Playing at the crossroads of religion and law: Historical milieu, context and curriculum hooks in Lost & Found

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Introduction: Creating a game series for learning

In this chapter, I use design case studies to demonstrate how collaborating designer-researchers and I approached questions of historical accuracy and notions of authenticity in the creation of games designed to teach about religious legal systems of North Africa in the twelfth century. I intend for these cases to share the processes and considerations of the team during the creation of these games. The decisions spanned a number of fields, as the games for learning cover history, law, art history and comparative religion. By providing such a record, this text also serves as a supplementary text to the games themselves, for those educators using the games in formal and informal learning environments and for those examining design considerations regarding representations of history in games. This work is an account of philosophy in action as we created artefacts addressing a variety of problems in teaching history, law and comparative religion.

The *Lost & Found* game series is set in Fustat (Old Cairo) at the time when the great legal scholar, philosopher, rabbi and physician, Moses Maimonides was writing his fourteen-volume law code, the *Mishneh Torah* (1170–1180 CE). Maimonides was seeking to write a Jewish law code that could provide his contemporaries with a more concise approach to the hundreds of years of accrued debates following the first post-biblical law code, the Mishna (redacted circa 250 CE) and the legal debates and story literature of the Talmud (Babylonian Talmud redacted circa 600 or 650 CE) as well as all the various debates, glosses and commentaries that followed the Talmud. He sought to provide a more clarified legal code that could be followed in daily life. Maimonides was also influenced by great Islamic jurists and scholars including Averroes and Al-Ghazli, and Fustat at this time was a crossroads moment for Jews, Muslims and Christians. The period and locale is one that is rich with opportunity for study and exploration and, unlike Spain during *La Convivencia*, has received, in my estimation, less popular attention that twelfth-century Fustat.
The *Lost & Found* series currently consists of two published tabletop (board/card) games concerned with the law around lost and found objects. The first game is *Lost & Found*, a strategy game about balancing trade-off decisions between communal and family needs in the face of legal cases. The second is *Lost & Found: Order in the Court – the Party Game*, which is a storytelling and legal reasoning game. The design team has also developed a digital mobile prototype of the strategy game for the National Endowment for the Humanities, and the team is currently developing an expansion module of the tabletop strategy game addressing Islamic laws of the period and locale. For purposes of clarity in the remainder of the chapter, the original strategy game is referred to as *Lost & Found*, while the party game is referred to as *Order in the Court*. The mobile version of the strategy game will be referred to as 'the digital prototype'.

The first two tabletop games took over four years to develop. I led the interdisciplinary teams, which included twelve scholars and twenty-eight graduate and undergraduate students. Scholars on the team included those covering the fields of medieval Jewish and Islamic studies, religious literacy and comparative religion, as well as game design and development, illustration and graphic design. Students worked with faculty on aspects of the games including game design, illustration, sound design (for the digital prototype), knowledge management, project management, software development and more.

The impetus for the creation of the series was twofold. First, the series seeks to expand the discourse around religious legal systems. Today, the study of religious legal systems is often relegated to graduate courses at universities which provide the deep context to those who pursue advanced studies. On the other hand, the broader public may only hear of religious legal systems through sensationalized clips on cable news. All too often, these clips, without context or research, lead to incitement by fear. For example, contemporary discourse is influenced by mentions of ‘Sharia law’ as a modern legal system to fear, as opposed to a set of historically grounded, specifically contextualized ideas to understand. The second driver beyond the development of the *Lost & Found* series is a desire to explore the boundaries of the discipline of games and learning by investigating how historically contextualized legal systems might be modelled by game systems. Both games and legal systems are rule-based, and so this intersection appeared an important parallel to explore for the field of games and learning.

