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7 Collaborative Constructions: Designing High School History Curriculum with the *Lost & Found* Game Series

Abstract: This chapter addresses design research and iterative curriculum design for the *Lost & Found* games series. The *Lost & Found* card-to-mobile series is set in Fustat (Old Cairo) in the twelfth century and focuses on religious laws of the period. The first two games focus on Moses Maimonides' Mishneh Torah, a key Jewish law code. A new expansion module which was in development at the time of the fieldwork described in this article that introduces Islamic laws of the period, and a mobile prototype of the initial strategy game has been developed with support National Endowment for the Humanities. The series pays close attention to period details and provides numerous entry points for curriculum. Featured at the 2019 Smithsonian American Museum of Art (SAAM) Arcade, winner of the best non-digital game at International Meaningful Play, and a Bronze medal winner at the International Serious Play competition, these games combine engaging table-top play across game genres with opportunities to learn about medieval religious history. The first game in the series is a strategy game which combines competitive and collaborative play as players make tradeoff decisions to balance the needs of their family with needs of the wider community. The second game in the series is a party game which focuses on legal reasoning. This chapter addresses approaching learning environments, from design with experts and playtests with learners to participant observation and narrative reports at a high school where the game is being used to teach history. Crucial to learning games is the way in which they relate to, are interwoven with, and are ultimately embedded in curriculum, especially learning outcomes and objectives. This chapter will examine strategies and processes that explore that interweaving.

Introduction

The dynamics of classroom environments vary and range across diverse contexts. Game design for the classroom thus requires playtesting and integration for particular audiences, typically determined by age and grade. Focusing on the specific learner population is a critical component of design in order to ensure the game is developmentally appropriate, engaging, and can be integrated into the

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classroom. Ideally, the work of games-for-learning designers and classroom teachers intersects early in the learning game design process and continues at each successive iterative phase of game design. But what happens when the educator and/or designer's target population broadens, changes, and shifts? Once learning games are already developed, how might game designers and classroom educators work together to optimize the use of a game for different audiences and classrooms, honing the curriculum and the use of the game for those classrooms?

This design case examines how a game designer-researcher (Gottlieb) and a history scholar and classroom educator (Clybor) collaborated over the course of three years to explore opportunities to integrate *Lost & Found*, a series of three learning games (one of which was still in development), into a series of high school history classrooms. Over the course of their explorations, the designers developed three primary design approaches to take forward following their classroom observations and analyses:

- tailoring the emphasis of classroom reading and lecture preparation to focus on topics that would later be instrumentalized in gameplay.
- using more scaffolding of the particular history-relevant skill sets used for competition in gameplay.
- teaching game media literacy regarding how the game designers approached representing history in the game, which includes leveraging any available designer publications, discussions, and statements.

Through our shared experiences of exploration, observation, analysis, and design decision-making, we intend to provide this design case as precedent for other designer/educator teams seeking to adapt learning games to build curricula for new classroom environments.

Design Case

This chapter is presented as a design case. Design cases include thick descriptions of an intentionally designed artifact or experience.[1] While designers have long used design analysis to advance their professional practices, the use of design cases in learning designs is exemplified by scholarly works such as the *International Journal of Designs for Learning*. This tradition of the use of design cases draws from naturalistic research traditions originating in anthropology and sociology.

1 Elizabeth Boling, "The Need for Design Cases: Disseminating Design Knowledge," *International Journal of Designs for Learning* 1, no. 1 (2010), https://doi.org/10.14434/ijdl.v1i1.919.

Learning designers apply design iteration, observation, thick description, and checks on interpretations to provide record of and accounting of design decisions, failures, and practices. These cases are not oriented towards generating generalized knowledge, but rather seek to provide precedents for designers – cases which will assist in the practices of design. This is distinct from design-based research, which uses iteration of designed artifacts for the establishment of new social science knowledge.[2] Though design cases on games for learning involve iteration, the iteration is focused on the process of design as opposed to determining new learning theory.

This design learning case is related but different in intent and approach from action research practices in the classroom. In action research, teachers use systematic inquiry to gather data about teaching, school operation, and student learning in order to increase insight, develop teaching practices, and bring about positive change in the learning environment, student outcomes, and the experience of those involved.[3] In the case described in this chapter, because our goal was curriculum development (see Background below), we focus on the curriculum and its process of development as design artifacts to explore and iterate. We use ethnographic methods and formal IRB procedures to gather data, which would provide us with options beyond the initial design study in terms of methodological analysis approaches. While the data is gathered such that it could be used for social science research, we deploy the data in the service of a design project: seeking design questions and exploring design approaches. Such a design-case oriented process allowed us to respond with flexibility to student responses as well as shifting classroom environments over time, while also capturing and preserving data for more varied research use in the future.

Background: Designers in Collaboration

Co-authors Gottlieb and Clybor met in 2018 at the Game Developers Conference (GDC) in San Francisco when they were both presenting history learning games, and quickly found they had related design interests and complementary skills.

2 (DBRC) The Design-Based Research Collective, "Design-Based Research: An Emerging Paradigm for Educational Inquiry," *Educational Researcher* 32, no. 1 (January 1, 2003): 5–8, https://doi.org/10.3102/0013189X032001005.

