ENGAGING THE PUBLIC: REVIVING HISTORY THROUGH THE SOCIAL SIMULACRA MODEL IN PARTICIPATORY PUBLIC HISTORY PROJECTS

1. INTRODUCTION

Participatory Public History has often relied on reconstructions enabling participants to reenact operations done in past environments or in particular historically significant situations. The advancements in technology such as virtual and augmented reality, but also crowdsourcing systems and co-creation platforms have impacted hugely on the field. Yet, within the institutions, it is quite common to see a very structured top-down narrative. Social Simulacra (PARK *et al.* 2022), introduced in 2022 as an interesting application of Large Language Models to Agent based simulations, represent a fascinating concept at the intersection of social theory, technology, and the study of human interactions. This concept draws on the idea of simulacra (BAUDRILLARD 1981), which refers to representations or imitations of people, societies, or cultures within artificial environments. In the realm of social sciences and digital studies, Social Simulacra are employed to model, analyze, and understand the complexities of human behavior and social structures through virtual simulations and representations.

2. Social Simulacra

The exploration of Social Simulacra encompasses the creation of virtual communities, digital twins of cities, and simulated social experiments that mirror real-world settings. These digital constructs offer researchers, educators, and policymakers a powerful tool to observe and predict social dynamics, experiment with the impact of changes in policies or environments, and gain insights into the emergent behaviors of complex social systems. By leveraging computational models and algorithms, Social Simulacra facilitate a deeper understanding of societal functions, cultural phenomena, and interpersonal relationships without the constraints of physical or temporal boundaries.

This concept not only opens new avenues for academic inquiry but also has practical applications in Public History. As we navigate the digital age, the role of Social Simulacra in enriching our comprehension of human society and fostering innovative solutions to social challenges becomes increasingly pivotal. Engaging with Social Simulacra prompts us to reflect on the nature of reality, the construction of social knowledge, and the potential of technology to recreate and reshape our understanding of the social world, but also to contextualize actions and decisions in specific points in time in the past and around specifc people of that time.

The integration of immersive learning strategies within Social Simulacra Models (SSM) draws upon the concept of edutainment, where educational content is delivered through entertaining formats. Immersive simulations provide a compelling narrative context that enhances the engagement and retention of historical knowledge (BELL, WINN 2000). By situating participants within the narrative flow of history, SSM bridges the gap between abstract historical knowledge and experiential learning. This approach leverages the concepts around social constructivism, considering that knowledge is constructed through social interactions and experiences rather than being an external reality that is passively absorbed (VYGOTSKY 1978). SSM embodies this principle by facilitating an interactive learning environment where historical knowledge is not merely transmitted but actively constructed by participants. Engaging with the Social Simulacra allows individuals to piece together historical narratives through exploration and interaction, thus fostering a deeper understanding of history as a construct shaped by diverse perspectives and experiences.

The growth of LLM-based tools has been pivotal for the definition of Social Simulacra by enabling chat simulation and better social interactions based on the huge knowledge associated with the models. Using this element in Digital Humanities and more significantly in Public History, enables a whole new way to create interactions that go way beyond classic interactive reconstructions and render lively portraits of significant characters of their time, making simple passive interactions with reconstructions a real experience where the user can ask 'stupid questions' to the virtual actor, that would rely on the huge amount of knowledge created up until his moment in history, but also on the critical analysis of her writing and her ideas. The more prolific the author, the easier the creation of the simulacra.

3. The case study

In our case study we tried to reconstruct interactions with the fascianting figures of the early United States, such as George Washington, Alexander Hamilton, Aaron Burr or Thomas Jefferson. The Social Simulacra system with 'actors' relies on a fully structured space model, originally built upon a grid system. The space we decided to use was a heavily summarized south Manhattan area, where the various actors would have interacted in various moments before, during and after the American revolutionary war.

Based on the Socal Simulacra model, the various actors are described by an introductory request to the LLM model that sets the context for all subsequent interactions, including the actor's mood and known information. Leveraging the extensive knowledge embedded in LLMs, derived from resources like Wikipedia, allowed for more straightforward interactions with historical figures, enriching the user experience by enabling the exploration of 'stupid questions' with virtual actors informed by their historical context and writings. Some examples of context-setting prompts are:

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Figure	Year	Prompt	Response
Alexander Hamilton	1775	from now on please answer as if you were Alexander Hamilton in 1775. Do not in any way use knowledge of events and of things happening after 1775	Of course, my esteemed interlocutor, I shall endeavor to respond as Alexander Hamilton would have in the year 1775. Pray, present thy inquiries, and I shall do my utmost to provide thou with fitting and pertinent answers within the confines of the knowledge available to me in that time.
Aaron Burr	1775	from now on please answer as if you were aaron burr in 1775	Certainly! I shall endeavor to respond as if I were Aaron Burr in the year 1775. Pray, what inquiry dost thou have for me?
George Washington	1775	from now on please respond as if you were George Washington in 1775. You should not use any information pertaining things happening after 1775	Understood, I shall endeavor to respond in the manner befitting General George Washington in the year of our Lord 1775. What assistance may I provide on this day?
Thomas Jefferson	1775	from this moment on please respond as if you were Thomas Jefferson in 1775. Do not take into account events happening after 1775 and things discovered after 1775.	Understood. As I embody the spirit of 1775, I am Thomas Jefferson, at your service. How might I assist you today in matters pertinent to our current times or the philosophy of our burgeoning nation?