The central purpose of the *Lost & Found* series is to serve as a learning artefact to use in formal and informal learning environments. The goal of the use of these artefacts is to expand the discourse around religious legal systems, including promoting the understanding of the historical prosocial aspects of these systems, namely collaboration, cooperation, governance and community sustainability. Team member Diane Moore writes of the importance of setting religion in its context of time and place in her text *Overcoming Religious Illiteracy*. The team went to great lengths to design historically accurate reproductions in the games, with illustrations of architectural patterns, coinage and other artefacts of the period including various vessels. When considering questions of authenticity, the series takes into account a number of possible interpretive stances educators and learners may take while playing, exploring and reflecting on the games.
The structure of the games

Prior to moving onto notions of accuracy and authenticity, and in order to provide a window in the games themselves, this section will describe an overview of gameplay of the two games. This is not an in-depth description of play, given the purpose of this particular chapter, but rather is intended to provide enough context to appreciate the design work concerned with issues of historical accuracy and authenticity. For an extended discussion of the game systems, see Gottlieb, 2017; Gottlieb & Schreiber, 2018; Gottlieb and Schreiber, forthcoming. Detailed manuals/rulebooks for the games are available at www.lostandfoundthegame.com.

The first game, *Lost & Found*, is a strategy game combining mid-weight Euro-style competitive mechanics with cooperative mechanics from American games such as *Pandemic* (Leacock, 2008). This competitive-cooperative game is targeted to high school students. The game is for three to five players, comprising six turns through thirty-three game events. Play lasts between forty-five minutes and seventy minutes depending on players' familiarity with the rules. In the game, players take on roles representing families in twelfth-century Fustat. Over the course of the game, players must resolve Events, such as losing or finding animals or other belongings. The Events are mostly drawn from cases in the *Mishneh Torah*. Players must address the events with limited resources. For example, they may need to decide whether to follow the law, break the law, or go above and beyond the law to help their neighbours. If a neighbour's cow has wandered away, what will they decide? Meanwhile the path to winning requires contributing resources (in the form of the in-game currency, *dinarim*) to both family and communal responsibilities. Family responsibilities include, for example, teaching one's children a trade, or teaching them how to swim. Communal responsibilities include building a bathhouse and training a doctor. Family responsibilities are incentives specific to the player while communal responsibilities must be achieved cooperatively. Additional cooperative actions include working together to solve Crises and Disasters such as fires, windstorms, and plagues.

Any or all players can win. If any player 'goes destitute', the term for a player unable to cover basic resource requirements, then all players immediately loose. In order to be eligible to win, the group must collectively complete at least six communal responsibilities prior to the end of the game. If by end of game, the 'communals' are completed, then those players who have also completed three family responsibilities win. If players decide during the game to either break the law (for example, in using property owned by another for their own gain) or go above and beyond the law to help a neighbour, then the number of required family responsibilities may be altered in the end game turns. The uncertainty of whether law breakers are caught and whether those who go above and beyond the law are managed through a late-in-game card draw from the *heshbon*, or accounting, deck. The core mechanic of the game is weighing trade-off decisions as players navigate the events and their responsibilities to family and community while under resource constraints. If all players win (one of the possible, yet challenging, outcomes), it is considered to be a 'thriving community'.
Order in the Court is a very different type of game, based on the same underlying material. Designed for faster play and particularly concerned with encouraging conversations about legal reasoning, this game can be played by three to five or more players (we have had games with up to eight players). It is targeted for learners in junior high and up, and a three- to five-player game takes about thirty minutes. Larger groups may increase the time of play. In the game, players take turns as judge as the other players use Story Cards with people and objects referenced in the chapter of Mishneh Torah. The goal of their stories is to explain how an arcane law the judge reads might have gone to a court in the first place. The Ruling Card has the arcane ruling on one side. Players compete for the judge's favour, often through humour, crafting and then presenting their stories using at least three of the cards in their hands in the story. Once the judge decides on a winner for the round, the players can hear the actual historical context for the ruling, which is on the back of the Ruling Card. The judge role rotates among players. The game's core mechanic of developing legal stories focuses on legal reasoning, and the tone of the game is humorous. With this overview of gameplay and mechanics as foundation, I now turn to design approaches and concerns regarding historical accuracy in the design of these games.