3 Geoffrey Mills, *Action Research: A Guide for the Teacher Researcher*, 6th edition (NY, NY: Pearson, 2017).

Gottlieb, a professor, researcher, and designer in the fields of games and interactive media for learning, with a specialty in history and religion, was presenting on his team's 2017 tabletop learning game releases *Lost & Found*[4] and *Lost & Found: Order in the Court*.[5] These two games, one a strategy game and one a legal-reasoning party game, focus on Jewish religious laws of lost and found objects in twelfth century Fustat (Old Cairo), a crossroads of Islam, Judaism, and Christianity, as a means to teach about pro-social aspects of religion (collaboration, cooperation, and sustainable governance practices). The first two games in the series deal with Moses Maimonides' laws for the Jewish community found in the *Mishneh Torah* (1170–1180). In *Lost & Found*, players both collaborate and compete while navigating the laws of lost and found objects with the ability to choose how they respond in each situation such as when and whether to follow the law. They must balance the needs of their family and those of the community, making trade-off decisions. *Order in the Court* is a legal reasoning game in which players create stories to explain how a law might have arrived in a court in the first place. The latest release in the series, *Lost & Found: New Harvest*,[6] introduces Islamic law by Ibn Rusd and Al-Marghinani. When combined with the original *Lost & Found*, *New Harvest* allows players to play as Jews and Muslims living side by side, and to compare the contemporaneous legal systems of Muslim and Jewish neighbours.

Clybor, a published historian with a Ph.D. in history and independent school teacher with ten years of experience in the classroom, was attending the parallel Independent Games Festival (IGF) with the Czech Game development studio Charles Games, whose serious game *Attentat 1942* been nominated for the award "Excellence in Narrative."[7] Clybor played various roles for Charles Games, including translator, localizer, game designer, and curriculum writer on two different video game projects: *Attentat 1942* and its sequel *Svoboda 1945: Liberation*.[8] Set in Czechia, the games are historically-situated narrative adventures comprising multimedia elements (Full-Motion Video, documentary

4 Owen Gottlieb, Ian Schreiber, and Kelly Murdoch-Kitt, "Lost & Found," *Initiative in Religion, Culture, and Policy, MAGIC Spell Studios*, January 1, 2017, https://scholarworks.rit.edu/other/904/.

5 Owen Gottlieb and Ian Schreiber, "Lost & Found: Order in the Court – The Party Game," *Initiative in Religion, Culture, and Policy, MAGIC Spell Studios*, January 1, 2017, https://scholarworks.rit.edu/other/903/.

6 Owen Gottlieb and Ian Schreiber, "Lost & Found: New Harvest," *Initiative in Religion, Culture, and Policy, MAGIC Spell Studios*, November 4, 2020, https://scholarworks.rit.edu/other/947/.

7 *Attentat 1942* (Charles Games, 2017).

8 *Svoboda 1945: Liberation* (Charles Games, 2021).

footage, and interactive comics). The goal of both games is for players to conduct interactive interviews of friends, family, and other "everyday people" in the near-present, and then relive with them their experiences of the Second World War and its aftermath. Through his work with Charles Games, Clybor had developed a keen interest in the possibilities of game-based learning and teaching history through commercial video games.

Clybor and Gottlieb discovered that they shared a passion for teaching history in the classroom through games. Having focused the design of the *Lost & Found* series for undergraduates, Gottlieb was looking to develop approaches and curricula to bring *Lost & Found* to high schools. Clybor had just completed a curriculum guide for *Attentat 1942*, and was looking for innovative ways to incorporate other games and game-based learning in his classroom. This synchronicity led us to collaborate on curriculum development for the *Lost & Found* games series.

Gottlieb and his team had primarily focused on undergraduates as their target audience with additional limited play observation of teens. Gottlieb's team, based at a university game design and development program, has access to many undergraduate players for playtesting and iteration. Gottlieb also reasoned that a tabletop game that would be initially compelling for undergraduates could also have the capability to interest high schoolers, as had been the case with classics such as *Dungeons & Dragons* and *Magic: The Gathering*. Gottlieb wanted to work on a high school curriculum with an expert high school history teacher who was literate in the medium of games. Meanwhile, Clybor recognized an opportunity to work with a game designer on building game-based curricula while enhancing his history classroom offerings, especially because the setting of the *Lost & Found* series coincided with subjects he was teaching. We would work together to design something new that we hoped would engage and excite students while deepening their history skills.

Goals and Approach

We decided that the eventual curriculum should be iterated in the classroom and stimulating for high school students, while also serving the teaching goals of educators. We sought to maximize a diversity of teaching opportunities and learning experiences given the variety and volume of material designed into the games: historical, legal, ethical, art history, and religious studies. To achieve these goals, we decided to explore the use of games in Clybor's classroom with a focus on deeper historical understanding and historical empathy (see section below on this topic).

In terms of collaboration, we worked to share expertise areas, design a playful approach to curriculum development, and respond to what arose in the shifting classroom contexts. In order to capture what occurred, Clybor would gather audio and video recordings on the ground, keep journals of preparation and classroom observations, and share his reflections with Gottlieb.

We conferred on Clybor's lesson plans prior to the in-class events, then, following the sessions, we discussed and analyzed the observations that Clybor had gathered. The initial iteration was initiated following Clybor's instincts for what might work best in his classroom. Gottlieb provided sources in advance to Clybor regarding the history of the period as it pertained to the game. This included secondary sources, original primary source texts of the legal material that was used to develop the game, and a design rationale for how the game incorporates this material. Clybor suggested ways to introduce the material, ways to frame the game or use the game to frame the lessons, and potential approaches to reflection that he felt would be effective. Gottlieb helped Clybor prepare an introductory lesson for the game by providing demo tutorial material and offering suggestions from what Gottlieb and his team had gathered from a variety of playtests and play sessions. After each set of classes, we debriefed, reviewed observations, discussed student responses, actions, and reflections, and considered different interpretations of what we observed. Each year, we drew on the previous years' experience to consider new approaches for iteration: how we might maximize the classroom experience for the learners with regards to exploration of the topic, with each step advancing the lesson plans and approaches.