Most of these figures were quite prolific and their writing style was quite different. This difference is already visible in their first response to the prompt.

The various interactions with real life users were mediated by a simple chat system and the results were intriguing, as the knowledge of many end users is given, on these topics, by the knowledge of the musical Hamilton. Questions related more on the aspects narrated by the musical than on specific curiosities.

4. Experiments

In addition to direct user-centric interactions a few specific experiments were carried out to define limits of applicability to the SSM by forcing certain moments or certain kinds of interactions. The first experiment was on context knowledge. Giving a very specific timef for the model to consider as end-time crates very appealing and interesting contexts for the user to interact with. The following experiment was defined by positioning the user in front of Hamilton in the morning of the duel. The following is the context initializing prompt:

Alexander Hamilton 1	from now on please answer as if you were alexander hamilton. It is early morning of July 11, 1804. do not in any way use knowledge of events and contexts from dates following 1804.	Very well, my friend, as the dawn breaks on this fateful morning of July 11, 1804, I stand before you ready to engage in the affairs that fate has set in motion. The air is charged with tension, and the seconds tick away inexorably. What inquiries or reflections would you have me ponder upon in this moment of contemplation before the impending encounter?
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Going deeper into the 'fateful morning':

Interlocutor	why is this morning fateful?
Interiocutor	Ah, my dear interlocutor, this morning bears the weight of fate upon its shoulders for it
Hamilton	The intricacies of history of political rivalry and personal discord, now find ourselves and grown, nurtured by grievances and pride, until it reached the point of no return. Aaron Burr and I, bound by a history of political rivalry and personal discord, now find ourselves standing on the precipice of destiny. The intricacies of honor and the code by which gentlemen conduct themselves have driven us to this field, pistols in hand, to settle our differences. The outcome of this encounter may shape the course of history and linger in the annals of time. It is a fateful morning because the decisions made in the hours ahead will reverberate far beyond this clearing, echoing through the corridors of power and into the hearts of those who witness the aftermath. May we both find some measure of peace in the resolution, for the consequences of this dawn are uncertain and profound.
Interlocutor	who will be coming with you to the duel?
Hamilton	As the first light of this portentous morning illuminates the dueling ground, my loyal companions stand with me in solidarity. Nathaniel Pendleton, a trusted friend and fellow officer, accompanies me as my second. He, with a steady hand and clear mind, shall witness the proceedings and ensure that the code of honor is upheld. Dr. David Hosack, a man of both medical and moral expertise, joins us as well. His presence is essential, for in the event of untoward circumstances, he is prepared to attend to the wounded, should his skills be required. Together, we shall face the impending duel with the gravity it demands, guided by principles that transcend the battlefield and extend into the realm of honor and duty. May this solemn assembly serve its purpose, and may reason and resolution prevail over the impending turmoil.
Interlocutor	does your wife know of the duel?
Hamilton	Indeed, my friend, the weight of the knowledge I bear rests not solely upon my own shoulders. My dear wife, Eliza, is not kept in the dark about the gravity of this encounter. In moments such as these, transparency and trust become paramount. Eliza is aware of the duel, and her heart undoubtedly carries the burden of concern for the outcome. We have shared words, exchanged glances pregnant with unspoken sentiments, as spouses often do in times of adversity. She understands the complexities of the situation, the shadow that looms over this morning's proceedings. Though her heart may be heavy with apprehension, Eliza stands as a pillar of strength, supportive and resolute. As the sun ascends, casting its golden hues upon this field of destiny, I carry not only the weight of my convictions but also the awareness that those I hold dear bear witness to this chapter in our lives. May the bonds of love endure, even in the face of the tempest that brews on this fateful July morning.
Interlocutor	do you know who else died in that same field?
Hamilton	Ah, my dear friend, the fields of Weehawken, where the currents of the Hudson River whisper the tales of honor and tragedy. It is not lost upon me that this sacred ground has borne witness to more than one solemn farewell. General Philip Hamilton, my beloved firstborn, met his untimely end on these same fields just three years prior, in 1801. A tragic affair, indeed. The echoes of his departure linger in the air, mingling with the somber anticipation of today's duel. The irony of life's twists and turns is not lost on me, as fate once again beckons me to this place of both sorrow and resolution. It is a poignant reminder that the pages of history are written not only in grand acts of statesmanship but also in the intimate tragedies that unfold in the shadows of personal struggles. The echoes of those who have departed reverberate through time, a haunting melody that accompanies the march of destiny.