The pursuit of historical accuracy

I pursued accuracy in representations of material culture by working closely with experts in medieval Jewish and Islamic North Africa, most often Phillip Ackerman-Lieberman at Vanderbilt University. We sought source images that were period and locale-accurate and that would help us develop illustrations of various social scenes of the period. Ackerman-Lieberman and I then worked with student illustrators including lead illustrators Mimi Ace, Tori Bonagura and Annie Wong, who created original illustrations of the artefacts, architectural patterns and social tableaus, taking care to always adapt the reference imagery in order to create original illustrations. This often meant imagining the objects from different angles and views than portrayed in photography in order to avoid any potential copyright infringement of the photographs we studied. No artefact appears in the game as it does in a particular photograph, yet we worked to honour the original object while shifting angles, sometimes colours, sometimes 'restoring' artefacts through our illustrations.

In Lost & Found, the original strategy game, there are various types of cards in the game, each serving different purposes, including resources, goal cards (responsibilities), roles, event cards and other card classes. Each unique set of cards has a card back, and each card back features a pattern that Annie Wong located from photography of buildings from Fatimid architecture in Fustat (referencing texts such as Bloom, 2007). She enlarged detail patterns to create the card backs and image frames on the cards. Each card face also has an architectural pattern framing the main card illustration (Figures 9.1, 9.2 and 9.3).

Each artefact or situation the team rendered went through an initial discussion between a scholar or scholars of the period, illustrators and designers, and then through a further discussion among illustrators and designers regarding various approaches...
for representing that research through illustration. When working on various scenes, Ackerman-Lieberman helped us find reference images – what would the following scenes look like: a court room, a study circle, a bathhouse, a bathroom or a scale from the period? Along with reference images and discussions, the illustrators created a consistent style, which they described as ‘inviting’, a pleasant warm style. They also created a style guide and a video tutorial for other student illustrators who would later join the team.

Our research covered a wide range of subjects beyond architecture. We researched information about garb of the period, for example, people in the game wear turbans. When depicting a scale from the period, we worked to find representative scales from which to design. We illustrated an inkwell and reed pens as well as a box in which to keep pens. See Figure 9.5. These are just a few examples of the many period images rendered in the game (Figures 9.4 and 9.5).

In Lost & Found, event cards include game events involving the loss and discovery of objects and animals as well as other events. Players then must contend with choices

Figure 9.1 Card back showing architectural patterns from Fatimid Fustat in Lost & Found. © Rochester Institute of Technology. (Illustrated by Annie Wong.)
as to how to behave regarding the event. Will they work to return the lost object? Will they break the law? When not required to return something, will they preserve their family resources, or consider going above and beyond the law to assist their neighbours or strangers at a cost to themselves? In addition, there are other event card types including Crises and Disasters. Crises and Disasters require players to work together, either immediately in the case of disasters, or over the course of the next round of play with Crises cards. When illustrating event cards, we spoke with scholars about details of the event, whether it was regarding the loss of an animal, typical crops of the region, or what a 'plague' might have meant in Fatimid North Africa. We learned, for example, that plague usually referred to disease carried by flies that flew into people's eyes and that there were monsoons in the region. We learned about key crops of the period, such as flax, sugar cane and rendered them in illustration (see Figures 9.6, 9.7 and 9.8).
Our mode of evoking the period and locale focused on developing ‘accurate’ imagery through the collaboration with scholarly experts and illustrators. Illustrators worked to translate ideas and references shared by the expert, and then illustrators applied a consistent style in consultation with the executive producer (Gottlieb) and the game design team. We developed a system of communication, discussion, references and illustration that we applied to each image. I found approaching ideas of historical authenticity far more slippery.