Historical Thinking, Historical Empathy, and Games

Although it was important to Clybor that the historical content in *Lost & Found* aligned thematically and chronologically with content covered in his curriculum, his core objectives were skill-based: to develop students' historical thinking and historical empathy. In the case of the first two games, this meant historically situating Judaism in the specific context of old Fustat. The third game meant also historically situating Islam in old Fustat. Building upon Samuel Wineburg's work, Clybor's understanding of historical thinking entails remaining aware of our modes of thinking in the present while avoiding the projection of these modes of thinking onto the past. According to Wineburg, the reconciliation of this contradiction makes historical thinking a counterintuitive or "unnatural" act because it requires us to both embrace and escape our presentism – understanding the past

with contemporary values that are based on modern concepts.[9] Peter Seixas similarly argues that historical thinking occurs when students negotiate solutions to six different "problems" that revolve around tensions between history and the historian, who "is a temporal being immersed in time, investigating and writing at a particular historical juncture, with particular lenses, questions and methods," necessarily, with interpretive lenses defined by experiences in the present.[10] One of these key problems, particularly challenging in our curriculum development, is historical perspective taking, the act of juggling historical continuity and change to develop an understanding of "the minds of peoples who lived in worlds so different from our own."[11] Jason Endacott and Sarah Brooks have also provided helpful retrospectives on different scholarly approaches to conceptualizing and building historical empathy. One approach cautions that emotional and affective empathy can lead to presentism, whereas a more cognitive and reason-based approach to empathy draws upon contextualization to reconcile the tensions between our understandings of the past with our inescapable present.[12] In other words, we can never truly know the emotional world of

9 Samuel S. Wineburg, *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past* (Temple University Press, 2001), 84.

10 Peter Seixas, "A Model of Historical Thinking," Educational Philosophy and Theory 49, no. 6 (2015): 6, https://doi.org/DOI: 10.1080/00131857.2015.1101363; cf. Peter Seixas et al., *The Big Six: Historical Thinking Concepts* (Toronto: Nelson Education, 2013). The website of the Historical Thinking Project (https://historicalthinking.ca/historical-thinking-concepts) based on Seixas' work articulates the problems/concepts succinctly as:

1. Establish historical significance
2. Use primary source evidence
3. Identify continuity and change
4. Analyze cause and consequence
5. Take historical perspectives, and
6. Understand the ethical dimension of historical interpretations.

11 Seixas, "*A Model of Historical Thinking*, 9.

12 See: Wineburg 2001; cf., Stuart J. Foster and Elizabeth Anne Yeager, "The Role of Empathy in the Development of Historical Understanding," *International Journal of Social Education* 13, no. 1 (1998): 1–7; Stuart J. Foster, "Using Historical Empathy to Excite Students about the Study of History: Can You Empathize with Neville Chamberlain?," *The Social Studies* 90, no. 1 (January 1, 1999): 18–24, https://doi.org/10.1080/00377999909602386; Bruce VanSledright, "From Empathetic Regard to Self-Understanding: Im/Positionality, Empathy, and Historical Contextualizations," in *Historical Empathy and Perspective Taking in the Social Studies*, ed. O. L. Davis Jr., E. A. Yeager, and S. J. Foster (Lanham, MD: Rowman & Littlefield Publishers, 2001), 51–68; Stéphane Lévesque, *Thinking Historically: Educating Students for the Twenty-First Century*, *Thinking Historically: Educating Students for the Twenty-First Century* (University of Toronto Press, 2008); Jeffrey Nokes, *Building Students' Historical Literacies: Learning to Read and Reason with Historical Texts and Evidence* (Routledge, Taylor & Francis Group, 2012).

historical actors, but we can know the context that framed their potential emotional responses. Another approach to historical empathy drawing upon Keith Barton and Linda Levstik, among others, notes the dangers of erasing emotion and affect from the study of history.[13] Summarizing this approach, Lisa Gilbert argues:

> While they [Barton and Levstik] agreed that imagining the emotions of others as though they were one's own represents a problem for historical reasoning, they reminded readers that this action should rightly be categorized as sympathy rather than empathy. Further, Endacott and Brooks (2013) suggested that "students must be able to find an affective connection between the experiences faced by historical figures and similar experiences in their own lives" as one of the skills necessary for historical empathy (p. 46). They indicated that this approach to historical empathy "can help students develop a stronger awareness of needs around them and a sense of agency to respond to these needs. (p. 45)"[14]

Here Gilbert transitions from Barton and Levstik to settle on a definition of historical empathy oriented in the work of Endacott and Brooks; namely that historical empathy is a "dual dimensional" act of cognitive perspective recognition plus affective connection (what Barton and Levstik describe as "caring.")[15] By this approach, learners perform the cognitive work of empathy to avoid presentism, but they also need to care about whom they are learning about. They need to care in the sense that they are able to make moral judgements about the material, develop compassion for people's experiences in the past, and take civic action

13 Keith C. Barton and Linda S. Levstik, *Teaching History for the Common Good* (New York: Routledge, 2004), https://doi.org/10.4324/9781410610508; Sarah Brooks, "Historical Empathy in the Social Studies Classroom: A Review of the Literature," *Journal of Social Studies Research* 33, no. 2 (Fall 2009): 213–34; Jason L. Endacott, "Reconsidering Affective Engagement in Historical Empathy," *Theory & Research in Social Education* 38, no. 1 (January 1, 2010): 6–47, https://doi.org/10.1080/00933104.2010.10473415; Jason L. Endacott and Sarah Brooks, "An Updated Theoretical and Practical Model for Promoting Historical Empathy," *Social Studies Research and Practice* 8, no. 1 (2013): 41–58; Elif M. Gokcigdem, *Fostering Empathy Through Museums* (Rowman & Littlefield Publishers, 2016); Jason L. Endacott and Sarah Brooks, "Historical Empathy: Perspectives and Responding to the Past," in *The Wiley International Handbook of History Teaching and Learning*, ed. Scott Alan Metzger and Lauren McArthur Harris (John Wiley & Sons, 2018): 203–25, https://doi.org/10.1002/9781119100812.ch8.

