

Performance and Ritual in the Virtual Egyptian Temple

Gillam, R.¹, Innes, C.², Jacobson, J.³

¹Dept. of Humanities, York University, Canada, robnyng@pathcom.com

²Dept. of English, York University, Canada, prof.innes@gmail.com

³PublicVR, Boston, USA, jeff@publicvr.org

Abstract

Performance and ritual of formal Egyptian religion were part of a discourse that permeated the entire culture. Egyptian priests role-played gods, heroes, and sometimes Pharaoh himself. This took place in and around monumental Egyptian temples, each one a model of the cosmos and a house of the gods. Re-enactment is a unique and important tool for understanding this crucial dimension of Egyptian culture and a powerful learning tool for the student-performers and the audience. These performances cannot be complete without their visual and spatial context, but the few such temples still sufficiently intact are difficult to access for this kind of work. Our current solution is to film the re-enactments in front of a blue-screen and visually place them in PublicVR's Virtual Egyptian Temple. The texts used in this latest effort are the Confirmation of Power in the New Year, a propitiatory rite aimed at protecting the king from the dangers of the turn of the year, The Triumph of Horus, a dramatic presentation of the battle of the god of kingship with an enemy representing the forces of chaos, and the Mystery of the Divine Birth, which portrays the conception, birth and enthronement of the god's son as heavenly and earthly king.

Keywords: Egypt, Performance, Drama, Learning, Film, Blue-Screen, Virtual Heritage.

1. Introduction

Since 1998, Robyn Gillam has directed undergraduate students in Classical and Religious Studies at York University in several performances based on Egyptian liturgical documents from the Greco-Roman period. Similarly, Christopher Innes and his Centre for Performance Research staged the 1912 production of *Orpheus and Eurydice* by Adolphe Appia (AA, 2010). They composed it with scenes from the EU-Funded Theatron project's virtual reconstruction of the original Hellerau performance space. In 2005, Gillam and Innes reconstructed the Festival of the Raising of the Sky as written at Esna in the 2nd century CE (GILLAM, 2006). At PublicVR, Jeffrey Jacobson currently leads the ongoing development of the Virtual Egyptian Temple (TROCHE, 2010). Designed to support educational activities in Egyptian cultural heritage, the temple embodies the most important aspects of New Kingdom and Late Period Egyptian temple architecture. Rather than being bound to the idiosyncrasies of a physical site, the temple is readable, accessible, and changeable, suitable for a variety of investigations.

These lines of research come together in our filmed re-enactment of the Confirmation of Power in the New Year, a propitiatory rite aimed at protecting the king

from the dangers of the turn of the year (Figure 1), The Triumph of Horus, a dramatic presentation of the battle of the god of kingship with an enemy representing the forces of chaos, and the Mystery of the Divine Birth,



Figure 1: High Priest (in leopard skin) officiates, while another priest (center) acts in Pharaoh's place. The ceremony is blue-screened into the virtual temple.

which portrays the conception, birth and enthronement of the god's son as heavenly and earthly king. All three are examples of performance and ritual in formal Egyptian religion, a part of a discourse that permeated the entire culture. Egyptian priests role-played gods, heroes,

and sometimes Pharaoh himself. Performances took place in and around monumental Egyptian temples, each one a model of the cosmos and a house of the gods.

These performances cannot be complete without their visual and spatial context. Unfortunately, the such temples still sufficiently intact are difficult to access and are in some disrepair, chiefly missing their paint. This is why we filmed actors in front of a blue-screen and visually placed them in PublicVR's Virtual Egyptian Temple. The result is a video, which re-presents this crucial dimension of Egyptian culture. The techniques we employed are low-cost and readily available to scholars in the Humanities (Figure 2).

2. Egyptian Ritual

Although the formal Egyptian temple re-presented a royal palace (BELL 1997, 133) it was also a focus for community gatherings (MCDOWELL 1999, 91-104) as well as being an important cultural and economic multiplier (KEMP 1989, 193-97) for its specific area. The temple kept the vast majority of the population at a distance from the vital daily cult rituals at the heart of the temple that fed and clothed the ensouled image of the deity (SPALINGER 1998), but it also invited the participation of the general population in large open-air festivals as well as providing a place for public prayer at the back wall of the temple (SPALINGER 1998; CABROL 2001, 580-1), right behind the sanctuary, which represented the bedroom or throne ("great seat") of the god (O'CONNOR, 1991). Religious experience was based on "seeing" the god (ASSMANN 1996, 222-4; SPALINGER 1998, 251-2;), but also knowing that the temple and its staff kept a "balance" (*Maat* in Egyptian) between the human and divine (GABLIN 2007, 337). This reciprocal arrangement was personified by the king (male or female) who was the transmission point between these two spheres (HORNUNG, 1982 138-142, 201-4) Successful balance maintained the necessities of life, made possible the flooding of the Nile and social stability where everyone kept to their proper social station and was gainfully employed in their appropriate occupation in a harmonious and non-threatening natural environment (ASSMANN, 1979).