**Defining and pursuing historical authenticity**

What do I mean by historical ‘authenticity’? In considering authenticity, I have found the literature on this topic in the field of heritage tourism particularly helpful.
Figure 9.4 Card from *Lost & Found* illustrating objects, garments and milieu. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)

Figure 9.5 Card from *Lost & Found* illustrating objects and milieu. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)
**Figure 9.6** Events Card: Plague. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)

**Objective:** Donate 8.
**Failure:** All players must collectively discard a total of 8 Resource cards. If players cannot do this (or refuse to), the game ends in destitution.

**Figure 9.7** Events Card: Monsoon. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)

**Objective:** Donate dinarim of at least 2x the number of players in the game.
**Failure:** All players must pay 3 each. If any player cannot pay, the game ends in destitution.
Heritage studies and tourism studies are fields which have had to wrestle with ideas of authenticity in a variety of contexts including restoration of historical sites.

Gordon Waitt, in his examination of perception of historical authenticity of The Rocks in Sydney Australia draws from a number of scholars to articulate a post-structuralist understanding of authenticity. Waitt identifies various competing interests and perspectives through which a place’s past is interpreted such as those of academics, government institutions, tour operators, residents and tourists. He notes that each group has its own agendas and viewpoints. Waitt explains a means to understand authenticity as the product of a process of negotiation:

[A] post-structuralist critique of how place is assimilated into the tourism production system rejects the dichotomies of true/false, real/invented, and staged authenticity/back regions. Instead, authenticity is regarded as a process of negotiation between various competing interpretations of past events in a particular place. The version of authenticity that is socially constructed for consumption is conceived of as a manifestation of a negotiation process between the various stakeholders in that place.

I understood that any attempt at authenticity in the game would be both constructed as well as contrived and considered how I might include this understanding within the design of the game itself. I hypothesized about how I might foreground the particularly constructed nature of authenticity and settled on an approach I refer to

![Events Cards: Bumper Crop](Image) © Rochester Institute of Technology. (Illustrated by Annie Wong.)

*You have an extra yield this season.* Player with the fewest completed Family Responsibilities draws a Resource.
as ‘Maimonides’ Dream.’ ‘Maimonides’ Dream’ would situate the game during the time and in the place Maimonides was writing. This would be as close as we could emulate Maimonides perspective as he studies and considers texts from different periods, such as the Mishna and the Talmud, and creates the new text of the Mishneh Torah. All the while, we understood our emulation would be a far approximation. The ‘authenticity’ would come from picking this particular perspective as a grounding position and a reference point. If the stakeholders were those concerned with material culture, we would clearly date certain periods relative to twelfth-century Fustat (coins would appear from twelfth-century Fustat, but also the times Maimonides was reading about in the Mishna and the Talmud). If the stakeholders were those concerned about the interpretation of the law, we would fall back on Maimonides time period. If the stakeholders were concerned about gender portrayals, we would allow for players to play male or female roles, yet depict in our tableaus when we believed men would likely have a role (such as a ‘judge’ or ‘teacher’) during the time of Maimonides’ life and the times he considers in the texts he is reading. Each stakeholder would be situated relative to Maimonides’ imagined position. I will provide more detailed examples later of how the team rendered this idea of ‘Maimonides’ Dream.’

Imagining ‘Maimonides’ Dream’

I had previously used a science-fiction wrapper narrative in my mobile augmented reality history game Jewish Time Jump: New York. Players took on the roles of time travelling reporters, who go back in time to recover a story ‘lost to time’. In visiting the past, they encounter historical characters and events including primary source material. In this way, I worked to emphasize the constructed nature of the narratives – both the historical narrative, which is always constructed, and the game narrative, which was an interweaving of historical drama and primary source material. Given the goal of the Lost & Found games, I had decided early in the process that the history would be one I might articulate for the design team as well as educators as ‘Maimonides’ Dream’ of the Mishnah Torah. This required that a number of different ideas had to be combined. First, that we might communicate a flavour of the material culture of the period, imagining Maimonides walking the streets of Fustat during the years he was writing the Mishneh Torah. What would the streets and buildings look like? How would people dress? What might a visit to a doctor’s ‘office’, or a marriage contract (ketubah) look like? (see Figure 9.9).

