

Play to preserve a city: Ludofforming and embedded identities in video game versions of Hong Kong

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ABSTRACT

With the spatial turn in cultural studies of the 80s and 90s, the idea of (historical) narratives embedded in spaces gained traction. This spatial turn has also come to the fore in video games since they both build previously inexistent spaces and transform real-life spaces. However, the embodied implications or possibilities in the form of cultural affordances in these video game environments have not been addressed. In this paper, we engage in a close reading guided by three critical stances based on the portrayal of cultural, historical, and spatial identities in three games (*Sleeping Dogs*, *A Summer's End*, and *Oblige*) set in Hong Kong. The analysis results explain how different contents that reflect various aspects of a city's identity cooperate in affording certain actions or reactions in the player. This is the first step towards constructing a framework to analyze and design urban experiences through video games effectively.

Keywords

Hong Kong, embodied cognition, cultural affordances, historical affordances, ludofforming

INTRODUCTION

For several decades, we have witnessed an increasing interest in geographical issues or, on a philosophical level, in spatiality. As Warf and Arias (2009) put it: "Social theory repositioned the understanding of space from given to produced, calling attention to its role in the construction and transformation of social life and its deeply power-laden nature." As such, "history narratives" embedded and arising from urban environments have become a key manifestation of place identity. Our mission in this paper is to analyze

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how video game cities afford reflection on the historical, cultural, and spatial dimensions of the identity of these places.

Video game cities (places): Do they perpetuate ideas about cities? By this, we mean, do they crystallize and keep concepts of the city in ideal or conceptual (de Certeau 1988) forms for posterity? In his fascinating book on video games (digital games) as history, Adam Chapman (2016) wrote: "Like the city, the space of the game becomes not only thematically historical but also a spatial, historical narrative, a landscape that documents the forces at play and the changes that have been made to it over time." Following this idea, we contend that video game cities afford societal-historical reflection/consciousness, and thus, they are important assets and resources for both historiography and urban design.

Furthermore, video game worlds (spaces) can have an actual influence on our real-life environment; as Nitsche (2019) puts it: "fictional videogames spaces can transform 'outwards' and redefine our living rooms and ultimately our understanding of physical space as such." The implications of a possible historiography written from within the virtual towards the real (in any possible way, even as augmented, virtual reality, or mixed reality projects) are ever more enticing. Suppose it is that, as Aarseth says, "[t]he actual world is not a good playground, so when it is used unchanged (...) it is the least successful in the game" (2019). In that case, it follows, then, that by modifying spaces (particularly those with an actual life referent), video game worlds would appear to be more successful in affording a particular cultural-historical consciousness.

Some of the particularities of the gameplay experience that throw light upon the ways historical discourse or connotation in video game spaces materialize and afford a response from the player are the "player's *indirect* influence on the game world" and how "game spaces submit to the player's 'physical narration.'" (Domsch 2019). By pursuing this analysis, we manifest our agreement with Solymosi (2013) when he declares: "Any human artifact or by-product of human activity that becomes a means of affording humans new opportunities for action is a cultural affordance."

To identify those "artifacts" and "by-products" within video game worlds, we are engaging in a contrastive study focusing on the way certain features in the design of the different video game portrayals of Hong Kong (of specific places, in fact) are presented in a select number of games, focusing on the historical and cultural implications embedded in gameplay and game spaces. First, we engage in a close reading of three games set in Hong Kong, adopting specific critical stances that focus our task on the cultural, historical, and spatial content transmitted by those games. From these stances, we turn to embodied cognition theories (Gibson 2014; Shapiro 2019) to discuss the affordances (cultural and historical; Solomosi 2013) identified for these game spaces to show the way they contribute to the presentation of the cultural, historical, and spatial dimensions of the identity of Hong Kong (one specific city).

METHODOLOGY

We'll be approaching the games through a "truncated" close reading (or "well playing"), in the sense that the games might or might not be played to completion. There are several reasons for this, the most salient one being their length, but more importantly, we consider that since we are focusing on a whole pervading layer of the games (the city, the

concrete spatial dimension), as long as we experience the environment and what it affords, we can reach satisfactory saturation point. Bizzocchi and Tanenbaum (2011) point out that a close reading “is a process-driven practice rather than a product-driven one.” As such, it naturally conforms to the nature of embodied cognition, as affordances arise from perception, from the process of perceiving and being (embodied).

Embodied cognition came about as a complement and challenge of classical (or computational) cognitive theories, and thanks to its heterogeneous nature, it can serve as scaffolding for various scholarly projects. Some introductory books, such as Shapiro’s (2020), discuss the inception of the field, stemming from Gibson’s “ecological theory of perception” (2014) and Hatfield’s (1988) more “noncognitive computationalism. This introductory work systematically questions the emergent ideas of embodied cognition, placing them in relationship with past assumptions. Other relevant works, such as the linguistic-minded works of Lakoff and Johnson (1980; 199), trace the challenge to standard cognitive science even further back to Merleau-Ponty’s “phenomenology of perception” (1962) and John Dewey’s and the pragmatists’ distancing from the classic Cartesian body-mind dualism (Crippen, 2017).

A key concept that can be used to describe our engagement with space is that of “affordances,” that is, what the environment offers a sentient being for “ill or good,” a “complementarity of the animal and the environment” (Gibson 2014). This concept was a particular interpretation of the cognitive involvement of a body with its space and, as such, served as a foundation for “embodied cognition.” (however, it is not a concept bound to it) Affordances have made the jump to different disciplines and fields, game studies included. In this field, affordances in computer games are helpful but complicated tools to implement, given the double layering of real/virtual situatedness (Rambusch 2010). In 2013, Tibor Solymosi published “Against Representation: A Brief Introduction to Cultural Affordances.” He explores the intrinsic cultural affordances of any product or activity involving human beings; furthermore, Sun and Suthers (2023) have taken the discussion of cultural affordances to the realm of technology, which aligns with our research direction. Finally, history and historiography can also contribute to the development of embodied cognition; Pedersen and Bang (2016) discuss how historical and cultural activity can work with affordance theory to dig deeper into studying human activity.

Playing/reading Hong Kong

There has been extensive research on Hong Kong and its presence in different media. From literature (Barroso 2015) and painting (Man 1996) to cinema (Yuen 2000) and, yes, video games (Davies 2018; 2019). In his groundbreaking analysis of the city's cultural landscape, Ackbar Abbas (1996) points out how, as a spatial reality, Hong Kong presents important challenges: “Space is homogenized in the colonial gaze as ‘old’ and ‘new’ are placed together in contiguity and continuity.” Luk (2002) further explores how Hong Kong is “created rather than revealed” and how the city is presented as a metaphor and not a concrete inhabited/lived space.