14 Lisa Gilbert, "'Assassin's Creed Reminds Us That History Is Human Experience': Students' Senses of Empathy While Playing a Narrative Video Game," *Theory & Research in Social Education* 47, no. 1 (January 2, 2019): 6, https://doi.org/10.1080/00933104.2018.1560713.

15 Endacott and Brooks, "An Updated Theoretical and Practical Model for Promoting Historical Empathy," 44; cf. Barton and Levstik, *Teaching History for the Common Good*, 228–243.

based upon what they learn.[16] Caring requires affect, and is key for empathetic engagement in history.

Attuned to the affective power of the medium of games, both Gottlieb and Clybor seek to leverage both the cognitive and affective opportunities for learners through historical empathy. James Gee has long noted the importance of role-taking in games in terms of its exploration of identity.[17] Game designers also understand the power of emotion in play. For example, Tracy Fullerton devotes an entire section of her text on game design to "Working with Dramatic Elements:" [T]hese elements are what engage players with the formal system – what gets them and keeps them emotionally involved in the game. Challenge, play, and story can all provide emotional hooks that captivate players and invest them in the outcome so that they will keep playing.[18]

The medium of games and the act of play is attuned to affective experience as well as cognitive experience. Therefore, approaching the teaching of history with games should attend to both cognitive and affective historical empathy. What might the students think while problem solving? And how might they engage, in terms of affect?

In the Classroom

In 2018, Clybor brought the strategy game *Lost & Found* to his ninth-grade honours ancient world history course as the culminating activity of a larger unit that focused on the Middle Ages in the Mediterranean World. The school is a private high school in the Northeastern United States. The population of the school includes both non-Jewish and Jewish students, some of whom may have had previous exposure to some of the Jewish texts. All student names have

16 At the core of Barton and Levstik's approach is understanding the purpose of history education as preparing learners to be citizens in a pluralist democracy, and so students must learn history to develop a sense of caring about that role and responsibility. Gilbert, "Assassin's Creed Reminds Us That History Is Human Experience," 6–7; see for example, Barton and Levstik, *Teaching History for the Common Good*, Chapter 2, Chapter 12.

17 James Paul Gee, "Stories, Probes, and Games," *Narrative Inquiry* 21, no. 2 (January 1, 2011): 353–57, https://doi.org/10.1075/ni.21.2.14gee; James Paul Gee, *What Video Games Have to Teach Us About Learning and Literacy. Second Edition: Revised and Updated Edition*, 2nd ed. (Palgrave Macmillan, 2007).

18 Tracy Fullerton, *Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Third Edition*, 3 edition (Boca Raton: A K Peters/CRC Press, 2014): 341.

been replaced with pseudonyms in this article.[19] The class included nine students in total (five girls and four boys), ranging in age from 14 to 15 years old. Clybor's initial lesson goals were for students to:

- Explore the possibilities and limitations of religious co-existence in the Fatimid Caliphate, and compare this milieu to other civilizations in the Mediterranean world.
- Explain how Jews, as a religious minority, used religious laws to define and manage their communities in the Middle Ages.

These goals connected to larger themes central to his course, such as cultural blending and religious co-existence, and melded nicely with the kinds of design intent that motivated the game's development.

Clybor's *Lost & Found* mini-unit took four days to complete. The first class began with a short lecture and finished with a guided group discussion on two assigned readings: a short secondary source article from the *Jerusalem Post* about the Fatimids,[20] and a primary source excerpt in Hebrew and with English translation from Maimonedes' *Mishneh Torah*.[21] Some of the game's core mechanics and many of the scenarios were based on and inspired by a particular chapter of *Mishneh Torah, Gezelah va'Avedah*, that deals with the return of lost belongings. The next two days were devoted to the play sessions. On the first day, Clybor organized the class into two groups of four to five students, provided a 10-minute tutorial, and then walked students through their first round of play. The rest of this class and the entire next class were devoted to independent game play. The last day was devoted to a class-wide reflection, during which the students proved so eager to discuss the game that Clybor rarely needed to pose the questions he had prepared in advance; instead he reacted to comments, asked follow-up questions, and offered observations to channel the conversation.

Clybor's initial expectation was that students would use their historical reasoning skills to connect content from the game to content from the assigned primary and secondary sources to develop an argument about how Jews used religious law to define their communities in the Middle Ages. This occurred primarily with the *Mishneh Torah* excerpts, which the students referenced throughout their play

19 Students and parents all consented to participation in adherence to IRB procedures. Use of pseudonyms for students is specifically for publisher specifications.

20 Seth J. Frantzman, "To Pray Where Maimonides Prayed," The Jerusalem Post | JPost.com, February 14, 2017, https://www.jpost.com/diaspora/to-pray-where-maimonides-prayed-481462.

21 Rabbi Eliyahu Touger, *Rambam Mishneh Torah: Sefer Nezikin* (Moznaim Publishing, 1997).

sessions and group discussion. One of the groups even called Clybor over to read an excerpt with them to confirm that their understanding of the text was correct in terms of how they were applying it to make a decision regarding their gameplay. Another student, Marc,[22] reported to Clybor that on his way home after the first day of play that he saw another student unknowingly drop a quarter while exiting the school bus. That evening Marc called the student to announce that he had found a piece of his lost property. The student he called was dumbfounded as Marc explained to him that because they were both Jewish he had an obligation in "the spirit of the *Mishneh Torah*."