The dream also meant asking the question of how Maimonides might imagine something like a dinar. The dinar (plural in Hebrew, dinarim) is a coin of the period. The dinar is also referred to in the Mishna as well as the Talmud, which interprets and comments on the Mishna. So, what might Maimonides be thinking about when he writes ‘dinar’ in the Mishneh Torah? Perhaps he thought about the dinarim that he himself used in transactions. Perhaps he was thinking of the dinar of the Mishna; perhaps after considering a Talmud passage interpreting the Mishnah, he would consider a dinar of the Talmud. When we decided on the illustrations for the dinarim cards, we decided to render dinarim of all three periods. This was to provide a sense
that ‘dinar’ could have multiple interpretations, and that the *Mishneh Torah* was built upon earlier texts, interpretations and debates. This was also an example of one of the numerous curricular ‘hooks’ we embedded in the game. An educator, working with a pre-written curriculum or educators developing curricula with our team, could use this as a teachable moment, exploring the questions of a moment in time, the literary work or works, and the different meanings and values over time of a concept such as a ‘dinar’. I imagined a question prompt such as ‘Why do you think there are different *dinarim* with different periods on the cards?’ (Figures 9.10 and 9.11).

We also had to render social scenes. This was less about material culture and more about the social milieu: how might we depict a judge making a decision, or a teacher with a circle of students. Out of discussions with Ackerman-Lieberman, we determined position of people and items such as the wand or stick that a teacher might hold, how

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**Figure 9.9** A *ketubah*, or marriage contract, from *Lost & Found*. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura and Annie Wong.)
a judge would be on a raised platform and how the judge or teacher would most likely be a man during this period (Figures 9.12 and 9.13).

Beyond material culture and aspects of social scenes, we also had to come to an understanding of questions raised by the law. What did certain obscure or decontextualized phrases or passages in the law mean, or why was the law this way? For example, in order to understand the halacha (law), around negotiating a price for assistance with a broken vessel, we had to understand that honey, made from dates was more valuable than wine. The law revolves around pre-negotiating dumping out one’s wine to assist someone losing their honey: one cannot, after the fact, without having asked in advance, charge the person being helped for the loss of the wine (Figure 9.14).

Another example of understanding of the laws can be seen in how Maimonides makes a distinction between a cow that a neighbour neglectfully abandons – neither

Figure 9.10  Dinarim cards marked with dates and locales of different dinarim from Lost & Found. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura and Annie Wong.)
keeping the door to the enclosure closed nor tying the animal down. In this case (Mishneh Torah, Gezelah Va’Aevdah 11:11), the statement of the halacha does not obligate the neighbour finding the cow to intervene. Other jurists disagree, but in this instance, we can see the balancing of two principles – the obligation to return a neighbour’s belonging, often at great expense to the finder (feeding, keeping, trying to return at intervals, not making a profit for at least a year, hiring it out to not benefit from it). At the same time, by accounting for neglect, Maimonides places boundaries and balance on the requirement to intervene. We would call this dealing with ‘undue burden’.

And so, in this case, accuracy was in rendering the meaning of the law to the best of our ability and translating that into the game (in this case with three possible decisions for the player – follow the law (do the minimum), or go above and beyond the law and

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**Figure 9.11** Dinarim cards marked with dates and locales of different dinarim from *Lost & Found*. © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura and Annie Wong.)
Figure 9.12 Train a Judge and Train a Teacher cards from *Lost & Found.* © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)

Figure 9.13 Train a Judge and Train a Teacher cards from *Lost & Found.* © Rochester Institute of Technology. (Illustrated by Mimi Ace, Tori Bonagura, and Annie Wong.)
Figure 9.14 Honey Jar Cracks event card from Lost & Found. © Rochester Institute of Technology. (Illustrated by Tori Bonagura and Annie Wong.)