For the source of our drama, Dr. Gillam selected a text that would lend itself to small scenes with fewer actors, necessitated by the constraints of our studio space, as well the spaces provided by the virtual temple. The **Confirmation of Power in the New Year**, found in Brooklyn Museum Papyrus, **47.218.50** was published by J-C. GOYON in 1973. This document, which has been tentatively dated to the 4th century BCE, is in essence a propitiatory ritual that takes places between the first epagonemal day and the 10 of the first month. In it, a priestly substitute, role-playing the king, makes offerings to the gods and propitiates Sekhmet and the agents of universal chaos that lie in wait at the turn of the year, before eating a cake imbued with the office of

kingship and laying down to sleep on the Osirian lion bed. Awakened as Horus son of Osiris, the player king is hailed as ruler by various birds who take news of his triumph to the four corners of the earth.

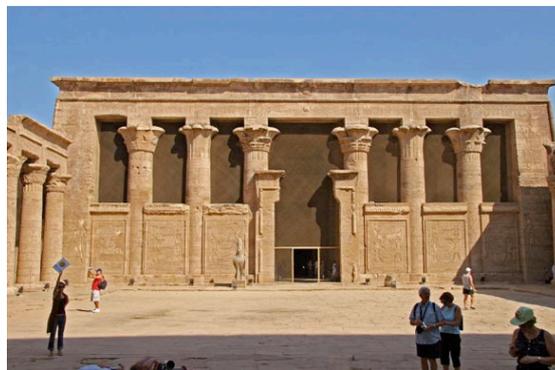


Figure 2: (Top) The Courtyard of the real temple of Horus At Edfu. (Middle) Students acting: a priest anoints Pharaoh during the Confirmation of Power ritual. (Bottom) Action is composited with the Virtual Egyptian Temple.

This part of the ritual was later elaborated for the enthronement of the sacred falcon at Edfu and rites using live birds are also shown elsewhere, as for example, on the gate of Euergetes at Karnak (CLÈRE, 1961). The performance detailed in **P. BROOKLYN 47. 218.50** was intended to be enacted in the inner, non-public parts of a temple (ideally that of Re Atum at Heliopolis) and would fit well with the spaces provided in the virtual temple. Furthermore, as a secret ritual, it only involved

the presence of the substitute king, a lector priest acting as master of ceremonies and some other priests acting as servitors. The text as a whole underlines the importance of magic (*hq3*) in Egyptian thought and ritual practice and the use of a king substitute as an index to changed conditions in the later first millennium BCE.

3. VR Theater For Education and Scholarship

Theater has a long history as an educational tool. Many of the ritual performances of ancient Egypt, around which this project is based, were originally designed not only to address the gods but to teach the people religious mythology, with the temples as stage settings on a monumental scale to reinforce the efficacy of the learning experience through inspiring awe. In the United States, theater has been an established part of education since Winifred Ward developed her system of "Creative Drama" for the Evanston Public Schools during the 1920s, with the aim of helping children learn a wide range of curriculum subjects, as well as develop their personalities (WARD, 1957). In the school context, theater games, improvisation and role playing have been shown to be effective in fostering communication skills, problem-solving, social awareness, and positive self-images, as well as in inspiring the quest for knowledge and in absorbing information.

Furthermore, representing people in virtual heritage is not new, and sometimes resembles living museums in the physical world. Approaches include: (1) Virtual people are simply there in the environment, going about their business (ULICNY, 2002). (2) The virtual people interact with the user in some meaningful way, using low-cost game technology (CHAMPION, 2008a, 2008b). (3) In online worlds such as Second Life (SL, 2009) users represent themselves as ancient peoples and interact with each other and with the automated humans (BOGDANOVYCH, 2009). (4) The experience is personal, as the user interacts with a single complex virtual person (JACOBSON 2010; ECONOMOU 2001). (5) Advanced immersive virtual reality technology is different from the game technology. The former can offer compelling visuals and interactive narratives driven by advanced artificial intelligence (CAVAZZA 2007; SWARTOUT 2006; KENNY 2007). The advantage is that software can be endlessly replicated and provide a consistent experience. On the other hand, the programming is expensive and could never provide the flexibility of a live actor.

Finally, a benefit for scholars might be seeing how a site specific activity like the Egyptian daily cult interacts with and develops in relation to its environment. Where the exact setting of an activity is not specified or subject to dispute, as is the case with texts like the Confirmation of Power in the New Year or the Triumph of Horus, it may be possible (in the future) to experimentally place the activity in various parts of the temple area in order to further test existing hypotheses about its lo-

cation. The possibilities for such virtual environment include also its aural capabilities, as well as the visual. On-site investigation of well preserved sites like the temple at Edfu could facilitate the construction of a soundscape model which could greatly enhance the environment of the existing virtual temple, although such an enhanced environment may work better in a more immediate setting like a digital dome rather than online.