An unexpected theme that emerged almost immediately during the class-wide debrief was whether it was the additional historical context such as the lecture and readings or the game itself that provided the richest opportunities for learning. Initially, Marc, Larry, and Paul expressed the opinion that the game was not particularly useful for learning history beyond the supplemental context, such as the class readings and overview of the rules. Danica disagreed with this opinion, leading to the following exchange between her and Clybor:

> Danica: "Once you learn the rules, I agree that's where the historical context ends, but I think it really helps, as someone who isn't Jewish, and who doesn't have a lot of experience with Judaism, to learn what the essence of the Mishneh Torah really is, and what the overall themes of it are in relation to . . . to . . . "
>
> Clybor: "How the religion functions?"
>
> Danica: "Yes. Like how it functions in the historical context that we're learning about."
>
> Clybor: "As opposed to?"
>
> Danica: "As opposed to just learning the basic facts of the period."

Here Danica discussed her interpretation of play through its procedures and her role within them, which, she expressed, gave her a sense that she was learning through direct experience about the perspective of someone following their daily life in the context of *Mishneh Torah* laws. In other words, Danica was speaking to a different type of context, which she believed allowed her to understand an "essence" of a historically located cultural experience through the play process. We can see here both the risks of presentism, and essentialism, but also the potential for players, through following procedures and roles in a game, to develop a sense of first-hand connection to a historical experience. The game's mechanics,

22 Pseudonym, as is the case with all student names in article.

the carefully researched illustrations on the cards, and the overall social milieu of gameplay may have all contributed to her interpretation of this experience. Clybor and Gottlieb suspect that this is likely a combination of the cognitive processes of thinking and reflecting on play, but also the affective experience of play within the game's rules and procedures, including the social experience of play with classmates, which involved gossip, laughter, and personal stories. During the play sessions Danica's behavior was especially animated, as she threw her hands in the air, swung backwards in her seat, and even held up different game cards to the camera recording their play.

In the moment, Clybor wondered whether, with more reflection, students like Danica might draw upon their affective experiences to explore how historically-situated structures, systems, and rules impact behavior and perspectives. Indeed, after Danica responded, several other students mentioned the impact of the game on their behavior. For example, according to Larry: "Aside from teaching you how, giving you a simulation of how the *Mishneh Torah* was really used in real life, or the teachings from it, it also, the game itself helps to develop skills that are useful later in life, like critical decision making, and prioritizing things." Larry had initially argued that the gameplay had limited value as a teaching tool, but here, perhaps responding to Danica, he is pointing out that the game encouraged him to use important skills such as decision-making and prioritizing (in this case player versus group incentives). Looking back at the data, Clybor realized that the curriculum might encourage students such as Larry to consider the skills of decision-making and prioritizing – but in an historically contextualized way, as opposed to such skills understood outside of such historical context. Could we engage students in considering how decision-making might be impacted by the social structures, values, and norms of a particular time and place? How might decision-making in twenty-first century northeastern United States be different than decision-making in twelfth century Fustat? How might decision-making regarding communal responsibility, interdependency, and cooperation have been different in medieval Fustat than in contemporary New Jersey? By considering such context and questions, perhaps Larry could engage directly with presentism.

After Clybor discussed his observations with Gottlieb, one of the conclusions he came to was that he needed to loosen his plans for developing his lessons. While designing a curriculum was still his primary objective from this project, he realized that he did not fully understand what was resonating with the students. He had wanted students to deepen their retention of historical content by reinforcing that content through game play; instead he began wondering how he could encourage them to draw deeper connections between their own affective play experiences and their perceived experience of historical context. They were

role-playing the experience of living within the legal and sociocultural systems that inspired the design of the game's mechanics and rules. Moving forward, Clybor would therefore emphasize the *Mishneh Torah* text and de-emphasize the broader historical context by cutting the secondary source article and shortening the lecture. This allowed us to observe with greater flexibility how students were responding to and learning from the game, with an eye towards designing future curricula around these emergent learning experiences.

In 2019, we shifted over to using the legal reasoning party game *Order in the Court*, in which players craft stories to the scenarios that might have led to the origin of a particular law in the *Mishneh Torah*. It is usually played for humor – to see who can create the most entertaining stories. The "judge" position rotates. When players are curious, the actual explanations for the rulings and the laws on which they were derived are provided on the backside of the cards. This time, Clybor designed his classes with less structure and less emphasis on the broader historical context of the Fatimid Caliphate. This class was larger than the previous group, including 15 students, six boys and nine girls, again ranging from 14 to 15 years old.

The first day of class was focused primarily on a discussion of the *Mishneh Torah* excerpts, followed by one day of play, and (after a last-minute change in his school's schedule) a shortened second day of play followed by a quick 20-minute discussion. Finally, instead of including the play sessions as an integrated part of his final unit on the Middle Ages, he scheduled the game for the week after the assessment. In part this was due to timing – he had an extra week of class before the academic year ended – but he also wanted to think more creatively about the types of assessments that he might be able to develop by first observing the students' play.

During their game play, Clybor again noticed that the students were using their reasoning skills to draw upon the *Mishneh Torah*, this time to better situate their rulings in what they imagined to be its "authentic" historical and legal context. The students' efforts to simulate the Maimonides reading was especially strong in one group, with heavy doses of showboating, where the boys seemed eager to win the attention of the girls. In other words, the internal social dynamics of the groups appeared to provide intrinsic motivation to better instrumentalize the class materials. Whatever their underlying motivations, the students only rarely (and at Clybor's behest) read the provided explanations on the backsides of the cards at the end of their turn. They seemed much more likely to incorporate previous information they had already learned "on the fly," including both the Maimonides excerpts and other texts. For example, students in two different groups attempted to simulate the rhetoric of biblical stories and oral myths they had studied in Clybor's class earlier that year.

