	9
Hyperreality	13
The Phenomenology of Perception	15
DESIGN PROCESS AND PROJECT OVERVIEW	19
Target Audience	19
Visual Aesthetic	21
Technical Constraints	23
Source Code Meta-Narrative	27
PROJECT EVALUATION AND FUTURE WORK	30
BIBLIOGRAPHY	32

**ABSTRACT**

We live in a society that is saturated with images. Media augments the tedium of everyday life with innumerable depictions of fictitious realities fabricated for entertainment, instruction, manipulation, or distraction. Despite the ubiquity of images, which draw us into these fabricated realities, we are, by comparison, relatively unaware of the impact they have on our emotions, perceptions, and expectations of reality. Trying to understand the complexity of how all of the messages in media proliferate, merge, interact, and conflict is well beyond the scope of any single project, as would be attempting to understand the overall collective impact that media has on society. But within a more limited scope—in this case, focusing on the immersive fantasy of video games, movies, and television—it becomes more feasible to consider the benefits and drawbacks that come from allowing fiction to deeply influence the ways we think and understand the world more tangibly and observably.

HOMETOWN: Exploring Escapism through Meta-Narrative is a multi-disciplinary, open-ended exploration of these ideas, mediated through the development of a meta-narrative video game that deliberately breaks its own immersion to increase players' awareness of the fabricated nature of the game itself. More specifically, the objective is to present players with an example of "fabricated reality" and encourage them to analyse it from multiple points of view—as a player, an outside observer, a developer—creating a context for them to make their own personal conclusions about the positive and negative effects of fantasy immersion as they experience it. By borrowing and adapting from many of the common elements used by other games to create nostalgia and immersion, and then subsequently subverting how those common elements are utilised, HOMETOWN attempts to create an introspective gaming experience that

entertains players with an interesting story, while also pulling back the curtain to reveal the inner workings and asking those players to consider the larger role of stories in their everyday lives.

**PROJECT BACKGROUND**

Imagination and storytelling are an integral part of what makes us human. The limitations of storytelling are vast and immeasurable. Pick up a book and lose yourself in its pages as it carries your imagination off into worlds far removed from your own—taking you through the twists and turns of the narrative to feel, empathise, and care. Listen to a song and the cascading rhythms conjure a powerful imaginary soundscape as vivid as your actual surroundings—while yet another part of your mind might escape into the memories you associate with the music. Go to the cinema and watch a film and, as vivid characters dance across the silver screen, the sights and sounds draw you even deeper into the magic of make believe. Immerse yourself in a video game, become part of the story with the agency to change things and meaningfully impact the trajectory of the narrative—and then realise, totally immersed, you lost track of time and have played the game for eight hours straight and now it's dark outside.

Stories have an almost magical power to draw us in and to keep us captive. The best writers are capable, often through words alone, of transporting us into their make believe realms and guiding us through their twisting labyrinth of characters, settings, and plot lines to communicate something greater than a mere chronology of events; whether real or fictitious these events are woven together with skill and craft to create a cohesive experience with an underlying theme, which communicates more intimate realities about our human condition. Whether on a screen, a video game console, or on the printed page, stories teach us about life, death, love, and what it means to be human.

*"We don't read and write poetry because it's cute. We read and write poetry because we are members of the human race. And the human race is filled with passion. And medicine, law, business, engineering, these are noble pursuits and necessary to sustain life. But poetry, beauty, romance, love, these are what we stay alive for. To quote from Whitman, "O me! O life!... of the questions of these recurring; of the endless trains of the faithless... of cities filled with the foolish; what good amid these, O me, O life?" Answer. That you are here. That life exists, and identity; that the powerful play goes on and you may contribute a verse. That the powerful play goes on and you may contribute a verse. What will your verse be?"* —Professor John Keating, Dead Poets Society (1989)

An affinity for stories comes with a wide variety of benefits. Through fiction we can temporarily leave our own thoughts to understand and experience something from another person's point of view. In addition to broadening our perspective of the world around us, fiction also empowers us to better understand ourselves and how we relate to it. Lord of the Rings author, J. R. R. Tolkien considered fantasy to be a natural human activity, one that is not opposed to science and reason, but rather that fiction can be a compelling vehicle for understanding reality more fully. He believed "the keener and clearer the reason, the better fantasy will it make." (Tolkien, 54) The most compelling fantasy does not come out of a vacuum. A story without any tether to reality or to real human experience will lack the underlying truth necessary to resonate with its audience. It will not "make me care" as Pixar writer and director, Andrew Stanton, suggests good stories must do.

The strong appeal of stories also comes with some drawbacks. Our brains react in much the same way to make believe scenarios that we encounter in stories, as they do real situations. When we are deeply immersed into watching a film, the adrenaline of a tense action sequence can offer us the same rush of emotions as we might expect from riding a roller coaster. Research suggests we identify and relate to fictional characters, historical figures, and real people in very similar ways. But when we close the book, walk out of the cinema, or finish the game, and our minds revel in the aftertaste of excitement, it can be tempting to compare the fantasy world we just left with our own reality. And if that reality isn't as compelling as the fiction, we might be tempted to prefer the latter over the former.