4. See the Video

The final videos is currently available at "<http://publicvr.org/Egypt/ConfPowerVideo/>".

References

- AA (2010) <http://www.kvl.cch.kcl.ac.uk/appia2.html>
- ASSMANN, J. (1979) "Königsdogma und Heilserwartung. Politische und kultische Chaosbeschreibung in ägyptischen Texten." *Apocalypticism in the Mediterranean World and the Near East.*, Uppsala. ed. David Hellholm. Tübingen: Mohr, 1983): 345-77.
- Assmann, J. (1996). *The Mind of Egypt: History and Meaning in the Time of the Pharaohs.* tr. A. Jenkins (New York: Henry Holt).
- BELL, L. (1997), *The New Kingdom Divine Temple: The Example of Luxor*, in *Temples of Ancient Egypt* (ed. B. Schafer) Ithaca and London: Cornell University Press and Tauris: 127-83.
- BOGDANOVYCH, A., RODRIGUEZ, J. A., SI-MOFF, S., COHEN, A., SIERRA, C. (2009). "Developing Virtual Heritage Applications as Normative Multi-agent Systems" in proceedings of the Tenth International Workshop on Agent Oriented Software Engineering (AOSE 2009) at the Eighth International Joint Conference on Autonomous Agents and Multi-agent Systems (AAMAS 2009), Budapest, Hungary, 10-15 May 2009. Accepted for publication.
- CABROL, A. (2001). *Les voies processionnelles de Thèbes.* (Leuven: Peeters).
- CAVAZZA, M., LUGRIN, J.L., PIZZI, D., CHARLES, F. (2007). "Madame Bovary on the Holodeck: Immersive Interactive Storytelling" in proceedings of the ACM Multimedia 2007, ACM Press, Augsburg, Germany, 2007.
- CHAMPION, ERIK. (2008a). "Game-based historical learning" in Rick Ferdig, (ed.) *Handbook of Research on Effective Electronic Gaming in Education*, Information Science Reference, Florida USA, pp.219-234. ISBN 978-1-59904-808-6 (hardcover) -- ISBN 978-1-59904-811-6 (e-book).
- CHAMPION, ERIK. (2008b). "Otherness of Place: Game-based Interaction and Learning in Virtual Heri-

tage Projects,” *International Journal of Heritage Studies*, 14(3), 210 - 228.
<http://www.igiglobal.com/reference/details.asp?ID=7960&v=tableOfContents>

CLÈRE, P. (1961) *La Porte d'Evergète à Karnak*. Cairo, Institut français d'archéologie orientale du Caire.

Goyon J.-C. (1972). *Rituels Funéraires de l'Ancienne Egypte* (Paris: Éditions du Cerf).

ECONOMOU, D., MITCHELL, W., PETTIFER, S., COOK, J., MARSH, J. (2001). “User Centered Virtual Actor Technology” Conference of Virtual reality, Archaeology, and Cultural Heritage (VAST). 1-58113-447-92001

GABLIN L. (2007). “Private Religion,” in *The Egyptian World* (ed. T. Wilkinson) (New York/London: Routledge).

GILLAM, R. (2006) “Enacting Temple Ritual and Other Performances for Presentation in Virtual Reality Environments,” Annual Meeting of the American Research Center in Egypt, Jersey City NJ.

HORNUNG, E. (1982) *Conceptions of God in Ancient Egypt: The One and the Many* (tr. J. Baines). (Ithaca: Cornell).

JACOBSON, J. (2010) *Digital Dome Versus Desktop Computer in a Learning Game for Religious Architecture*. Annual meeting of the American Educational Research Association (AERA), Denver, CO, April, 2010.

KEMP, B.J (1989) *Ancient Egypt: Anatomy of a Civilization* (London: Routledge)

KENNY, P., HARTHOLT, A., GRATCH, J., SWARTOUT, W., TRAUM, D., MARSELLA, S., AND PIEPOL, D. (2007). “Building interactive virtual humans for training environment,” in *Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) 2007*.

MCDOWELL, K. G. (1999), *Village Life in Ancient Egypt* (London/New York: Oxford University Press)

O'CONNOR, DAVID. (1991) *Mirror of the Cosmos: The Palace of Merenptah*. In *Fragments of a Shattered Visage*, (ed. E. Bleiberg and R. Freed) Memphis, Memphis State University: 167–197

SL (2010) http://en.wikipedia.org/wiki/Second_life

SPALINGER, A.J. (1998) “The limitations of formal ancient Egyptian religion,” *Journal of Near Eastern Studies* 57: 241-260.

SWARTOUT, W., GRATCH, J., HILL, R., HOVY, E., MARSELLA, S., RICKEL, J., AND TRAUM, D. “Toward Virtual Humans,” in *AI Magazine*, v.27(1), 2006

TROCHE, J., JACOBSON, J. (2010) *An Exemplar of Ptolemaic Egyptian Temples*. *Computer Applications in Archaeology (CAA)*, Granada, Spain, April, 2010