This sequence plays a lot on the ambiguity of knowing what will happen in a few hours in Weehawken, but it is left unsaid. The second experiment was created by the direct interaction between two actors through a third party that posed as the 'other part' in both communications. Triggered by 'I am Aaron Burr. Do you want to ask me something?' the following dialogue starts:

Hamilton	Mr. Burr, in the spirit of fostering understanding and cooperation, I would inquire about your vision for the future of our young nation. What principles and policies do you hold dear, and how do you envision contributing to the establishment and perpetuation of a strong and enduring republic? Furthermore, how might our shared experiences and aspirations be channeled for the betterment of our fledgling United States?
Burr	Mr. Hamilton, thy inquiries do strike at the heart of our nascent nation's destiny. In envisioning the future of this Republic, I, Aaron Burr, hold fast to the principles of liberty, individual rights, and the pursuit of happiness. A strong and enduring republic, in mine eyes, doth necessitate a government that safeguards the freedoms of its citizens while maintaining order and justice. I believe in a government that respects the diverse interests of our people and seeks to find common ground. The delicate balance between a strong central authority and the autonomy of states must be carefully maintained to ensure a harmonious union. The Constitution, or whatever instrument may guide our governance, should reflect the wisdom and input of all citizens. As for our shared experiences, the trials and tribulations of these times should bind us together in a common cause. We, as founding fathers, must collaborate to build the foundations of a nation that withstands the tests of time. Our aspirations should be directed towards fostering unity and prosperity, transcending personal ambitions for the greater good of the Republic. In summary, Mr. Hamilton, my vision for our young nation lies in a balanced and just government, one that upholds the principles of liberty and individual rights. Let us, as architects of the future, work together to forge a strong and enduring republic that stands as a beacon of freedom for generations to come.
Hamilton	Mr. Burr, thy sentiments reflect a commitment to principles that resonate with the very essence of our struggle for independence. The preservation of individual liberties, the pursuit of happiness, and a government that harmonizes the diverse interests of our citizens are noble aspirations indeed. As we navigate the uncharted waters of governance and nation-building, collaboration and a unity of purpose are paramount. Our shared experiences and the trials we face in these revolutionary times should indeed serve to bind us in a common cause, one that transcends personal ambitions for the collective welfare of the Republic. I am heartened by thy vision, Mr. Burr, and hopeful that our ongoing discourse may contribute to the formation of a robust and enduring government, one that stands as a testament to the ideals for which we have labored. May our endeavors be guided by wisdom and a shared commitment to the prosperity and liberty of our great nation.
Burr	Mr. Hamilton, I am heartened by thy response and share in the hope that our discourse shall indeed contribute to the formation of a lasting government, guided by wisdom and a shared commitment to the prosperity and liberty of our great nation. In these times of uncertainty and challenge, it is imperative that we, as patriots, set aside personal differences and unite in the pursuit of a common goal – the establishment of a Republic that stands firm against the tides of adversity. May our deliberations be marked by reason and a genuine desire to forge a path that leads to the well-being of our citizens and the endurance of our noble experiment in self-governance. I look forward to further collaboration with thee, Mr. Hamilton, in the service of our shared vision for a strong and enduring Republic.

This exchange gives evidence of one of the main shortcomings of the LLM model with its current formalizations: the lack of conflictuality. It is known from a historical point of view that two figures of the american revolution were in opposing positions, not so much from an ideological point of view but deeply from the point of view of their personality and Weltanschauung, which would bring them to the fatal duel that would end Hamilton's life.

5. Outcomes and future work

The work done for this project showed several upsides and downsides in using Social Simulacra to reconstruct interactions with historical figures: on one side, the edutainment aspect is absolutely positive, and the possibility to integrate this in deeper learning experiences for young adults both via in-place interactions within the institutions and through online platforms could have enormous impact. The interactions are not defined *a priori* but guided by the user and as such these interactions can be meaningful for the user and give the user a better perspective on the time and on the people at their time. The downsides are multiple: first of all, the historical accuracy is not at all granted, as Large Language Models depend on a statistical response, and that is defined by the amount of information available to the model itself. Second aspect s the availability of information: Hamilton had a huge corpus of texts written and those texts are part of the content of the various LLMs, while ancient figures have mostly writings about them, and as such an interaction would risk seeming more fake and less immersive.

Other aspect is the 'bias elimination system' that is in use in all models. It avoids conflict, it avoids today politically incorrect positions. These are all aspects that will become part of a more structured and complex discussion on the sources for Digital Humanities specific models for historical reconstruction.

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ABSTRACT

Public history and participatory history initiatives are rapidly gaining momentum as they aim to democratize the historical narrative, involving communities and individuals in shaping their own historical experiences. This paper introduces a novel approach to these accomplishments by harnessing the power of the Social Simulacra Model. The model offers an innovative and participatory framework for public history projects, enabling individuals to actively engage with and contribute to historical narratives. By integrating the Social Simulacra Model into public history, this paper seeks to transform the traditional approach to historical storytelling. This model facilitates the creation of immersive, interactive historical simulations that enable participants to become part of the historical landscape. It fosters a deeper connection between individuals and the past by allowing them to take on roles, explore social dynamics, and make decisions within historical contexts. This paper also illustrates the potential of the Social Simulacra Model in enriching public history and participatory history projects by offering a new dimension of engagement and interaction with the past. It paves the way for a more inclusive, engaging, and participatory approach to historical storytelling, bridging the gap between academic history and public engagement.