Finally, Chu Yiu-Wai's "Introduction" to *Global Media and China's* issue about Hong Kong as a former colony shows us the richness and complexity of the city as an object of study and reflection, even when seen as a boundary. This introduction (and the rest of the essays

in this issue) raises important issues about Hong Kong, which are present in many aspects of society, from education to its cultural industry (mainly film).

However, as rich as the discussions around Hong Kong and its media presence might be, more literature is needed about its relationship or presence in video games. One interesting paper by Ge Zhang (2014) explores the spatial experience of the player in *Sleeping Dogs* (Square Enix 2012): taking Lefebvre's spatial tripartite analysis of the "production of space" to gauge (local) players' engagement with the portrayal of their own city

Between 2018 and 2019, Hugh Davies wrote a series of texts on Hong Kong in video games. He presented a brief discussion on "Re: presenting Hong Kong in videogame spaces" at the Chinese DiGra 2018; he also published three articles on the M+ Magazine website further explaining Hong Kong and its popularity as a video game setting (2018), the many versions of the city (Davies and Lau 2019), even its enduring image as the prototypical cyberpunk city (2019).

Well playing/close reading

The close reading consists of a constant oscillation between a genuine play experience "from the point of view of a naïve interactor" (Bizzocchi and Tanenbaum 2011) and a critical-analytical distancing. For this to happen, we decided to play each game for a certain amount of time to obvious points of rest (chapter closure, mission resolution, explicit temporal divisions, etc.), and afterward take relevant notes and make appropriate commentaries of the experience, thus achieving the swinging motion of the pendulum.

For the analysis, we set out some working critical stances ("analytical lenses" for Bizzocchi and Tanenbaum) to make better sense of our notes and observations:

- "Affectiveness" (cultural identity) as a critical stance took shape after approaching the works of geographer Yi-Fu Tuan (1988), whose humanistic reading of the relationship between people and their environment and how our experiences shape our understanding of the world. Tuan's understanding of the relationship between user and space is like Pierre Nora's concept of the *lieu de mémoire*, that is, "any significant entity, whether material or non-material in nature, which by dint of human will or the work of time has become a symbolic element of the memorial heritage of any community" (2005)
- The "Historiography" (historical identity) stance arose from the reading of Dolores Hayden's *The Power of Place* (1997) and Susana Alves' study on the affordances of historic places (2014). The first one emphasizes the role of public spaces as the locus for shared memories, that is, for identity creation; the second one does the same but puts a greater focus on the active role of the members of a given community in forming identities by performing in those spaces.
- As for the "Ludoforming" (spatial identity) stance, it was inspired by Espen Aarseth's brilliant introduction to the design of referential spaces in video games (2019). Aarseth describes the different strategies that come into play when transforming an existing space for its inclusion in a game/play situation. In the same collection of essays where Aarseth talked about ludoforming, Domsch (2019) addresses the "embedded narratives" in video game spaces.

Game selection

To make an informed selection of games to analyze, we turned to the exhaustive work done by Eddie Lau on the “Hong Kong in videogames” blog. On his website, Lau presents an ever-expanding list of video games with any relationship with Hong Kong. To get a greater range of representations, we chose games from different genres and from developers with different profiles (size, renown, trajectory, and such). We have relied mainly on metadata to make an informed and conscious sample (Tyack et al. 2018); we have also considered the coverage of these games in mainstream media or news outlets, which would account for their presence within the cultural stream of media consumption. We chose the following three games (also found in Lau’s list):

- *Sleeping Dogs* (sandbox, action game), available on Steam
- *A Summer’s End - Hong Kong 1986* (visual novel), available on Steam
- *Oblige* (“narrative-heavy sidescroller/typing game”), available on itch.io

A few details on the selection criteria will be useful to understand the following analysis. For this initial exploration, we have paid special attention to the “time modeled” in the games to identify any overlapping cultural features and those specific to the different epochs portrayed; in other words, we have considered the historiographic possibilities of the games; we also focus on games released in the last decade (2013-2023) and readily available. However, other factors helped confirm and further justify the sample as the investigation was underway.

In the case of *Sleeping Dogs*, a compelling account of how the game was received by local players (Zhang, 2014) echoed and complemented our previous exploration of the coverage of the game in mainstream media. For *A Summer’s End: Hong Kong 1986* and *Oblige*, we followed Tyack, Wyeth, and Klarkoswki’s (2018) suggestions by complementing our previous criteria with the MDA (Mechanics, Dynamics, and Aesthetics) framework, which was first conceptualized by Hunicke, LeBlanc, and Zubek (2004) as a tool for both the study and the design of games. From the player experiences desired (lived space, non-violent engagement), we pursued aesthetics (A) inspired by our engagement with the city and its portrayals: narrow streets with swarthy tattered buildings, peppered with the occasional neon sign and the interplay of Chinese and English, accented by different cultural referents, mainly food-based. The dynamics (D) we found related to those aesthetics were exploration/navigation (but our previous game had covered that already), daily life routines, engagement with local people, and discussing concerns of the city’s inhabitants. Finally, some game mechanics (M) that embodied those possible dynamics were non-violent exploration, talking to non-playable characters (NPC), making choices related to the daily grind, visiting places locals would frequent, or cultural landmarks.

“*Sleeping Dogs’* Hong Kong is the ultimate playground.” (Steam) The game has been lauded as a faithful representation of the city; one could say that it is an exemplary translation of a real game city into the video game realm, as the developers tried “making a fun, accessible game and recreating Hong Kong faithfully.” (Horti, 2019) With such an ambitious project and the attention it garnered, this game demanded our attention.

The description of *A Summer’s End: Hong Kong 1986* found on the game’s official website should help us explain our decision to include it in our research:

A Summer's End - Hong Kong 1986 is a visual novel game set to release on Steam for PC. Follow the story of Michelle and Sam, and how their chance meeting evolves into a deeper romantic relationship. Set in vibrant Hong Kong in the year 1986, it is an original story about love, family, and culture.

We can see that the identity of the citizenry (even of the city itself) is at the forefront of this game. We were curious to see how the developers tried to relive and reflect the historical and cultural ethos of Hong Kong.