Yi-Fu Tuan, a Chinese-American geographer, wrote at length about Escapism. To many people, escapism might be primarily associated with fantasy and imagination, for instance, daydreaming as a way to avoid responsibilities. But more broadly, Tuan suggests that escape manifests across many aspects of human existence, not limited to the individual imagination alone. In his view, almost any aspect of human culture can be considered a form of escapism—culture itself is merely the human imagination imposing its own structure and order over the harsh reality of the natural world. Just as a person might escape into their house to be sheltered from inclement weather, one might seek escape into fiction in order to avoid difficult aspects of life that are out of their control. While Tuan initially talks about escape in terms of seeking the order and structure of culture over the harsh unknown reality of nature, he concedes that even culture itself has inconsistencies and uncertainties that people may also seek to escape

from. It seems in most cases, the general idea behind escape is seeking something predictable, familiar, and known, in avoidance of the unknown or uncertain. (Tuan, 132)

Tolkien also wrote about escape more specifically in regards to fantasy, and in response to the negative connotations of the term in the literary criticism of his time. In Tolkien's view, escape into literature (including fantasy) often serves to liberate the mind, rather than to imprison it, and he points out that escape in other contexts rarely comes with the same negative connotation. It would be considered natural for someone who finds him or herself in real captivity to seek freedom; the desire to escape from this sort of literal confinement isn't fundamentally different from the desire to escape from the figurative captivity of negative circumstances in favour of fantasy, where those circumstances fade into the background.

It would be fairly easy to adopt one of two outlooks about escape into stories and fiction—namely either the view that escapism is a valuable sort of temporary respite, or the view that it is an irresponsible waste of time. Approximately these two views have likely been debated for as long as stories have existed. Evidence can be found in classic Japanese literature dating back to the 11th century that, even then, the value of fiction was already under scrutiny, specifically in terms of its usefulness. The Tale of Genji ( '源氏物語', transliterated 'Genji monogatari') is a 54-chapter work of imaginative fiction widely considered to be the first novel, written by poet and noblewoman, Murasaki Shikibu, about the life and legacy of the titular protagonist, Hikaru Genji. In a chapter titled "Fireflies" Genji and his adopted daughter Tamakazura debate the value of fictional stories:



*"Tamakazura was the most avid reader of all. She quite lost herself in pictures and stories and would spend whole days with them. Several of her young women were well informed in literary matters. She came upon all sorts of interesting and shocking incidents (she could not be sure whether they were true or not), but she found little that resembled her own unfortunate career."*

Genji expresses distaste in these fictional tales, dismissing stories as untruthful and those who tell them as people who are "much practiced in lying." Tamakazura defends her cherished pictures and stories arguing they are truthful to her, if not in a completely literal sense, at least in meaning and what they represent to history and culture. The Tale of Genji is perhaps the oldest precedent for this project, as an exemplary work of imaginative fiction that addresses escapism, if not by name, by speculating on the intrinsic value of stories. The inclusion of this debate in such an early work of fiction, suggests that the critique and defense of the value of stories has been going on for a very long time; it is not likely to go away any time soon, nor is it the goal for this project to make any particular conclusion on the matter.

In *How To Do Things With Videogames*, Ian Bogost writes about a "proceduralist" category of games, which are games that employ a procedural rhetoric that does not argue a specific position but rather attempts to characterise themes or ideas through the experience of playing the game. (Bogost, 14) In this sense, a proceduralist game is more concerned with encouraging player introspection than arriving at a specific resolution or creating a particular effect. He goes on to describe the use of the vignette, across various mediums, in much the same way as a proceduralist game as not so much making a direct argument but rather characterising

an experience. (Bogost, 23) In a similar vein, through the design of its surface narrative and by establishing links between the surface narrative and meta-narrative, HOMETOWN offers affordances for the player to consider these themes of fantasy, immersion, and escapism without pushing any particular interpretation on them. This way players are able to draw their own conclusions about these ideas from their unique perspective as a player, and from seeing a glimpse of the developer's point of view through the meta-narrative. Breaking the fourth wall reinforces player awareness that the game exists beyond the scope of its own fiction, reminding the player that the game is a tangible and malleable part of their own world, encouraging them to analyse it within a much wider context.

## FOUNDATIONAL THEORIES

### Cultivation Theory

It is easily observed that mass media such as radio, film, and television had a critical role in shaping American values and culture throughout the twentieth century and into the next. Mass media continues to influence culture and society today, but now it must be expanded to include new paradigms of contemporary media such as video games and the Internet. George Gerbner, a professor of communication, first proposed cultivation theory in 1969 as a means of observing and understanding the influence mass media has on our perceptions of reality. Gerbner saw television as a centralised system of storytelling; in their role at the center of daily American life, television programs "bring a relatively coherent world of common images and messages into every home." Television, as the storyteller for the masses, has the power to shape and influence culture through repeated exposure to the messages it conveys. "Its massive flow of stories showing what things are, how things work, and what to do about them has become the common socializer of our times." (Gerbner, 14)

*"You see, TV is power. The power to lull, to pacify, and then when all eyes are glazed and all minds are jelly the power to take. The power to hold the world in your fist."*

—"Tempus Anyone?" Lois and Clark: The New Adventures of Superman, S03E14

The core idea behind Gerbner's cultivation theory is that over time, frequent exposure to television can "cultivate" the belief that messages seen on television accurately depict reality or can be applied to the real world. People who spend a lot of time watching television who are routinely exposed to these repeated messages may become more likely to think that the idea of

society as it is depicted on the screen is a reliable model of how society actually is in real life. Furthermore, cultivation theory suggests that as television begins to shape peoples' perceptions of reality through frequent exposure, this can also start to shape their beliefs, values, and attitudes—regardless of whether they believe what they see on television is true or not.