During the discussion, Clybor followed up on these observations and asked the students whether it had helped them to read the excerpts from Maimonides. Most of the students agreed, and were able to supply specific instances in which they drew upon the excerpts to better simulate legal reasoning or better situate their reasoning in its historical context, at least to the extent that they understood it. Rachel summarized, "You can compare it to the kinds of rulings that happen, or [Maimonides'] general idea of the style of writing." Josh later added, "You could also incorporate other laws, other than the one that was being [used] in the ruling." When Clybor asked if Josh could provide an example, he responded: "Yeah! There was a ruling about how your possessions would take priority over a teacher's possessions. So when I was explaining it I tried to make it sound like you were more knowledgeable than the teacher because there's that thing about how you should return something unless the other person is wiser than the teacher." On the other hand, none of the students offered specific examples of how they applied (or could have applied) content from the (now abbreviated) historical context lecture about the Fatimid Caliphate. When Clybor asked them about it directly, two of the students noted that it was important information to know, but similar to the 2018 group they were unable to provide specific examples of how or why it was important to know. The students also seemed to pick up, at least intuitively, on the importance of simulation as a means of using their historical thinking skills. For example, when Clybor asked them what a "fair assessment" for the game might look like, Katrin suggested: "What do you think, socially, is happening in the period, and how does this impact the rules you were seeing?" Several students agreed that contextualizing the rulings could be a useful exercise for a test. Others suggested that a fair test would ask them to do exactly what they had done in the game, namely to hypothesize situations that may have led to the ruling, but to do so more "academically" by writing out their answer, supplying contextual evidence, and incorporating primary sources such as Maimonides.

While reviewing their gameplay, Clybor noted that similar to the 2018 class the additional materials that seemed to matter most to the students were those that aligned more closely to the procedures simulated in gameplay, perhaps because they provided a gameplay advantage. Because some of the students were demonstrating competitive prowess in the game by making strongly constructed legally reasoned stories, Clybor suggested to Gottlieb that moving forward, we spend more time advancing the class as a whole with additional readings they could draw upon, and more sample turns and cases. We expand on this idea in greater detail in the reflections section below.

2020 was a different year for many reasons. The new standalone expansion to the strategy game, *New Harvest*, was close to release, which meant that Gottlieb's

team had an opportunity to playtest it with Clybor's students prior to completing its design. They would be able to make adjustments to the game from what they learned. What might arise from using a not-yet-finished game in the classroom, and how might that influence our work designing curriculum with the series? Our third year was also different in the classroom. Clybor was no longer teaching the ninth-grade ancient and medieval world history class, and opted instead to recruit volunteers and run the sessions shortly after winter break. He found four senior volunteers: Cindy, Daniel, and Zach were enrolled in his video games senior elective, and Frank was conducting his senior capstone research project on the educational uses of *Dungeons & Dragons* in middle school.

The play sessions ran across several weeks from February through early March. Because the sessions were conducted with a prototype early build of *New Harvest* that did not include illustrations, Clybor first had the group play the original *Lost & Found* to help them understand how it might look. The next two play sessions were conducted with the *New Harvest* prototype. The final discussion was cancelled due to the school closing in response to the COVID-19 pandemic outbreak. Given the voluntary nature of the play session, Clybor was unable to deliver an introductory lecture or assign outside reading materials. Instead, Clybor and Gottlieb built upon the open-ended approach to lesson planning they had employed in 2019 so that it focused less on what the students were learning in terms of content and more on the types of interactions and behaviors they were exhibiting.

By dint of how the group was chosen, namely for their interest in games and game design, this group expressed more curiosity about the design process than earlier classes. They were also older, which meant that their suppositions and questions were relatively more sophisticated than previous groups. For these reasons, and unlike previous sessions, Clybor explained the project to them in greater detail before the play sessions began, and instead of providing historical context offered them more direct information about the game itself. As a group, the students seemed to take quite seriously their role as "play testers," a role not afforded to the earlier groups because the games were already published. Throughout their play sessions, they repeatedly analyzed the logic behind game mechanics and drew connections between design decisions and the historical processes that the game simulated. One striking example occurred while the students discussed their plans to complete one of the game's "communal responsibilities," building a mosque. When Frank decided that his character, the stone mason, would complete his "Hajj" (pilgrimage to Mecca) family responsibility before the mosque's completion, the group began to suppose how this might work, both in terms of the game and in terms of the simulated game world:

Frank: Ok . . . I'm going to pay all of [the communal responsibility], and . . .

Cindy: Finish your family responsibility?

Frank: Finish my family responsibility. (*Looks at card and misreads it*) My heritage.

Zach: You mean Hajj?

Frank: (*Correcting himself*) The Hajj . . .

Zach: (*Interrupts*) It's a pilgrimage.
(*Group discussion continues*)

Frank: (*Reading card*) Player cannot contribute to crises and disasters until the end of their next turn.

Cindy: All can't?

Daniel: No, [Frank] can't!

Zach: (*Gasps*) Because you're off in Mecca! (*In a motherly voice*) Have fun in Mecca, sweetie!
(*The game continues and* Frank *takes his next turn*)

Frank: "While I'm away on my pilgrimage I can still pay for [family and community responsibilities] right? . . . I'm just immune to disasters and crises."

Daniel: "Well you are immune, but the community isn't. And if you come back and the community is dead . . . you're in a bit of trouble."

Frank: "But I can still pay for a mosque and stuff."

Zach (*laughing*): "Our mason [Frank] is gonna pick up a boulder out in the desert and chuck it! That would be a *problem* more than it would *help* build a mosque!"