Finally, *Oblige* is a small game available in one of the most active communities for independent media creations. It allows us to go back in time to the 70s. As a smaller production, it allows for a certain degree of attention and care for details (in this case family interaction). And, as the developer says, it is “[d]irectly inspired by the stories of mothers and grandmothers living and working as housewives.” It lets us experience the domestic domain of the city in a more personal way. This game resonated enough with local identity that it caught the attention of the South China Morning Post (Shamdasani, 2017), one of the news outlets with greater circulation in the city.

ANALYSIS

Soon after its release, Zhang Ge (2014) explored *Sleeping Dogs's* local (Hong Kong) reception. In his analysis, he identified the differences between local and non-local focus in the game. For instance, (ostensibly) a local player would notice in "the entire cityscape a hybrid territory rather than a realistic re-construction." As he explains, the Hongkongese players would try to gauge the degree of referentiality of the game vis-à-vis their personal experience.

However, in this project, we didn't focus on the (intended) public of the game, considering those cultural and historically charged elements exist in the game space beyond/despite the player; our mission was to identify and describe them. For future projects, the profiles of both the designer and the player of a game are important. When we want to explore the impact of referentiality on the experience of a player, it is useful to consider their position: "The virtual does not accurately mirror the real but it is simplified and stylized caricature: everything fits into the algorithmic structure" (Zhang 2014)

In turn, the success of *A Summer's End* worldwide seems to be universally based on its romantic content (portraying a lesbian couple in the 80s) and the game's care for cultural and historical nuances. As an article in *HK01* (Tang 2021) points out: "More than a year since its release, *A Summer's End* has made the LGBT+ game community worldwide aware of Hong Kong in the 1980s. For those of us in Hong Kong, this game has special meaning and adds a sense of nostalgia." This appreciation echoes the way the game was received in the rest of the world; however, the emphasis shifts to some degree; for instance, writing for the website *RPGamer*, Sam Wachter (2020) pays more attention to the LGBTQIA+ dimension of the game, of course, without disengaging it from Hong Kong.

Oblige also received the attention of the media in Hong Kong, in this case, the South China Morning Post, one of the news outlets with greater circulation in Hong Kong, who called it "a unique experience that depicts the tedium and frustration of those who helped nurture Hong Kong's growth" (Shamdasani 2017). As the article says, the game quickly attracted players' attention due to its themes and game mechanics, and the comments section on the game's official website shows how certain themes that might not have been explicitly stated resonated with players.

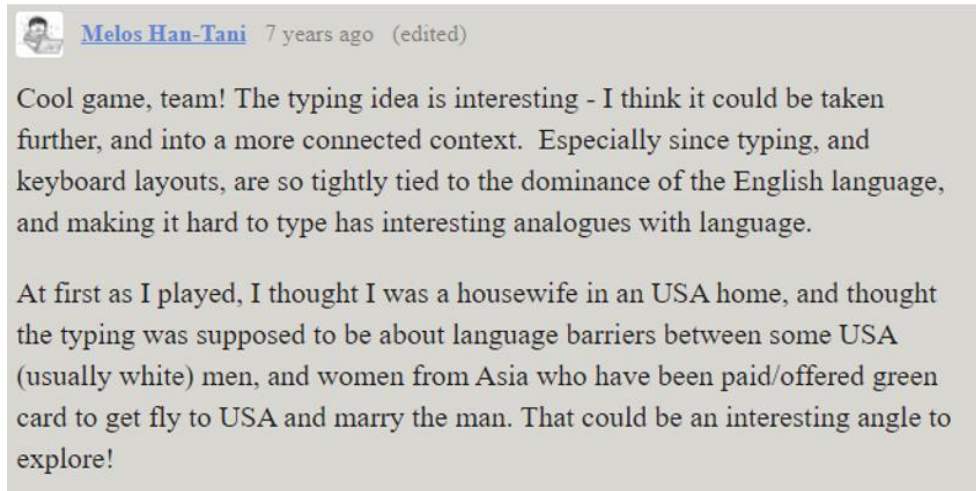


Figure 1 Screenshot of the official itch.io website for *Oblige*

In what follows, we shall describe our reading (playing) of these three games, putting forward key elements that contribute to the design and expression of cultural and/or historical affordances. At the same time, we explain the features identified as affording a consciousness of the identity of Hong Kong in its cultural, historical, and spatial dimensions.

Affectiveness (cultural identity)

We identified two general tendencies when presenting elements that help construct a cultural identity tied to urban space. These were the "local" and "non-local" cultural features. Given the nature of the selection, there was a pronounced tendency among these games to emphasize the weight of the local elements in portraying a specific referential space. A satirical, yet very explicit, example of the interplay of local and non-local can be found in *No More Heroes 3* (Grasshopper Manufacture 2021), where a stereotypical Californian town (Santa Destroy) is peppered with Japanese sushi stalls (with classical cart design).

This local-non-local differentiation can be problematic in some instances for its demographic and political implications if we consider that the main "substrate" of what is considered local is based on Han Chinese heritage but transformed by its sustained contact with other cultural backgrounds (such as the British, the Hakka, and the Tanka, with recent migratory trends to consider). With this in mind, we acknowledge a possible bias when identifying "local" and "non-local" elements, which further case studies should dispel.

Sleeping Dogs

When we started with *Sleeping Dogs*, we had designed a category of its own, "policing," encompassing many elements of this world. From the "local" triads to the "non-local" commercial exchanges. However, we realized that these phenomena were either functioning as elements constructing a sense of locality or those that marked a contrast with the local, the "foreign," or "non-local."

In terms of that which helps us distinguish this city from others, we find that *Sleeping Dogs* makes heavy use of the "triad" world, the local mafia. From the first moments of the game, we are constantly bombarded with violence and uncertainty attached to the life of the (local) gangster. One of the most effective ways to build this identity is by the terminology: "red pole" and "dragonhead," terms that designate the ranks within a triad and which are used frequently throughout the game; the names of the triad themselves, the "See On Yee," the "18k"; even the convention for naming the different high ranked members, all is a veiled reference to real-life triads. Also, the consequences of these triads within society are important to build the identity of the environment: triads vie for territory dominance, and they ask for compensation in exchange for "protection" from other triads.