Mainstreaming and resonance are two subsets of Gerbner's cultivation theory, which define more specific ways in which television influences the perceptions and beliefs of particular subgroups of audiences. Gerbner uses the term "mainstream" to refer to a "commonality of outlooks" as cultivated by the influence of television. Mainstreaming happens when the outlooks of frequent television viewers of diverse backgrounds converge toward a more homogenous view of the world when, without the influence of television, those same viewers would likely have more diverse outlooks. Gerbner's research shows that this happens among frequent television viewers regardless of socio-economic background. More educated, higher income groups who were less frequent television viewers also tended to have more diverse views and outlooks, whereas similarly more educated, high-income groups who more frequently watched television tended to hold views similar to those held by other less educated, lower income groups who frequently watched television. (Gerbner, 15)

While mainstreaming might explain how television shapes and normalises the outlooks of heavy television viewers, it only addresses the influence of television in relative isolation. Resonance describes the effects of cultivation theory in relation to how it is affected by real life experience. When the messages people see on television appear to be consistent with their own reality, or even just their perception of reality, the messages are reinforced and the cultivation

effect is amplified. For instance, someone who lives in an area with a high crime rate and is exposed to real violence in their everyday life would be more susceptible to the cultivation effects of frequent exposure to violence on television. Their real experiences of violence "resonate" with the violence that they see on television.

Unlike many contemporary studies which attempt to link violent media with violent tendencies, Gerbner and his team noticed a different effect, which they called the "mean world" syndrome. Rather than directly cultivating violent tendencies, they suggest that frequent exposure to the violence-saturated world of television can instead cultivate the outlook that the world is more mean or violent than it actually is. They found that heavy television viewers are more likely to adopt the cynical view that most people "cannot be trusted" and that people "are just looking out for themselves" (Gerbner, 23) In the words of a budding singer-songwriter:

*"We're all asleep or else offended; powerless, we're told to mend it. Cynical 'cause good news makes bad press."*—Gwenivere, "Jacob's Ladder"

Cultivation theory shows that mass media is capable of shaping the values and attitudes of culture when people are routinely exposed to the same selection of relatively consistent messages about what the world is, how it works, etc. Contemporary media is no exception. The Internet may have drawn people away from watching television as much as they did in the twentieth century, weakening the influence of television as the centralised storyteller for the masses, but now the Internet offers its own similarly repetitious, widely proliferated messages that subtly shape society—from streaming services that for many people assume the role television once did, to internet "meme culture" and the ways in which viral Internet humour and the repetitious

imagery of memes and short form videos function almost as a pictographic language, which actually relies on this kind of homogenised understanding of a "mainstream" cultural vocabulary in order to communicate through images alone.

Video games and interactive media are now only slightly less mainstream than television, and they also cultivate perceptions and outlooks through the frequent repetition of the common themes or imagery, as many games adopt similar core mechanics and underlying structures. Beyond the actual content of these mediums, the format and structure of the medium itself can also play a role in shaping perceptions and assumptions of its audience. While television may no longer be the only centralised storyteller, heavy exposure to repetitive, potentially misleading messages across the collective ecosystem of contemporary media still has the capability to overwrite perception of reality in unreliable ways.

## Hyperreality

The Argentine short-story author Jorge Luis Borges wrote a one-paragraph fictional excerpt called "On Exactitude in Science" about an ancient empire. In this empire, cartography was so highly revered that they began the endeavour of mapping the entire empire. These maps were being created at enormous scales, getting larger and larger, until finally a map of the whole empire was created at a scale of one-to-one, thus covering its whole expanse and perfectly overlaying the source with the copy. As the ages and generations came to pass, the map was exposed to the elements, fraying and withering away to reveal the former empire had also weathered away underneath.

The French sociologist, philosopher, and cultural theorist, Jean Baudrillard, uses Borges' story of the map empire to illustrate the concepts of hyperreality, simulacra, and simulation. In his work, *Simulacra and Simulation*, Baudrillard explores the relationships between representation and meaning through these terms, and the effects images have on society and perception. In his view, simulacra are "copies" of an original thing which either no longer exists, or perhaps never existed. In some ways similar to Cultivation Theory, Baudrillard suggests the prevalence of these copies begins to blur the lines between what is actually real and what only appears to be real because it is ubiquitous. Hyperreality is the inability to distinguish reality from these simulacra, moreover it is the idea that in postmodern society, which is oversaturated with media, the distinction between a true or false copy has disappeared; everything is now a simulation of reality—all copies, none any more or less "real" than any other.

Baudrillard divides the process by which simulation breaks down reality into four stages of representation; in the first stage an image depicts a basic reality, it is an accurate likeness such as a portrait, in the second stage the image masks or distorts that basic reality, such as when the likeness of something real is embellished or iconified, in the third stage the image masks the absence of an original basic reality, such as when the hyperrealism of special effects in film conceal the reality that film is fiction. In the fourth and final stage the image no longer bears any relationship to reality at all, such as in video games or virtual reality where all likeness is entirely fabricated. In this order, simulation destroys reality leaving only simulacra in its wake.

Italian novelist and semiotician, Umberto Eco, elaborates on the concept of hyperreality in *Travels in Hyperreality*, an essay accounting his actual travels across America, the purpose of which, in his own words, was "in search of instances where the American imagination demands the real thing and, to attain it, must fabricate the absolute fake; where the boundaries between game and illusion are blurred..." Essentially he seeking out examples of Baudrillard's simulacra, "authentic fakes," copies that no longer had an original, and his travels included a diverse array of destinations—from museums of Art and holography, to wax museums and other tourist attractions, to the what Baudrillard considered to be a perfect model of all the entangled orders of simulation: Disneyland.