When the conversation shifted to funding the "doctor" community responsibility first, to make the mosque cost less to fund, Clybor asked the group why they thought a doctor would have that effect:

Cindy: I don't know . . .

Zach (*interrupting*): Well if our mason is chucking boulders from miles away, I think we've got our answer!

Here, and at several other points during their play sessions, the students are demonstrating a creative levity while making strong connections between game rules and the enacting of Islamic religious and legal expectations in the twelfth century in Fustat. At other times, their tendency to rationalize game play in terms of historical phenomena led them to over-attribute certain game rules and

mechanics that were necessary abstractions from a design perspective – often due to playtime constraints (see Gottlieb and Schreiber 2020a and 2020b). At one point, they began comparing the cost of building a mosque in *New Harvest* to the cost of building a synagogue in *Lost & Found*, and drew spurious conclusions about the cultures and socio-economic status of Jewish and Muslim communities. In this instance and every other, they did not once express the possibility that certain rules or design decisions might not be accurate reflections of the historical past, nor did they do so at any other time throughout their three sessions of play. Gilbert noted what appears to be a similar phenomenon in her study of her use of *Assassin's Creed* with high school history students:

> students perceived so many positives in their emotional engagement with Assassin's Creed that they often uncritically trusted that their gameplay experiences translated to real insight about the lived experiences of people in the past. Even as they theorized about the historical accuracy of Assassin's Creed, they often did so in a way that evidenced a great deal of trust in Ubisoft's game designers.[23]

Gilbert also points to Lynch, Mallon, and Connolly, who:

> [F]ound that students improved their knowledge of the historical event but benefitted from debriefing to clarify which game characters were historical figures and which were fictional. The researchers concluded that there is an 'absolute necessity for post-game reflective discussions to take place in order to disentangle factual and fictional elements and complement the learning experience.'[24]

Similarly, Gottlieb had found that in training educators to use mobile augmented reality games for teaching history, discussion following play was necessary to disentangle historical fiction and fact within a situated documentary. This was key even when distinguishing markers were placed in the game to differentiate moments of historical fiction.[25]

Perhaps the students' emotional engagement was the cause of their misattribution in our *Lost & Found* sessions, or perhaps their self-understanding as playtesters led them to exaggerate the particular level of historical fidelity available to the game design process (*Lost & Found* has high fidelity on legal and material culture and more abstraction of economic systems in order to allow for

23 Gilbert, "Assassin's Creed Reminds Us That History Is Human Experience," 12.

24 Gilbert, "Assassin's Creed Reminds Us That History Is Human Experience," 5; Cf., R. Lynch, Bride Mallon, and C. Connolly, "The Pedagogical Application of Alternate Reality Games: Using Game-Based Learning to Revisit History," *Int. J. Game Based Learn* 5 (2015): 35, https://doi.org/10.4018/ijgbl.2015040102.

25 Owen Gottlieb, "Who Really Said What? Mobile Historical Situated Documentary as Liminal Learning Space," *gamevironments*, no. 5 (December 29, 2016): 237–57.

play within the time of a class period).[26] Whatever the reason, we were able to catch these misattributions only because Clybor was in direct conversation with Gottlieb, the game's co-designer, and therefore had intimate knowledge of the design process. Gottlieb knew that the decision regarding the cost of the mosque was made primarily for game play as opposed to specific economic models and even went back and checked his hunch with Ian Schreiber, his collaborator and core mechanics designer, and confirmed this to be the case.

During our conversations, Clybor raised the issue of this being a problem of media literacy and Gottlieb agreed, having written previously on teaching about the constructed nature of historical narratives through the use of historical fiction in games.[27] Gottlieb and Schreiber had also, more recently, published design research regarding such decision-making while designing history games, noting that the level of model fidelity in the *Lost & Found* series was often bounded by the target play time – a game using a high-fidelity economic model of Fustat in the twelfth century would take many hours to play.[28]

Clybor suggested, and Gottlieb readily agreed, that part of the curriculum moving forward, and perhaps for other history games, should include opportunities for students to identify and critically engage the boundaries between the historical research on which games are based and other types of designer intentions, such as making games engaging or fitting within a certain playtime constraint. Could we explore disentangling facts from game design decisions? Central to historical thinking is the ability to engage, analyze, appraise, and interpret different representations of the historical past from a broad range of sources, and much of what students learn about history today often comes from popular media. Understanding game design thus seems essential to understanding the possibilities and limitations of historical representation in games. Moving forward with the curriculum design, we plan to attend to the importance of media literacy in general, and game-design literacy in particular, as part of using game and other historical fictions and believe this is a key opportunity for developing historical thinking.

26 See: Owen Gottlieb and Ian Schreiber, "Lost & Found: New Harvest," *Initiative in Religion, Culture, and Policy, MAGIC Spell Studios*, January 1, 2020, https://scholarworks.rit.edu/other/947.

27 Gottlieb, "Who Really Said What?" 2016.

28 See: Owen Gottlieb and Ian Schreiber, "Designing Analog Learning Games: Genre Affordances, Limitations, and Multi-Game Approaches," in *Rerolling Boardgames*, ed. Esther MacCallum-Steward and Douglas Brown (McFarland Press, 2020), 195–211; Owen Gottlieb and Ian Schreiber, "Acts of Meaning, Resource Diagrams, and Essential Learning Behaviors: The Design Evolution of Lost & Found," *International Journal of Designs for Learning* 11, no. 1 (February 5, 2020): 151–64, https://doi.org/10.14434/ijdl.v11i1.24100.