Now, *Sleeping Dogs*' cultural identity is not reduced to this main theme of mafia activity; it tries to paint a more detailed picture of the city, even if imprecisions and misassignments arise in the design of the world. Most of the local flavor is given in the form of a) signs (neon and other) and b) food, with a dash of fighting (kung-fu and clandestine tournaments). One of the more salient examples, apart from the "hawkers" on markets and commercial streets, is the omnipresent "Shanghai Pan-fried Dumplings" (上海生煎包) food stalls; the problem with these (and with most of the signs in the game) is that they define most if not every food stall, without actually corresponding with the product sold: they may offer curry fishballs, waffle eggs, roast duck, even pork dumplings, but never the Shanghaiese dish that gives them their names. As indicated above, this imprecision permeates the whole presentation of the city, where signs in Chinese are repeated amongst the storefronts, even when they display very different contents. There are other minor elements like monks, shrines and temples, and feng shui, that add to the local flavor, even if they do not contribute to a heightened affectiveness.



Figure 2: Misnamed food stall.

The non-local, however, is subdued, even to the point of inexistence. This can be interpreted in two diametrically opposite directions. It can be seen as an interpretation of Hong Kong where the foreign is no longer so: things such as a black suit and white wedding dress might become the norm, the architecture of high rises in Central or shopping malls in Kennedy Town is nothing out of the ordinary in this global city. But the opposite interpretation is also valid, and worrisome, where the design of the space betrays a lack of understanding of the locals' consciousness of that which is not embedded in their identity but that at the same time reflects the telos of the Hongkongese (locals) themselves. That the protagonist, Wei Chen, has returned from America (and that one of the possible romantic partners, Amanda, is also an American tourist) is not without relevance. Have the locals turned inwards to the point of forgetting prevalent migratory tendencies amongst the Chinese, especially of those from insular territories (Koh and Chan 2018)? The occasional expatriates notwithstanding, everything appears to be local, everything is integrated.

A Summer's End: Hong Kong 1986

The case of *A Summer's End: Hong Kong 1986* is very similar to *Sleeping Dogs* in terms of affectiveness. Here, the strategies for building a sense of identity rely on the very attitude of the characters more than anything and on a deeply entrenched social principle. Though we still find some coincidences with the other games, particularly regarding food, most cultural references are more of an "insider" nature, well-known by the city's inhabitants.

We shall broadly describe elements aligned with the implied local identity. Culinary culture might be the most easily graspable level of affectiveness. In this game, as characters go on with their daily activities, they engage in eating activities, and most of the time, these are social occasions. Thus, we are shown and described a multitude of restaurants or food joints and many dishes and snacks. When it comes to the restaurants, some of the scenes show food stalls (with the accompanying hawker shouts), smaller tea parlors (cha chaan teng), or bigger restaurants (we'll take a more detailed look at these in the "ludoforming" section). For the food itself, there is always something to say about it: the main characters (Michelle and Sam) are always looking for some nourishment, discussing whether the food is good for their physique, from the humble curry fish balls and the multifarious skewers to fuller meals like beef brisket with rice noodles, served with particular drinks like milk tea or simple tea.

The next category of cultural elements that appear at different parts of the game are movies, stars, and idols in general. We see a few posters of popular films in Sam's store. Still, more explicitly, we are told of important singers, such as Teresa Teng (described as a "Mandarin folk" singer) and Anita Mui, beloved movie stars such as Brigitte Lin and Yam Kim-Fai (some of these artists have already gained recognition around the world). Lastly, we find a few cultural references that are meaningful for those who live or were raised in this place; these range from more communal or public activities, as is the case with stargazing and the "Summer Triangle" (though this extends to most of the Sinosphere), the Seven Sisters Festival (music festival) and the temple dedicated to the Seven Sisters in the New Territories (to help people find a good partner), to the more familiar or intimate convictions, such as the Michelle's "storybook childhood" (working father and overprotective mother who dote on their only child), the way to choose an English name (according to the game, the choice of English name is often due to the phonetic similarity

with their Chinese name), and finally the phenomenon of many young professionals that have studied abroad (UK, USA, etc.) and then returned to Hong Kong, and that are planning to migrate again (more on this in the historiographic section).



Figure 3: Visiting Sam's mom in Sai Kung's cemetery.

And so, in this, we find a bridge between the local and the non-local, a hesitation between "being here and going elsewhere." Before we describe the non-local identifying elements, a disclaimer: with most of these seemingly foreign references, there's an ambivalent attitude, in the sense that, though they may still be considered properly not from Hong Kong, they have practically become mainstays in the lives of the locals. Before, we had some reservations about how *Sleeping Dogs* had turned foreign cultural elements into local ones, eluding the complexity of the relationship between the Hongkongese and the non-Hongkongese. This game appears to confirm that vision. A male character describes Michelle as an "OL" (an abbreviation to refer to an "office lady," a working woman of certain solemnity), a clear borrowing from the well-known stereotype in Japanese culture; this same male character compares Michelle with Momoko Kikuchi (Japanese idol). All these references are taken at face value, with no sense of estrangement. Now, when Sam and Michelle talk about their ancestry, we find that their parents are mostly of non-Han origin (still Chinese): Sam's mother was of Hakka descent, Michelle's is Taishanese, and her father was Teocheow. Are these elements local or not? That ambivalence/ambiguity mentioned before pervades the identity of both protagonists and the city itself. What's interestingly different between *Sleeping Dogs* and *A Summer's End* is that where the former was "centripetal" in its relating local with non-local, the latter is more "centrifugal," projecting the Hongkongese towards the exterior.

Oblige

Oblige, while brief, deserves some attention, especially regarding affectiveness. In the streets, we find elements we have already described as present in the other games: Cantonese shouting, hawkers peddling their wares, an older man playing the erhu, etc. However, as stated before, the game tries to portray a week in the life of a Hongkongese family at the end of the 70s, so with this in mind, it is no surprise that emotional placemaking takes place within the realm of the domestic. The player character, the Mother of the family, can only do so much each day, three activities in total, of which two

will always be doing the laundry and cooking. These two activities could be seen as rather conventional when referring to domestic life for women in the period portrayed. Still, the way they are done and their content are loaded with local duress: for the cooking, the ingredients are rice, meat, fish, and vegetables (we always cut what appears to be green onions); the implements consist of cutting board, knife and rice cooker, and we can tenderize the meat, cut the vegetables, and cook rice (too much or too little, the right time or for too long). Laundry also has to make do with the space available: we have to go to the roof and handwash the clothes (soak, wring, rinse, wring, hang), and it is during this activity that the Mother speaks up (or thinks up) her mind. She questions her existence, her status quo: "What to do next?", "Am I happy?", "What about me?", "Who to support?", "Am I wrong?", "My son's future"...