## The Phenomenology of Perception

The school of Phenomenology was founded in the early 20th century by German philosopher, Edmund Husserl, and studies the structures of human consciousness and experience from an individual first person point of view. In contrast to a Cartesian understanding which focuses on objects and their intrinsic qualities and spatiality, phenomenology takes a different approach to understanding the relationship between the mind, the body, and objects in the world in terms of intentionality, experience, perception, and consciousness, arguing that an understanding of the mind and the object are not separate from each other, but linked.

In *The Phenomenology of Perception*, Maurice Merleau-Ponty, a foremost French philosopher of the twentieth century, explores perception in terms of consciousness and embodied experience, through the relationship between perception and the object perceived. A purely common sense definition of perception is inadequate; basing our understanding of perception on senses alone commits the error of making "perception out of things perceived. And since perceived things themselves are obviously accessible only through perception, we end by understanding neither." (Merleau-Ponty, 5)

Merleau-Ponty argues that perception is not simply an empirical observation of our surroundings as reported to the brain by our senses, but rather a conscious experience of this sensory information which we take in as a physical body that inhabits space. For Merleau-Ponty, perception is at the core of all experience, which guides attention, reflection, and consciousness into embodied action—embodiment of these faculties is necessary because the body is the medium through which we perceive the world. He argues that neither empiricism or rationalism

adequately describe this relationship between experience, perception, and consciousness. Rationalism views reason and logic as the foundation of certain knowledge, but does not account for the manner in which perception determines that reason or logic, while empiricism would argue that knowledge is derived from experience, as observation via the senses, but does not account for how intentionality and consciousness determine perception. So cogito, the essence of Decarte's statement "I think, therefore I am" is not complete in of itself; it must also account for thought as it occurs within an embodied frame of reference.

Merleau-Ponty suggests perception relies on a system of meanings, an interconnected web of associations between thought and perceived object. These include everything from spatial orientation, such as intuitively knowing the layout of a familiar place, which rooms and objects are near other rooms and objects, just as much as meaning in conversation inherits additional depth from prior meaning, such as when conversations with a long-term acquaintance include inside references that convey additional meaning than would otherwise not be understood by a general audience. The complicated relationship Merleau-Ponty defines between experience, perception, consciousness, and action illuminates the difficulty of arriving at a single definitive conclusion about escapism and media. How immersive media is perceived affects its power to subsequently shape perception, and this is dependent on many factors; not merely the context of perception—the physical space in which the media is viewed—but also the association of meanings which influence the interpretation of the media.

No discussion of the phenomenology of perception would be complete without exploring the philosophical concept of qualia as it relates to Merleau-Ponty's definition of perception.

Qualia refers to the specific, subjective experiences of a particular individual that would be difficult if not impossible to describe through purely objective terms. An example of this can be seen in trying to describe the particular "redness" of a patch of red, say, on a tablecloth or a flag. In objective terms we might be able to describe in optical terms the precise wavelengths of light that make the patch appear red, and we can use the term "red" to describe any number of objects which fall roughly within that frequency range. The more difficult task is to describe our own individual subjective experiences of the colour—how one person's experience of red may differ from that of another individual. Merleau-Ponty suggests that qualia are intrinsically tied to our embodied state of consciousness; this relates to his idea of perception as an interconnected system of meanings, but rooted within a physical body with a particular orientation to the rest of the world. The full gamut of qualia as units individual subjective experience is inseparable from both body and mind.

This sense of perception, understood as embodied consciousness, is at the core of how HOMETOWN approaches immersion from a different angle than most other games. Typically video games seek to create purely immaterial, purely cognitive immersion where you are entirely focused on the imaginary perceptual elements of the fictional world it creates through code and pixels. With the exception of virtual reality games, which do account for the spatiality of the player's body in a virtual space, traditional video games typically occupy the player's imagination and draw attention away from the real physical space the player is inhabiting. Instead of this HOMETOWN seeks to position the player in a meta-cognitive context where this typical kind of immersion is disrupted; the initial immersion of the surface narrative draws the player in initially, but then the meta-narrative offers affordances for the player to remember the wider context of the

gaming experience, being pulled out of the fantasy lets them become meta-cognitive of their embodied role in the playing the game.

**DESIGN PROCESS AND PROJECT OVERVIEW**

The subgenre of meta-narrative games is useful for exploring the theme of escapism in immersive media because meta-games are particularly useful for their ability to break down their own medium, acting as both exemplar and explanation all in one, to get the player to be more aware of the immersive aspects of the game. Player expectations based around conventions of genre can be subverted to draw particular attention to those conventions, asking the player to think more deeply about them. This subversion can be done to a marginal degree within the surface-level narrative through the more classic form of meta as self-reference, but primarily it will be accomplished by splitting the game into a surface-level narrative and a parallel meta-narrative in the source code that provides context, commentary, and critique of the retro-game facade as it initially appears. Deliberately breaking the immersion in this way is useful only insofar as it enables the player to become more aware of how the fiction operates and draws them in, and of themselves and their role in the fiction, without going so far as to disrupt their suspension of disbelief entirely. Therefore, a balance needs to be kept between self-referential hyper-awareness and compelling storycraft.