Reflections, Curricular Design Decisions, and Looking Ahead

Over the three years, while there were numerous design decisions that we made over the course of exploring and iterating our curricular approaches, three broader sets of design decisions crystallized for us from our observations and reflections. During the first sessions in 2018, students appeared to be engaging with their role in the game and the procedures they had to enact during game play. We theorized that a shift from emphasis on content synthesis to an historical empathy approach might take best advantage of student affect, engagement, and caring. This would mean de-emphasizing broader lectures and textbook readings on the period, and instead shifting to a greater focus on material that would specifically leverage gameplay (in this case, the primary *Mishneh Torah* legal text). In so doing, and with guided reflection, we would hope this focus could better facilitate historical thinking as students link their game experiences, especially their cognitive and affective responses to game mechanics and systems, back to the historical material. As our thinking moved in this direction, and as we headed into the 2019 iteration, Clybor shortened the background lecture and increased time spent on the *Mishneh Torah* text.

When analyzing our 2019 iteration in preparation for 2020, we noted that certain students demonstrated engagement in competition through skill deployment, including student argumentation and reasoning. Clybor suggested we enhance relevant skill development across the class prior to deploying the game. Although shifts in Clybor's teaching load and the outbreak of the pandemic prevented us from implementing this approach, it resonates with how game design theorists deploy Csikszentmihalyi's work on Flow theory: in order to get deeply absorbed in performance in an activity while performing at a high level, one must have a base level of skill and receive feedback on that skill deployment.[29] In the case of *Order in the Court*, the legal reasoning game, this suggested providing additional and expanded scaffolded example cases to practice the process of building a reasoned case prior to competitive play, or perhaps even between sessions. *Order in the Court* comes with an example case in the rule book, but Clybor suggested more in-depth and repeated practice, ideally with primary source documents. We believe we can better take advantage of engagement across more of the class by raising students' base-level historical thinking skills to improve their gameplay, thereby developing and enhancing their ability to compete. With

29 Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, 1st HarperPerennial ed. (New York: HarperPerennial, 1991).

incentives to use the material in play, the students should also retain the material better. We would also expect to see improvements in the quality of their legal reasoning in a historical context. We would need to balance their enhanced skill performance and competition with the need to maintain spontaneity, humor, and playfulness. In the judging role, players can still select for humor, and so based on the playtest with undergraduates, we suspect the high school groups will moderate the competition with humor. If historical thinking is an "unnatural act" for students, silliness certainly is not, especially with a game oriented towards generating humorous answers.

We would need to see how this approach plays out in the classroom. If more scaffolding assists in developing better reasoned legal cases in the context of the historical legal system, it would be a significant advancement for use of the game in the classroom. Boosting perspective taking and simulating period specific, contextualized thinking through the affective experience of operating within a system of game mechanics and rules may also lead to overcoming, or at least recognizing, presentism in a way that would circle back to Endacott and Brooks' dual dimensional understanding of historical empathy.[30] Such an enhanced curriculum could allow for cognitive perspective recognition to reinforce a stronger affective connection while a stronger affective experience in gameplay could reinforce cognitive perspective recognition. Such a recognition of presentism would of course require educator-guided reflection on issues of presentism. To help develop increasing understanding of the specific milieu, the educator can also leverage the game's own "explanation" sides of the card as a reveal by reminding students to turn over the "explanation" at the end of each turn. Each round then can advance understanding of the particular historical context, which should also assist in pointing out the risks of presentism.

By 2020, the third area of design shift for us was towards media literacy, and specifically in this case, literacy regarding game design. Through a better understanding of how designers make choices in their representations of the historical past, students may be able to directly apply historical thinking and historical thinking skills to analysing game environments. Games for which there is access to designer interviews, publications, or statements could be key extra-textual sources. In the case of *Lost & Found*, such material already exists and can be leveraged by educators. For example, students could be assigned the designer article: "Acts of Meaning, Resource Diagrams, and Essential Learning Behaviors:

30 Endacott and Brooks, "An Updated Theoretical and Practical Model for Promoting Historical Empathy," 2013, 41–58.

The Design Evolution of *Lost & Found*."[31] Alongside an analysis of the primary source material, the *Mishneh Torah*, educators could engage students in reflection about historical representations and how game designer decisions impact choices in the portrayal of history, economic systems, and cultural milieu. Such decisions could be further used to analyze how historical narratives are constructed more broadly, something Gottlieb has explored in a mobile phone GPS "situated" documentary.[32] This approach could further leverage research and scholarship in teaching history with other media such as Marcus, Metzger, Paxton, and Stoddard's work in teaching history with cinema.[33]

In terms of future research and design, we are planning to use these three broader design decisions to orient the classroom curriculum. From a research perspective, we would test the theories, using instruments such as pre-and post-tests, semi-structured interviews, analysis of talk practices and artifacts developed by students. From a design perspective, we would iterate the curriculum, working towards more refined lesson plans which we could share with the broader community via the *Lost & Found* website so that other history teachers can benefit from our explorations. Our hope is that through sharing this design case and exploration that other designers and educators may be able to benefit from the steps we have taken thus far, perhaps leveraging more media literacy, expanded targeted skill scaffolding, and taking advantage of engagement for focus on historical empathy – both cognitive and affective. We believe games as a medium offer some particular affordances for teaching history, such as active role play, modelling and analyzing procedural social and economic systems and emulating group or community dynamics. We are excited to be a part of this growing set of practices of games in the history classroom and hope that our explorations help expand and deepen those practices.

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31 Gottlieb and Schreiber, "Acts of Meaning, Resource Diagrams, and Essential Learning Behaviors."

32 Gottlieb, "Who Really Said What?"

33 Alan S. Marcus et al., *Teaching History with Film: Strategies for Secondary Social Studies* (Routledge, 2010), https://getit.library.nyu.edu/go/5900661.

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