After doing the house chores, we have to choose what to accomplish as our third and last activity: pay Father's dues or go through the process of signing your Son up for violin lessons. These final decisions, the need to weigh Father's demands (for the well-being of the family) with the desire to improve her children's cultivation (fostering creativity) underscores the domestic pathos of Asian motherhood (perhaps Chinese/Hongkongese more than any others). This conflict is evident during dinnertime when the four family members gather and discuss their daily activities; these moments are filled with tension as you see the positive or negative effects of your daily activities.



Figure 4: Mother's third task is always a favor for Father

In our first run, we tried to alternate between helping the Father and helping the Son, and sometimes we would receive positive feedback if our cooking was successful. Still, the most interesting part of dinner time came when our decisions were addressed: when we helped him deliver a check for his barber friend, he would congratulate us and explain how they gave a hand to Father with his business, and then the Son would urge Mother to enroll him in the violin course, reminding us of the coming deadline, and vice versa. We ended up fulfilling Son's desire, and it resulted in an angry Father storming out of the apartment, questioning, "How many kids grow up to be successful musicians?" (something that you had already thought about, in fact: "Artists are poor"). This domestic

drama links the local with the non-local, as the game's dedication echoes: "To our mothers of all eras and cultures."

Granted, the non-local affective content we identified was slim, even if it is an important part of the family drama. Even when the violin has become an identifying element of Chinese holistic or competitive education, it still links to a foreign culture that, as the Mother sees it, could help further her Son's development. If that was not enough, the constant playing of the *erhu*, both as a presence (the older man is always there) and as music, establishes a cultural parallel/contrast with the violin.

Historiography (historical consciousness)

Spaces are scarcely used in a historiographic way, and we find that, in general, there is no attempt at creating a historical identity through them. Nevertheless, we shall describe how this identity might be perceived in these games and how the city itself plays a role in this. As the close reading occurred, we saw that historiography could arise in two forms: "situations" and "objects." "Situations" are equivalent to historical events that help inform the game space, such as the overall setting of *Metal Gear Solid 3 Snake Eater* (Konami 2004), whose historical situatedness within the Cold War era influences the overall design of the game; the historiographical "objects" are those unbound things that are a product of a specific space-time frame: whenever a *katana* (Japanese one-edged sword) appears in a game, what historical-cultural implications are brought forward? While useful at a glance, practice has shown us that the usefulness of this division is limited, mainly because of the lack of content identified by us in this particular selection and the fast ties between situation and object.

Sleeping Dogs

In *Sleeping Dogs*, the historical framing is non-existent; there is no real "chronotype" or spacetime situatedness (Piero 2022), and the context makes sense to us because of the nearness of its release. In other words, we are bound to think of it as taking place in a contemporary time frame (to its release date). This situation helps explain the lack of historiographic material. Still, there might be a few ludofforming elements that could help situate the game in time for future players. But as it stands now, no historical consciousness can be constructed through this game.

We shall mention some "objects" we identified for rigor's sake. One of the side missions consists of a search for twelve Jade Statues, and it is gradually completed as you explore the game's Hong Kong. These statues are purportedly from the Song dynasty, which could be significant if one were to dive deeper into the city's history (were they brought to the island by the last two boy emperors of the Southern Song dynasty in their escape from the encroaching Mongols from the north?). Yet, the historical portrayal stops at their being "like a thousand years old, right?". Two other cultural objects of contemporary relevance could help build a historical frame: the BigLee restaurant in Aberdeen is the famous Jumbo Kingdom floating restaurant in disguise. There wouldn't be anything extraordinary about thinly veiled real places in the game (as we shall see in the next section about "ludofforming"), but its disappearance, or the possibility of this, indeed imbues those places with historical significance (one without an explicit temporal anchor, sadly). The Jumbo Kingdom stopped its operations in 2020 and sunk in 2022 as it was in transit to another location.

One last object of historiographical relevance is the color of taxis. While not precisely matching the current usage, the colors (red, blue, and green) can be found in the city streets as of the time of writing this paper.

A Summer's End: Hong Kong 1986

We might think that *A Summer's End* would fare better in the historiographic end, and to some degree, it does. However, its historical consciousness is very focused, not to say narrow. Let's first address the "objects" because the "situations" in this game are a little complex. We find references and images of things commonly used in the decade of the 80s, mainly in the form of the home media used at the time: cassette tapes, cassette players, laserdiscs, VHS, and movie posters of the era (in Sam's store we can see the Hongkongese promotional poster for Studio Ghibli's *Castle in the Sky* which saw a release in the city on June 26, 1987). Also, there are a lot of songs and musicians, movies and actors referenced throughout the game, many of them from previous decades, such as *Charlie's Angels* (which ran from 1976 to 1981) and *The Dream of the Red Chamber* with Brigitte Lin (made in 1977). The currency of these references within the game is enough to lead us to an approximate time frame but does little to build a historical consciousness of the city itself.

This contextualizing value of the game elements extends to the "situations." We know that even before booting up the game where and when we are (1986), with the constant presence of the World Cup (summer 1986, Mexico) to remind us of the time frame. Also, the soundtrack creates a "vibe" that could be very well said to be of the "eighties": "The soundtrack of *A Summer's End* falls under various genres which include funk, Italo disco, electronic, retro synthwave, chill wave, and vaporwave." (Creating a soundtrack...). But the game goes beyond this general time frame and takes it upon itself to integrate one of the most important events in the city's history into the characters' lives. The looming Handover to China constantly appears: we hear different opinions, see different attitudes, and are shown what is to be done in the face of such uncertainty. Here we have a few lines either of uncertainty (from Michelle, M in the list) or of confidence (from Sam, S):

- "Do you ever think about where you would be after 1997?" (M)
- "Don't you feel uncertain about what the future holds?" (M)
- "Do you really see yourself living freely then as you do now?" (M)
- "Are you entirely pessimistic about Hong Kong's future?" (S)
- "I feel that our civil liberties won't be protected." (M)
- "I have hope for a democratic future." (S)

The two possible endings perfectly match this hesitation between going and staying: one shows Michelle leading a happy married life, with husband and daughter, ready to leave Hong Kong (in 1997); the second embraces uncertainty and faith in the city, with Michelle and Sam embarking on a serious relationship in the city, betting in its favor.