**Target Audience**

Defining the target audience is an important early step in a game development project. While it may not always precede concept development, knowing what kind of player a game is intended for can better inform decisions about gameplay, visual aesthetic, and genre conventions. By establishing these parameters, the choice of what to include and what to leave out is made easier and the resulting game becomes more cohesive. The primary audience for HOMETOWN

consists of gamers who grew up with the video game consoles and popular video game culture from the 1980s through the early 2000s. By leveraging nostalgia players may have for these older games, HOMETOWN attempts to establish authentic familiarity by emulating the look and feel of a retro game through its interactions, visual aesthetic, and sound design.

Another strategy for creating a game that will appeal to a primary target audience of other gamers is including subtle references and paying homage to other media that would be familiar to those players. This serves the two-fold purpose of building onto the player's pre-existing expectations of the particular type of fantasy to set up the sort of world HOMETOWN takes place in as well as leveraging player nostalgia to make the gameplay feel familiar. It sets a baseline for expectations by implicitly telling the player what the game will be like in terms of similarity to other immersive works of fiction. This is kin to what many filmmakers do when they deliberately include references to other films as a subtle nod to their precedents and to any movie connoisseurs in their audience.

Furthermore, for this reason HOMETOWN was developed with the constraint of using a low resolution pixel art visual aesthetic in order to emulate the look and feel of arcade games and early consoles from the 80s and 90s. This simulates the constraints of computer hardware at the time, which limited the capabilities for video game graphics and resulted in the classic 8-bit style. While modern games are typically built using a game engine such as Unreal Engine or Unity, HOMETOWN does not utilise any such development environment and was developed from scratch using HTML5 and JavaScript to achieve. For other titles development via game engines provides pre-existing frameworks for abstracting the many facets of game design into easier to

manage conceptual blocks, allowing many different game developers to work on various parts of the game with a unified language for working with a lot of moving parts. Engines such as these provide built-in solutions for tricky design challenges such as complex physics, lighting, animation, or effects. While HOMETOWN could be developed using one of these latest and greatest game engines, this would add much unnecessary complexity for the kind of retro-game HOMETOWN aims to be. Games created using a game engine often come with much additional overhead, especially when published to the web, because the game engine packages numerous other code libraries, utilities, and extras that may not be relevant for running a minimalistic game. Furthermore, accessing the source code of HOMETOWN is an important part of the story, and all the extra code would distract the player from finding the important pieces of narrative. Alternatively, developing HOMETOWN from the ground up as a solitary developer in charge of all aspects of the game ensures more deliberate control over the gameplay and the source code, a precedent going back to the early days of game design when, for example, a game developer at Atari would be responsible for designing every aspect of a game—writing the story, creating the assets, and writing the code.

### **Visual Aesthetic**

From the pixel resolution to the choice of colour and layout, the visual design of HOMETOWN is deliberately rooted in references and allusions to a number of tropes, common elements, and familiar scenes in other video games, cartoons, and movies in order to establish a baseline of familiarity in the surface level narrative. Establishing this familiarity early on within the surface narrative gives the player something they know and can latch onto before confronting

them with the glitches or the more complicated source code meta-narrative. Using the language of pop culture and "mainstream" media in this way is particularly relevant to this project, when considered as an avenue for open-ended commentary on the recurring themes present in these genres. This creates an authentic backdrop consistent with these other stories, which alone might cultivate some of the same attitudes and outlooks, but through the addition of the meta-narrative the cultivation effect is limited, and conclusions can be drawn about immersion and escapism. One such clear example of these direct references to other stories can be seen from the very first scene when the kid first steps off the bus. The bus stop is designed to be reminiscent of the stop from Studio Ghibli's film, *My Neighbor Totoro*, in which the protagonists find themselves at a somewhat similar bus stop, albeit in the rain.

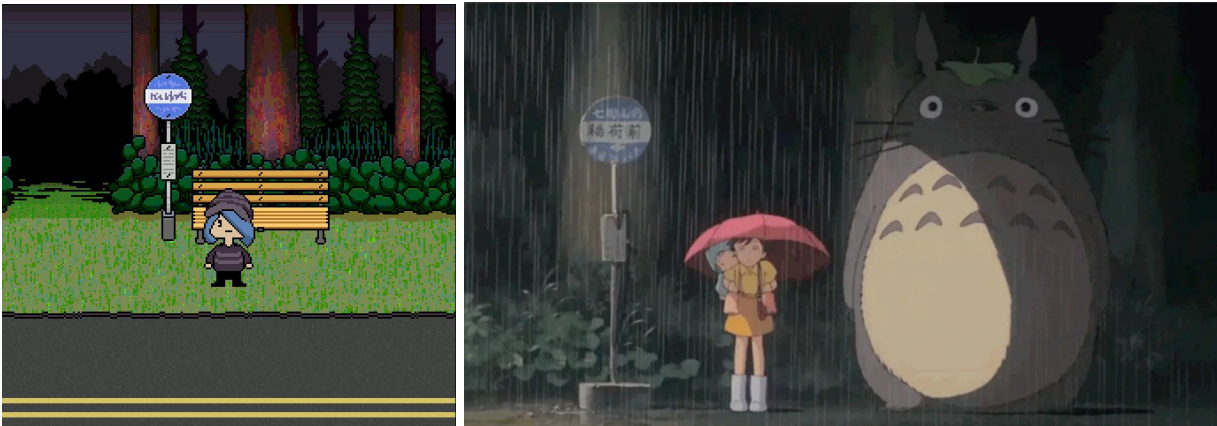


Fig 1. (left) bus stop scene from HOMETOWN; Fig. 2 (right) bus stop scene from *My Neighbor Totoro* (1988)

Instead of a straight copy, it was important to capture only the essence of the Ghibli scene—just enough for players to make the connection—while establishing a clearly different visual identity for HOMETOWN; therefore, more vivid colours were selected, and a wooden bench was added in lieu of a furry creature to preserve a similar visual and compositional



balance. This scene is intended to function as a bit of an establishing shot, as is typically used in film, to set the atmosphere and tone of the game from the first playable moment, while also calling to mind a similar feeling of comfortable mystery that players might associate with Totoro.