Figure 9.15 Abandoned Cow event card in Lost & Found. © Rochester Institute of Technology. (Illustrated by Mimi Ace and Annie Wong.)
The Middle Ages in Modern Culture

return the animal while sacrificing the remainder of one’s own turn). Here authenticity would need to be drawn out during reflection or discussion – to come to a reckoning regarding the potential implications of the law within society/community and to add those perspectives to the seeking of understanding of the period and locale (Figure 9.15).

Authenticity through dialogue, reflection and deeper study

As I illustrated in the examples earlier, I made a design decision to work from the perspective that the games should approach authenticity by allowing educators to encourage learners to ask questions about the game. In this way, those learners could delve deeper into sources, and this questioning and delving itself would add to the construction of authenticity. The more learners and educators engaged and reflected, the more the dimensionality of the law and the period might be developed. The cases generated by events in the strategy game would create stories which could be further investigated. If Maimonides hoped to help people come to a better understanding of how to live their lives through his newly condensed law code, then in a similar way, I wished to provide cases that could allow the law to be understood as a system that could hold neighbours responsible to one another in prosocial ways. As the design team spent months playing through various cases in this particular section of Mishneh Torah in the process of designing the game systems, from objectives through to events, we came to understand, at deeper and deeper levels, the purpose and power behind the law. In fact, in searching for objectives in the game, we attempted to look at underlying principles in the law, which we concluded, balances the needs of the community with the needs of the individual, providing various incentives and boundaries.

Could players/learners examine the various laws and come to a deeper understanding of the underlying principles of the system? The curriculum, currently in development, seeks to illicit such observations and questions, working in concert with the game artefacts. The second game in the series, Order in the Court, also arose out of our desire to experiment centring play around meta-questions about the law: Why is the law constructed this way? How might it have been constructed originally? By using the storytelling suppositional structure of Order in the Court, Ian Schreiber and I worked to move those meta-questions to the centre of play. I theorized that if both the strategy game and party game are played together, we could have both generated cases to dissect through curricular reflection (from the strategy game), and a game system to play with the concepts of the purpose of the laws and their possible origin in the second game. Together we could cover different types of reflection and widen our designed construction of the period. Further research on the games in classrooms will tell us more about how the games function separately, on their own, and in concert with curriculum (Figures 9.16 and 9.17).

Though my mobile AR history game Jewish Time Jump: New York used a science-fiction tale inspired by primary and secondary sources, the game was replete with
primary source material (digitizing of ephemera for example) and is informed by secondary source material. *Lost & Found* is also a construction of history drawing on primary and secondary source material. For this game series, the negotiations between the stakeholders could be understood as those between the educators, the learners, the scholars, the players and the designers. The illustrations are clearly constructed (painted or drawn), yet they are drawing on actual artefacts and images. The laws are from the actual text written in the period, yet the cases of origin pre-date the period considerably. Would the cases represent actual cases of the time period, or rather act as illustrations of principles that would be applied in the twelfth century, yet drawing from much earlier concerns?

My goal was to raise the opportunity to discuss these questions with adequate texture to encourage and engender further exploration, but not to answer them directly. There could be space for competing interpretations and that would be the ideal place for an educator and/or curriculum guide to engage learners. If free-floating without curriculum, then the strategy game could evoke a sense of a rich material culture and ideally, a mysterious and different time and a place inviting further exploration. We also would be leaving a player with scenarios embedded with legal cases as well as cases of play emulating the push and pull of the family, the community and the role of the law in moderating and circumscribing behaviour. By having players consider whether or not to break the law and, in some cases, having players make the decision to break the law, such play experiences could allow for cases of transgressive play that could
be used by educators to examine motives and position with regards to the law. Here learners would have opportunity to discuss choices and examine how the law relates to those choices. Sometimes the game rules will come in conflict with the law, but the strategy game was designed that way purposefully. I imagined questions such as ‘how did it feel when she did not return your cow?’ or ‘What was the decision like when you decided to transgress the law?’