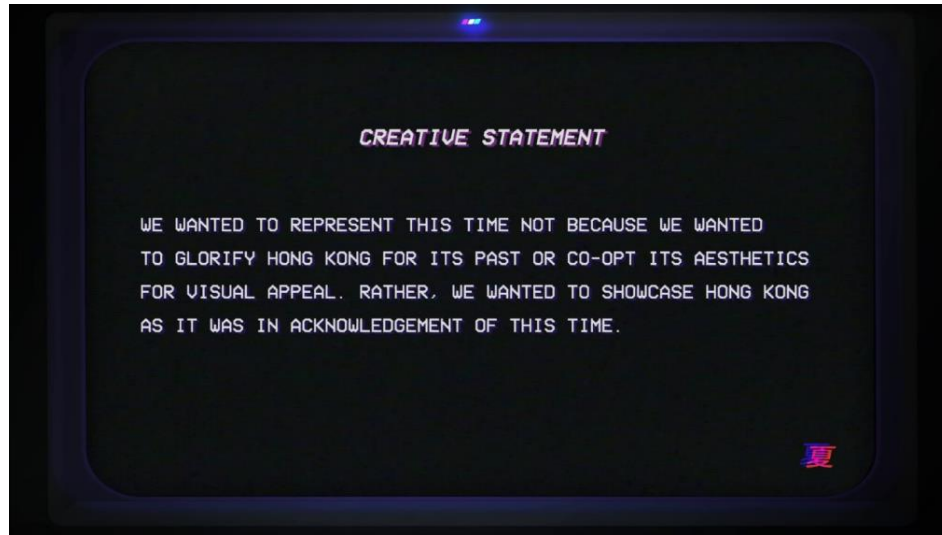


Figure 5: Capture of credit roll

Oblige

Finally, *Oblige* does little to create a historical consciousness beyond its initial setup of the game taking place in October 1979, spanning a week in total (some days indicate the year 2016; now, this could either be a mistake of the developer or a deliberate choice, almost unnoticed, that implies something deeper about the main theme of the game that is motherhood). The whole environment, the model and design of the appliances, and even the typewriter, a key element of the game, help us situate ourselves in the period offered, but that is far from presenting a historical consciousness.

Ludoforming (spatial construction)

As we have said, ludoforming refers to the strategies and procedures a designer follows to translate a real-world space into a game-world space (Aarseth, 2019). With this stance, we also observed a general alignment of elements in two general categories: one for "spatial" ludoforming (the proper concept related to specific spaces and places) and another one for "material" ludoforming (these are elements/objects that can be found in different parts of the city). A "spatial" ludoforming element, for instance, would be the transference and transformation of a preexisting space to the game world (Aarseth, 2013), such as the different landmarks one can climb onto in *Spider-Man 2* (Sony Interactive Entertainment, 2023); the "material" could be such things as the Staminan/Tauriner energy drinks in the *Yakuza* (SEGA, 2005) games, a material reference to the real-life Lipovitan, omnipresent in Tokyo. When we discuss our findings, we will address the engagement between the player and the spatial configurations offered by these games.

Sleeping Dogs

Through this lens, *Sleeping Dogs* was primed to shine since it claimed that “People even told [the developers] that they grew up in Hong Kong and hadn’t been back in a while, and playing was like visiting home. That was quite touching.” (Horti, 2019) It might be hard to spouse those sentiments with criticism such as: "Hong Kong doesn’t stand up to close examination. I never marveled at the sights. The city tends to all run together, a mass of nondescript locations and boring geography." (Kohler 2012)

The moment we start a new game, we are presented with Hong Kong's skyline, a generic yet imposing one. As we play through the game, we are in constant flux, between a feeling of inertia, of speeding by a nondescript megalopolis, and the sense of wonder at what a unique place this city might be. We find old and tattered junks (boats) on the pier (not sure where) and then cross a wet market where shady business is afoot. And this is only the first scene of the game. After this, we are tossed to the open world of "Hong Kong," but the moment we open the map, this Hong Kong looks considerably smaller and sparser. This is one of the game's strategies for managing such an unwieldy city for this ambitious project: the gameplay area (topology) is divided into four great areas with considerable differences and dramatic similarities. Much of the game is spent in North Point, the main character's territory. Here, we find the Street Market and its surrounding businesses, which form the core of this section of the city; the market presents a summary of the whole city: food stalls, street shops, pirated goods, and even enclosed spaces with restaurants and apartment areas. This is the richest and liveliest environment in the game. In this area, we find our apartment (the "Coffee shop and hotel" building): a small (not so much for the city's standards) and believable flat, with one living room/dining room/bedroom, plus bathroom and open kitchen. The building offers the expected layout, with a guard behind a railed office and arguing tenants outside their flats. This is one of the very few interactions non-playable characters (NPC) have among themselves, and a sample of lived space (Lefebvre, 1991) beyond simple designed space.

We said that each area presents a particular style, or socio-economic ethos, indicated by things like:

- Aerial space. North Point and Aberdeen have particularly crowded aerial space, with crisscrossing cables, neon signs, regular signs, laundry poles, etc.
- High rises. The presence of modern skyscrapers also helps differentiate areas. You find emblematic buildings in Central (rebaptized versions of the Bank of China building and the HSBC headquarters)
- Shopping malls. Even if they would be omnipresent in real Hong Kong, the first mall we found was in Kennedy Town, a wealthy area you will visit much later in the game
- Parks. Big or small, they each follow a more restrictive pattern than in the real city. For instance, Victoria Park can be traversed in one or two minutes, random bridges and waterways populate it, and there is even a modernist pavilion (with certain relevance for the plot). But these elements, to the understanding of the designers, are what distinguish bigger parks in Hong Kong (no signs of sports facilities in bigger parks, and forget about playgrounds for children)

- Flats (safehouses). As the game progresses, you get a flat in each of the four main areas. Despite aesthetic and size differences that match the socioeconomics of the area, the distribution and the things that can be done within do not change
- Hospitals. They also match the area. The Central hospital, for example, is a convincing medical center that can be explored and where you can find appropriate machinery and fitting staff, if a little deserted



Figure 6: North Point aerial space

That should be enough to get an idea of how the developers went about with a compromise between playability and fidelity, a compromise that results in a rather flat city (metaphorically and literally)

The "material" identity in *Sleeping Dogs* is also varied but not as exhaustive as the "spatial." Specific objects are to be found in all its corners. First, we have vending machines, or should we say *vending machine*, considering that it is one and the same, seemingly omnipresent: the energy drink Dragon Kick. We have already pointed out that one of the fundamental flaws in the city design was its generative design (with the unmatching signs). This flaw extends to most of the spaces and objects of the city: its neon signs repeat themselves in different locations, storefronts are mixed and matched, and red lantern strips can be found in many unexpected places around North Point. Health-increasing shrines, "lockboxes," and even the distinctively Chinese "red envelopes" are different, and their repeated presence is justified (?) by the game mechanics. Finally, double-decker buses, taxis, and even plastic rubbish bins are in different locations. Yet, they are necessary elements for the regular functions of a city, so their inclusion is more than acceptable.