Another example of derivative visual aesthetic, used deliberately to invoke the tone and associations of other media, is the design of the town mayor sprite. The town is supposed to be a whimsical place, and as such the mayor should be equally whimsical and strange. Characters are typically much more iconic than locations, so for the mayor it was important to reference a number of different influences to arrive at an original result with familiar resonance:

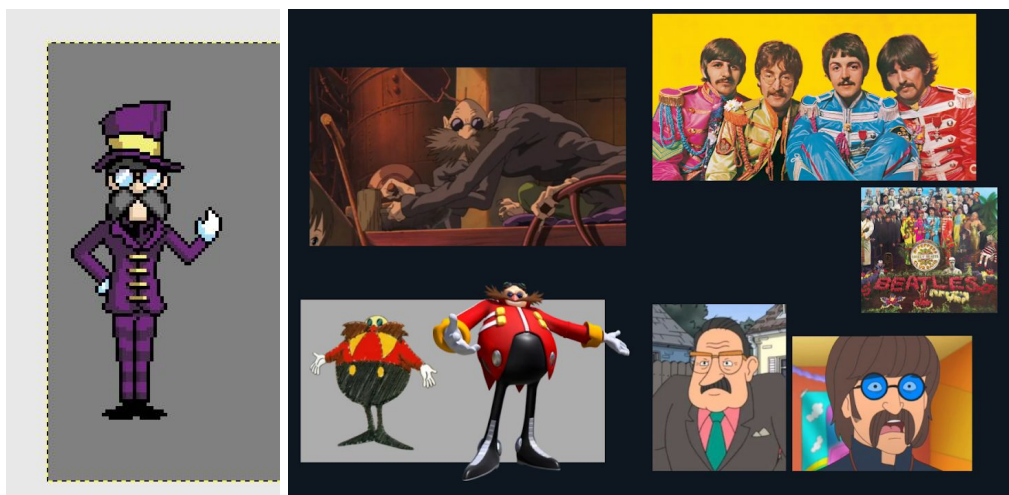


Fig. 4 The Town Mayor (left) a mixture of characters from Studio Ghibli, The Beatles, Disney, and SEGA

## Technical Constraints

HTML5 and JavaScript were chosen for developing the game for two reasons. Firstly, websites are easily shareable and will run straight out of the box on a wide variety of devices and operating systems without having to compile different versions manually. Web technologies for immersive media have been gradually improving in the last two decades, and now with the death

of Adobe Flash on the horizon (at the end of 2020), HTML5 Canvas is in a good position to take up the mantle as the web's primary method of delivering quality immersive interactions. JavaScript is the native scripting language of the Web, which is supported in all major browsers and provides robust client-side functionality. The second and more important reason JavaScript was chosen for developing HOMETOWN is that it is an interpreted scripting language, meaning that it is not compiled to machine code (unreadable to the end user) but rather it is transferred and executed in real-time from plain text source code. There are methods for dynamic loading, obfuscating, and minimising which can prevent easy access to the code, but the bottom line is that all JavaScript code is accessible by the client browser, and often in human readable form. This second aspect of HTML and JavaScript makes a web-based game the ideal candidate for a meta-game where accessing the real source code is the novel aspect of the game.

After establishing what language HOMETOWN would be developed in, it was important to establish specific constraints for how the game would run in the browser. The three primary components of a typical game are visual output (graphics), audio output (sound), and player input (controls) all of which come together to make up the player experience. Each of these needed to be addressed in terms of how they would be handled by the web browser. How the graphics would be displayed was the first consideration. Since the goal is to emulate an older console, the first constraint was a smaller canvas size than many modern games which run at resolutions at or above 1080p. Instead, the resolution of 256 x 240 pixels was chosen as a nod to the Nintendo Entertainment System (NES) which also had this pixel resolution. Limiting the colour palette was also considered, as the NES could only display a small range of colours at a given time, but due to the additional steps necessary for limiting the colour range and the impact this would have on

visual fidelity, the constraint ends with just the pixel resolution. The resulting aspect ratio was also a deliberate constraint in order to ensure similar experience across many different devices, which may have a variety of screen resolutions and orientations. By giving the game a fixed aspect ratio, HOMETOWN eliminates most of the challenges associated with responsive web design; this comes at the trade-off of not utilising all of the available space, but further emulates retro games in doing so.

The HTML5 Canvas element works similar to regular images on a website. It can be positioned and scaled anywhere on the page, with viewport scale relative to its actual pixel resolution. The difference from other images is that an HTML5 Canvas starts off entirely blank (transparent) and then graphics can be drawn to the canvas using JavaScript code. The Canvas API provides a robust variety of ways to render graphics to a Canvas element; it can draw lines and shapes, render other images, videos, or Canvas elements using a similar variety of blend modes as are available in Adobe Photoshop, and can even manipulate the resulting graphic on a per-pixel basis. The capabilities of HTML5 Canvas far exceed what is necessary for HOMETOWN, which primarily relies on sprite-based animation, loading images from external files and then rendering them as needed onto the canvas. This makes it simple enough for easy iteration while being versatile enough to handle more complex effects like reflections, animation cycles, etc. on a custom basis.