Methods and future curriculum design: Building authenticity through negotiation and dialogue over time

I have approached research and design on the *Lost & Found* game system through two sets of methods. The design team uses a ‘playcentric’ design approach, Fullerton’s articulation of iterating on a game design to improve its player engagement and reduce ‘fun killers’. This kind of design research is not generalizable, but rather is used to improve the designed artefact. It may lead to design cases studies. We conducted several dozen playtests while designing the games. We conducted internal design reviews both among the team members and also external playtests, bringing the games to players outside the team. Over much of the course of the school year and during some summer months for more than three and half years, we were conducting these playtests weekly.
We also conducted a small number of social science research investigations under the rubric of methods known as Design-Based Research (DBR). As we move into curricular development working with educators and learners, we are expanding these studies. Design-based research’s target outcome is design-relevant social science. Design-based research is suited for any ‘rich contextualized setting in which people have agency’. Design-based research is an iterative, proto-theory-testing approach to developing learning theory and design knowledge. Designer-researchers prototype a learning environment or intervention (such as a game or curriculum) over the course of a number of iterative cycles comprising design, field trial, data gathering, analysis and return to design. Learning theory is used as a starting point for design, and that theory is held suspect (a learning sciences term meaning ‘held in doubt’) during investigation. Our data gathering involves a number of diverse and mixed methods approaches, including participant observation with video and audio, pre-and post-tests and semi-structured interviews. Using DBR, we can work to develop new knowledge about learning while focusing the games and the curriculum towards improved formal and informal learning environments.

*Lost & Found* and *Lost & Found: Order in the Court – the Party Game* are both for sale to the public now. We are gathering data and expanding our research further. For example, the games are currently in use in a high school on the east coast of the United States and the teacher has joined our research project. As the *Lost & Found* team moves forward working on the forthcoming Islamic law module, we are also turning towards curriculum, which is critical for any learning game and which we eventually hope to make available to the wider public. The reflective moments – the questions, discussion and the delving – are key for building out the learning environment. I argue that pursuing historical authenticity also requires the kind of dialogue generated by a carefully design curriculum, whether in a classroom or a less formal learning environment. If, the heart of authenticity, as Waitt teaches us, is the social construction that is manifested by a negotiation process between many and varied stakeholders, then perhaps we can consider an authentic approach to history learning games as one that engenders thoughtful multi-vocal negotiations and reflections about time and place, guided by well-researched curriculum designed with teachers. Perhaps authenticity in games can only be understood in that searching and negotiation process.

**Notes**

2 *Lost & Found: Order in the Court – The Party Game* (Gottlieb and Schreiber, 2017).
3 This work is supported by the GCCIS, Office of the Vice President for Research, and the MAGIC Center at RIT. This work is also supported and funded by the National Endowment for the Humanities. Any views, findings, conclusions or recommendations expressed in this chapter do not necessarily represent those of the National Endowment for the Humanities.
4 In Game and Learning, or Games for Learning, scholars and designers looking to the affordances of games systems to enhance learning environments. See: Owen


8 Ibid., 848.

9 Ibid.


12 The Mishneh Torah (1170–1180 CE) was written in Hebrew in the style of the Mishnah (the first post-Biblical Jewish law code, written circa 250 CE) as opposed to Maimonides' Guide for the Perplexed (circa 1185), which was written in Judeo-Arabic.

13 While there is evidence that the Fatimid court had bee honey, Maimonides is referring to date honey, which would have been far more plentiful in twelfth-century Egypt, as there were date orchards. During the Talmudic period, bee honey would have been even more rare (Phillip Ackerman-Lieberman, personal conversation).


17 Christopher Hoadley, 'Design-Based Research', Presented at the ECT PhD Colloquium (New York University, 2013).