A Summer's End: Hong Kong 1986

In *A Summer's End*, we find an extensive list of strategies for ludofforming, even when, as a visual novel, only employs (a limited amount of) static images. For the environments of the game, we can start with public spaces. The first public space of the game is an MTR

(Mass Transit Railway) station; this one and others in the game are briefly, yet accurately, represented: we find publicity on the walls of the escalators, turnpikes at the entrance of paid areas, and even analog clocks hanging from the ceiling. These little strokes add to the spatial identity of the city. Open spaces are also detailed, and a lot of character exudes from them. The moment we step out of the MTR station, we find ourselves in what appears to be a bustling financial center, with a skyscraper right in front of us, a building with a distinguishing design (Jardine House). The other streets featured in the game are also pregnant with particular features: Mong Kok has plenty of signs (neon and not, in English, in Chinese, and both), cables hanging in the sky, and a plethora of stalls at ground level, as is also the case with "The grittier part of Portland Street"; along Victoria Harbour, we can appreciate the city's skyline, and after taking the ferry, we can see tall buildings of times past, with no neon to be seen. If we talk about stores, they offer a transition between outside and inside: "Besides street-level storefronts, there were a multitude of stores located within indoor shopping arcades, and as well the many outdoor market stores that were scattered across this whole neighborhood district."

Private or enclosed spaces are not as obviously referential, but their design elements are coherent with what we can find in Hong Kong. The first of these is Michelle's office, where we are shown a relatively large room with dividing panels, a desk and computer in each one, and decorative elements in each divided space—nothing out of the ordinary. But as in previous sections, it is in the "food department" where we find more details. After the very first meeting of the deuteragonist, they agree to have dinner together at a "small Hong Kong style dinner," and Michelle observes: "A diner like this could be found in any district around Hong Kong." So, what do these conventional places look like? Here are some of the recurring features shown in the game:

- White-tiled walls for the upper half
- Color band at the bottom half of the walls (green, orange, brown, colors vary)
- Big boards (often red or white) with the menu in Chinese
- Small squared tables leaning against the walls and/or bigger round hard-plastic tabletops with metallic legs for shared use



Figure 7: A run of the mill diner.

- Plastic squared stools, or stools with round hard-plastic seats and metallic legs

Other private spaces offer no particular identity but look lived-in. We have already seen Sam's video store, cramped to the brim, and her flat is the same, with limited space (one room for living and sleeping, and a kitchenette). The "Ruby" nightclub is what we might imagine a disco club in the 80s might have been, with neon lighting and a disco ball. Finally, Michelle's family flat is in Kowloon City, near the now inexistent Kai Tak Airport: we see the entrance, a dining table, part of the kitchen, and then part of her bedroom. This is a more privileged family. The socioeconomic implications in the portrayal of Michelle's and Sam's spaces are congruent with their stances on the city, as described above.

One last space that deserves attention is the "seaside fishing town of Sai Kung." In this place, we are shown the complexity of the geographical and cultural identity of Hong Kong. "There are a lot of Hakka villages in Sai Kung," points out one of the girls. It is here where Michelle and Sam open up about their diverse heritages (even the tomb of Sam's mom appears to be of a different cultural background), and it is also here where we are shown a side of Hong Kong that we hadn't been presented so far: the nature within and around the city. Before, all we had seen were crowded streets and bright (artificial) lights, but here, far from the main cluster of the city, the girls go on a hike, spend an afternoon at the beach, and experience a starry sky that would be impossible to admire in the city. This contrast is also important for the city where this game takes place, a cultural-spatial contrast.

The "material" level of ludiforming may be less explicit, but it is nonetheless rich and varied. Let's start with public transportation and public transit. As we said, the game opens in an MTR car, and the colors of the metro lines are significant: we see a prevalence of red accents with a white base. The interpretation of this metro line comes a little later when a male coworker mentions he takes the same line as Michelle, the Tsuen Wan Line, which is indeed red. That is not the only time the MTR makes an appearance; it is extensively used in the game, and a few background images portray its stations. Even if one has not been to this city, one can infer the importance of a metropolitan transportation system. Other mediums of transportation present in this game city are taxis (though we only see the interior), motorbikes (at least, Sam's), and two more that seem more particular for this city: ferries to cross from the peninsula and vice versa (indeed, here we become aware that Hong Kong is more than an island), and double-decker trams (only found in Hong Kong Island proper). *A Summer's End* creates a nuanced image of city transit; as Michelle says: "The sound of vehicle engines, car horns, and the audible crossing signal was unavoidable anywhere in Hong Kong."

The restaurants already mentioned here also feature material elements. For instance, on the tables, we will often find a few necessary items, such as chopsticks and other cutlery, but these are found in bunches inserted in plastic glasses or wooden boxes; condiments, too, have a common way of being displayed, and the game presents them in a plastic box, not too tall; finally, a common sight in these restaurants is the plastic napkin dispenser, with an opening on top. Of course, food is also present in the game, and even though we don't "see" the dishes, they are mentioned: curry fish balls, beef brisket with rice noodles, seafood, milk tea, club sandwich, and chef's salad (non-local?).

We identified miscellaneous items that helped produce this space to cap this material section. We have already discussed Sam's store, where we find tapes, posters, and media players. There is also a strange scene where Michelle seems to be lost in a mysterious

plane on Temple Street, where she talks about what one could normally see in that place, such as paper effigies, wood caskets, etc. Finally, there are two Japanese products for which the brand has been slightly modified, but that visually we can still identify: the "Somy" (Sony) tape player and the "Mopiko" (Nopiko) mosquito bite cream.