The next component to consider is audio output, for which there is another emerging Web technology: the Web Audio API. It allows external sound files to be buffered in browser memory, ready to play whenever cued by a JavaScript command. In addition to real-time

playback of sound effects triggered by player interactions, the Web Audio API also allows for scheduling audio events to occur at very precise intervals (it is perhaps the most precisely time JavaScript API available in web browsers); this can be utilised for scheduling pseudo-random background ambience and music. The real benefit of using the Web Audio API is that it allows for granular control over the entire audio pipeline, using nodes to route and adjust every aspect of the audio output of the game. HOMETOWN utilises this system to manage more nuanced control over different sound elements of the game, allowing them to be individually muted or re-mixed.

Well crafted player controls are important for creating immersion. These must be as intuitive as possible so the player can pick them up with minimal, concise instruction. To limit complexity, HOMETOWN listens for three core inputs from the player: directional input on an up/down and left/right axis, and two contextual input buttons which loosely mean "interact" and "cancel" based on what character or object the player is close to when the button is pressed. This abstracts the controls into very clear conceptual units that remain consistent throughout the surface-level game. On desktop and similar devices (i.e. devices that have a keyboard) these inputs are dual-mapped to the arrow keys of the keyboard, and to the Z and X key (an alternate mapping would use "WASD" for directional input, "Enter" to interact, and "Right Shift" to cancel) Mobile devices which do not have a keyboard, would instead need to rely on an alternative input scheme that leverages the touch screen capabilities of the device. Additional UI elements would need to be added to the HTML so that the player can tap digital "interact" and "cancel" buttons and control a digital joystick or directional pad in lieu of keyboard input. Yet another control method can be implemented for players who have a video game controller

connected to their client device, by implementing gamepad controls using the browser native GamePad API when available.

### **Source Code Meta-Narrative**

Tabletop roleplaying games such as Dungeons & Dragons have steadily increased in popularity over the past decade and although digital variants exist, many games within the genre are still played in person around a physical table, with pencil and paper, dice and rulebooks. The battlemat and miniatures are set out to model the fictional world of the game, representing spatial relationships between various entities and the environment for the purpose of tactical, turn based combat simulation. A common issue that arises with this setup is commonly referred to as meta-gaming; essentially because the players are fully aware of the mechanics and behind the scenes workings of the game, they have "meta-knowledge" of things that the characters they are supposed to roleplay would not have. Some measures can be taken to limit the amount of meta-knowledge players receive, but at least some meta-knowledge is unavoidable. Unlike video games, players ideally focus their attention on the story being told and ignore these meta-aspects during play; this could be described as intentional movement from meta-awareness of game mechanics towards immersion into the fiction.

HOMETOWN seeks to achieve the opposite effect with its meta-narrative by breaking the immersion of the fictional surface narrative and exposing the inner workings and underlying game mechanics that power that immersion. It is intended to function as the inverse of the typical tabletop roleplaying experience described above—starting with immersion and moving towards meta-experience, introspection, and heightened awareness of embodied perception.

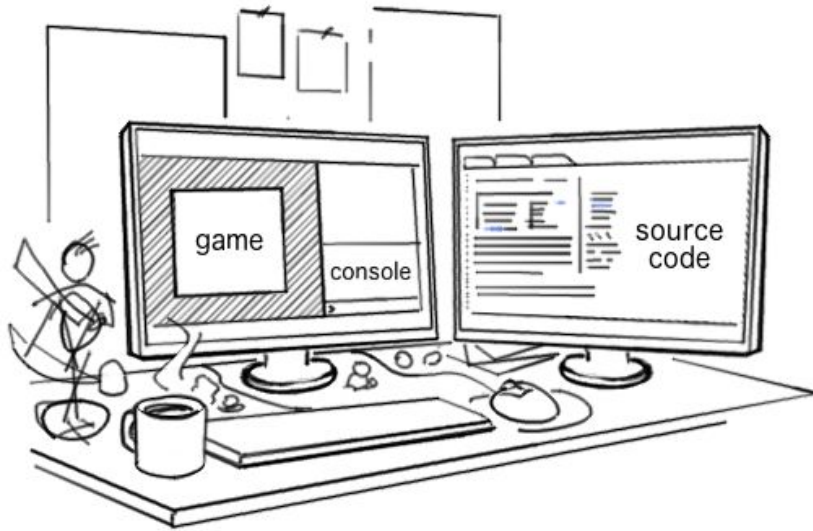


Fig 3. Rough sketch of an ideal context for playing HOMETOWN

The meta-narrative of HOMETOWN is designed to function as a parallel narrative to the surface-level game. As the player explores the town on the surface and comes to understand things about the characters and the state of the world, they also begin to see the bugs in the software, i.e. the glitches and inconsistencies that communicate all is not as it should be. This leads them to explore the parallel meta-narrative in the source code, which functions in a variety of ways. Primarily it functions as a standalone hypertext adventure, loosely matching some aspects of the surface-level game. Instead of navigating between locations and interacting with other characters, the source code abstracts locations into more conceptual pages connected by hyperlinks. Some of these pages behave more like rooms, while others provide more textual narrative about the town, the characters, or the fictional game developers.