Oblige

In the ludiforming area, *Oblige* has little more to offer than in the previous dimensions. We already showed how "affectiveness" is reinforced by and reinforces the domestic drama. Indeed, the space produced in the game is of a much more limited scope than that of *Sleeping Dogs* and *A Summer's End*. Nevertheless, it tries to capture the lived space of a family in the time frame described. The space of this family's life is rather nuanced. The main menu sets the familial mood, the domestic domain if you will, by showing a clothesline on the roof of a nondescript apartment building, with airplanes flying by in the background (these elements, to those familiar with the history and layout of the city, might point to the well-known Kowloon Walled City). As we start a new game, the first images we encounter are a side view of the flat where the family lives, a one-room affair, and a side view of the same, with which we get a sense of the family's socioeconomic standing. From the outside, our apartment building follows the same pattern as those in the neighborhood: they all have a particular arrangement of storefronts at ground level and flats on the upper floors, and these can either present small windows or their corresponding fenced solariums. This pattern can also be seen in *Sleeping Dogs*, but we failed to pay too much attention to it due to the camera behavior and the lack of any gameplay arising from this design. Since we are talking about the outdoor area, we shall point out some of the features of the street:

- Storefronts. The most common are those offering produce and other edibles,



Figure 8: Crowded street with mis-uniformed children

perhaps apothecaries and hardware stores. The different "friends" of Father, from the barber to the other contractors, also have their own stores

- Upper space. The side view outline includes neon signs and hanging clotheslines
- Randomly generated passersby. The students appear to be wearing uniforms

- Bus stop. A frame of metal beams and signs
- Cars. Not seen, but heard, constantly

The "material" personality of the game is, once again, rather modest but lively. Just as we started with the space of the family flat, let's talk about its furniture and appliances. Since everything is contained in "one room," we get two views of the apartment. Thus, things are either on view or hidden at different times of the day. When the family gathers in the dining space, we see a calendar (always showing 25), a wall clock, a bunk bed, a small TV, and a rice cooker (green). During the day, we can see most of the same objects from a different point of view; we notice that the rice cooker is on top of a dish cabinet and that there is also a smallish cream-green fridge towards the entrance with a diamond-shaped fu sticker on its door; the refrigerator is next to a cabinet with a red-yellow candle (could it be a shrine?), there is also a red warm-water bottle on top this cabinet; finally, there is a green plastic stool almost at the entrance. The basics for a frugal life, nothing is superfluous. Two more things to mention related to the ludiforming of the material culture in the city are the double-decker buses, which need no more explanation, and the other one is the uniform that we mentioned the kids were wearing on the streets. It appears to consist of a white short-sleeved shirt, a pair of black shorts, a black tie, and sometimes we can see a red accent. While the pattern certainly could be traced to the 60s, the overall look is more reminiscent of some current designs in Mainland China (the red ribbon is an identifier for the Young Pioneers of China, a pre-membership of the Communist Party).

“Managing challenging affordances”

For the close reading, we chose three games from different genres, all set in various periods in Hong Kong. Through our previously established critical stances, we gained valuable insights into how referential spaces (Hong Kong) afford consciousness of a certain spatial identity. After analyzing the information obtained in this exercise, we can model certain “cultural affordances” that arise as we, the players, find ourselves embodied in the game city. As we shall see, the intercrossing of those interactive layers (our critical stances) directly affects how we are expected to react.

We consider that cultural affordances “result from a biased pool of symbolic resources of culture that are brought to bear on the construction of concrete daily situations” (Kitayama et al. 2006). The challenges, then, are a) to identify what is being communicated by the translated urban space (Rambusch & Susi 2008) and b) to understand those “new opportunities for action [or reaction, we might add].” Linderoth (2015) sharply criticizes Rambusch and Susi for creating a dualistic model of “real” and “virtual” affordances, arguing that the context of game playing is enough to afford certain actions without the need to make this differentiation. While a very sensible criticism, we still believe that their approach to the cultural level of affordances is useful.

The affective dimension in accord with the historiographic sometimes afforded complicated (re)actions, as the “Creative Statement” and the dedication seek to afford either “Understanding” of the plea of a certain group of people (the Hongkongese in times of uncertainty, or even minority groups in this city), or “Commiserating” for the hardships experienced by someone (mothers everywhere, anytime); it can also afford a desire for “Investigating” more about situations not fully explored in the game (the martial arts tradition in China and its relationship with history).

The interaction of the historiographic content with ludiforming strategies affords a rich variety of responses. We have already mentioned the impulse of “Investigating” references and cultural products that give meaning to a given lived space (such as Teresa Teng's works and Ruan Lingyu's movies). Nevertheless, as the ludiforming takes over, we are also taken over by an “Experiencing” desire. We want to do ourselves what is being done in this virtual world (food is an obvious example, but we might also want to try using a typewriter, even handwashing clothes). When the spatial construction is taken on its own, and the city itself becomes the focus of the player interaction, we begin “Questioning” the links between the video game city and its real-life referent (are flats made up of one room? Are the triads active in the city? Can you still find diners such as the ones shown in these video games?).

Finally, we would like to indicate a strong identification between a game's affective and ludiforming aspects as if the former informed the latter. When characters talk about places and objects that have a particular value to them, we as players are invited to a series of reactions: we are afforded “investigating” the meaning of a place, and we get the desire of “experiencing” what can be done in there, yet we might also start “questioning” the fidelity or actuality of those places and objects.

CONCLUSIONS

Since our focus was informed by the rather abstract notion of cultural (historical) affordances, we established the possibility of game worlds as affording emotional and non-physical actions. Afterward, we described our close reading exploration; this allowed us to get a more focused experience of the games and abstract meaningful elements in different layers of spatial representation.

With the analytical matrix that resulted from the three critical stances adopted for the close reading, we proposed a few cultural affordances that we identified as core to the games' spatial and ludic structure. These affordances were articulated as gerunds, meant as sustained or lasting reactions parallel to the stimulus within the games. “Understanding,” “Commiserating,” “Investigating,” “Experiencing,” and “Questioning” were the most salient affordances we managed to identify for the time being.

Every portrayal is, in a way, historiography. With this research, we tried to address a gap between social sciences and cultural sciences. A conscious dialogue with history is necessary to fully understand what happens when establishing a relationship with a virtual space. Beyond our embodiment, we must also try to understand our emotional commitment, which is thus embodied. Most importantly, as Susana Alves (2015) says, when we try to comprehend cultural or historical affordances, we are, in fact, trying to “connect groups of people and to provide a space for collective memory.” This research is a step further towards that goal.

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