To a non-programmer viewing the source code of a website or utilising browser native developer tools may easily feel like navigating strange and unfamiliar new territory. It might be

exciting for a subset of the target audience, but for others ordinary source code may be intimidating enough to discourage exploration and discovery of the meta-narrative. In order for players to understand the underlying narrative of HOMETOWN, it is critical that they are able to easily navigate both the surface level narrative and the meta-narrative hidden in the source code. Under ideal circumstances, the player should be allowed to uncover the meta-narrative on their own, but players may need some assistance finding and navigating the source code space; therefore, it is important to design the source code with non-programmers in mind, offering clear instructions for how to navigate the code and how to implement the useable bits of code or narrative that players may find there. Like telling a good story, the challenge is striking the right balance between giving the player clear guidelines and assistance, while also keeping some things unknown and letting them enjoy the scavenger hunt.

One of the ways in which HOMETOWN encourages navigation between surface-level game and the source code is by implementing simulated glitches, which alert the player that there is more going on underneath the surface, hidden somewhere in the source code. Although these glitches are entirely fake, they are made to appear authentic and they orient the player towards viewing the source code by implication, based on the notion that a "glitch" means something is wrong with the game and presumably this error is somewhere in the code. These glitches are also accompanied by cryptic messages which call out for help, and within these messages the game offers even clearer instructions for how to access the source code, as well as hints about where to look for things once the player is there. By associating the cryptic messages with the same ultimate goal as the player character (wanting to go home) this creates a sympathetic link.

## PROJECT EVALUATION AND FUTURE WORK

Looking back at just how far this project has come from where it began, I can't help but consider its early origins. The first instances of technical experimentations that paved the way date back to my time as an undergraduate student, teaching myself web coding in between the classes I was taking for my design studies major; interested in HTML5 Canvas, I started to develop an experimental 8-bit sandbox game in an attempt to re-create a particular visual effect from UNDERTALE that for whatever reason was unsupported on my MacBook Pro at the time. After the success of this initial challenge, I continued implementing more interactions and gradually I arrived at a fun little pixel art tech demo. It lacked any sort of narrative at the time, but I could see the potential for expanding the concept into a bigger project.

From a very young age, I have been fascinated by stories and a core part of my being has always felt compelled to craft narrative experiences that bring the same sort of wonder and excitement to others as stories have offered me throughout my life. This passion for storytelling was the primary influence behind my decision to pursue a career in Art and Design; now as I reach the end of seven irreplaceable years at NC State, I believe I have finally learned what might be the most pivotal lesson I needed to learn about the major difference between *enjoying* stories and actually *making* them.

Passion goes a long way in storytelling. It makes the work more fun, and you can usually see a marked difference in the final result. If there is no passion behind creativity, the endeavour becomes grueling and the result will be flat and emotionless. But no amount of passion for storytelling can make up for not actually putting in the time and effort. There is no magical secret



to easily make a narrative work right out of the box, you have to put in the due diligence. It takes a lot of time, energy, and determination to sit with an idea long enough to see it through to its full potential, and there isn't a formula or function that can streamline this critical human factor. On this as well as other projects, I have wasted so much time looking for this elusive magic formula, instead of realising that the focus of any creative endeavour should be less concerned about the experience of making itself, and instead more focused on the experience that is being crafted for its audience. Whether or not my work, my studio classes, my aesthetically cluttered workspace, going for introspective walks around campus, or reading a ton of obscure books makes me "feel like an artist" amounts to nothing—what actually matters is the final result: does my work create a compelling and engaging experience *for the audience?*

I believe that HOMETOWN has the potential to become a thought-provoking and fresh approach towards exploring important questions about the ubiquitous and immersive fabricated realities that we move in and out of each day, using those very same realms of imagination and immersion to do so.

**BIBLIOGRAPHY**

- Abrams, J. J. and Doug Dorst. *S*. New York : Mulholland Books/Little, Brown, 2013. Print.
- Baudrillard, Jean. *Simulacra and Simulation*. Ann Arbor : University of Michigan Press, 1994. Print.
- Bogost, Ian. *How to Do Things with Videogames*. Minneapolis : University of Minnesota Press, 2013. Print.
- Danielewski, Mark Z. *House of Leaves*. New York : Pantheon Books, 2000. Print.
- Eco, Umberto. *Travels in Hyperreality: essays*. San Diego : Harcourt Brace Jovanovich, 1986.
- Gottschall, Jonathan. *The Storytelling Animal: How Stories Make Us Human*. Boston : Houghton Mifflin Harcourt, 2012. Print.
- McGonigal, Jane. *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*. London : Jonathan Cape, 2011. Print.
- McKee, Robert. *Story: Substance, Structure, Style and the Principles of Screenwriting*. New York : Harper Collins, 1997. Print.
- Merleau-Ponty, Maurice. *Phenomenology Of Perception*. London : New York : Routledge & K. Paul; Humanities Press, 1974. Print.
- Shirane, Haruo (ed.), *Traditional Japanese Literature: An Anthology, Beginnings to 1600*. New York : Columbia University Press, 2007. Print.
- Tolkien, J. R. R. "On Fairy Stories" from *Tree And Leaf*. Boston : Houghton Mifflin, 1965. Print.
- Tuan, Yi-Fu. *Escapism*. Baltimore, Md. : Johns Hopkins University Press, 1998. Print.