## PERSEPOLIS FORTIFICATION ARCHIVE PROJECT

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Most of the work of the Persepolis Fortification Archive (PFA) Project is a matter of adding new data of known kinds, making new connections, and eliciting an increasingly rich texture of languages, art, institutions, and society at the center of the Achaemenid Persian empire around 500 BCE. At times, the close attention that this requires leads to something altogether different and surprising.

That happened again as PFA Project editor Annalisa Azzoni (Vanderbilt University, Nashville) pored over images of the Aramaic texts on Fortification tablets and fragments. Among about 850 monolingual Aramaic documents recorded until now, one persistently resisted interpretation until she recognized that it is not written in Imperial Aramaic at all. It is written in Egyptian Demotic, confirmed by Oriental Institute colleagues Janet Johnson and Brian Muhs (fig. 1).

If that does not seem remarkable, consider it not only in the archival context formed by the thousands of Fortification texts written in Elamite cuneiform writing and the hundreds written in Aramaic script, but also alongside the single Fortification documents written in Greek, Phrygian, and Old Persian alphabets, the one intrusive legal document written in Babylonian cuneiform, and the several impressions of seals with Egyptian hieroglyphic inscriptions or cartouches. As each of these were iden-



Figure 1. Fort. 2131-301 (Fort. 11146), formerly known as PFAT 671, a Fortification tablet with Coptic text

tified, it seemed remarkable but exceptional. Now, considering them together, the Persepolis Fortification Archive shows examples of almost every writing system in use at the time in western Asia and the Mediterranean world. The examples are all in ordinary, practical documents. The people who wrote, filed, and stored them had to suppose that someone could use them, read them, or have them read, so at least some of the people who produced and kept the Fortification Archive moved more or less easily among these ways of recording. This is a practical embodiment of the trait with which the inscriptions of the Achaemenid kings represent the vastness of the empire, describing it in Old Persian and Elamite versions as including "all kinds of people," in Babylonian versions "people of many tongues."

This discovery also exemplifies some of the fortunate circumstances of the PFA Project, including Azzoni's broad training in the epigraphy of "many tongues," the interlocking scholarly and technical skills of the PFA Project team, and the unique reserves of expertise of "all kinds of people" at the Oriental Institute — circumstances that the PFA Project will continue to rely on for as long as the PFA is in the Oriental Institute's custody.

Final legal determination of the PFA's custody is imminent. In early July 2017 the Supreme Court accepted the legal dispute over the tablets for review in the term that began in October 2017. The court heard oral arguments in December. A ruling is expected before this Annual Report is published. If the Court follows a recommendation from the office of the Solicitor General and upholds the ruling against the plaintiffs, the legal threat to the integrity of the PFA and to ongoing research on the PFA will end. Until then, the PFA Project continues all phases of its emergency efforts to record the Archive and to make its records public.

Azzoni continued to finalize readings of Aramaic epigraphs on Elamite tablets, readings of monolingual Aramaic Fortification tablets, and readings of Aramaic seal inscriptions. She also recorded new epigraphs, monolingual documents and seal inscriptions as they were identified. Project editor Elspeth Dusinberre (University of Colorado, Denver) has drafted most of a monograph on more than 580 seals identified from impressions on the monolingual Aramaic tablets, to be supplemented with information from newly identified items.

Project editor Wouter Henkelman (École Pratique des Hautes Études, Paris), continued work on his collated critical edition of the ca. 2,500 still unpublished Elamite document recorded in draft editions by the late Richard T. Hallock. He continued to compile textual and critical notes, also drawing on new collations of previously published texts, Hallock's own corrections recorded in marginal notes, and information drawn from Elamite texts that I continue to record in draft form.

I recorded about 95 new Elamite documents (for a running total of about 1,650 items, and a running total of recorded Elamite texts and fragments close to 6,500 items). Veteran student worker Teagan Wolter (NELC) entered about 200 of the new texts, glossed and parsed in preliminary form, for presentation by the Online Cultural Heritage Resource Environment (OCHRE). Most of the newly entered texts are fragments of registers, that is, documents in comparatively long and complex formats from the late stage of information processing at Persepolis. The task of entering them is slower and the number of distinct items is smaller than when this work focussed on shorter and simpler texts, but the volume of information organized and entered is larger.

The same is true of my collations of my first readings of Elamite documents, now also concentrating on registers. I group the registers according to the seals impressed on them, guided by chapters of Tytus Mikołajczak's NELC dissertation (completed in winter, 2018) on these seals and the accounting procedures that the documents reflect. This allows me to consider together items that I first recorded separately, sometimes at long intervals, but that were originally produced by the same ancient offices and staffs; comparison leads to improved readings and confident restorations of broken passages. I collated about 195 registers, for a running total of about 1,040 collated texts. Graduate student Rhyne King (NELC) continues to enter these corrections in OCHRE, updating editions of about 75 more Elamite texts (for a running total of about 740), and correcting entries in the Elamite glossary in OCHRE.

Project editor Mark Garrison (Trinity University, San Antonio) continues to face the task of recording the seals impressed on the Fortification tablets in terms of triage. Garrison, Dusinberre, and student workers under their instruction have compiled collated scale drawings of about 2,000 of seals, ready for publication (allowing for further tweaking as more impressions are identified). They also made preliminary sketches of about 1,450 others. Still to be cataloged and collated are the impressions on more than 2,800 sealed, uninscribed tablets recorded with digital images, and still to be identified are impressions of new seals on about 1,000 of the newly edited Elamite texts.

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Thanks again to a grant from the Roshan Cultural Heritage Institute, veteran student workers Christina Chandler (Bryn Mawr University) and Erin Daly (Classics, University of Chicago) returned to work on the seals during the summer of 2016, and Daly continued work throughout the year. They returned again during the summer of 2017, now joined by Emma Petersen (University of Minnesota) (fig. 2). Chandler focused on final drawings and records of the inscribed seals, which are to be the topic of her doctoral dissertation (fig. 3). Daly first divided her attention between recording seals on uninscribed tablets and identifying new seals on tablets with new Elamite texts (about 25 new seals on about 135 documents until now). Later, she concentrated on work for Dusinberre's publication of the seals on the Aramaic tablets, making final drawings of "cross-over" seals, that is, seals impressed both on Aramaic and on Elamite and/or uninscribed tablets. During the summer of 2016 visiting student Delphine Poinsot (École Pratique des Hautes Études, Paris) took time from her research on Sasanian seals to learn about the Fortification seal corpus and assist in recording seals on uninscribed tablets.

Other priorities of this phase of the Project, if time and circumstances permit, include making final collated drawings of new seals identified from impressions on unpublished Elamite documents, making final drawings of new seals identified from impressions on uninscribed tablets, identifying and recording the seals on uninscribed tablets, and checking for new seals among the remaining uncataloged fragments. The potential importance of the last of these tasks was vividly demonstrated by Garrison's startling recognition of the seal of the prince Aršama among the fragments four years ago (see *Annual Report* 2012–2013, p. 105, 2014–2015, p. 144 fig. 1).

Photographers Ami Huang and Alexandra Hoffman (both NELC) made conventional digital images of about 95 new Elamite tablets



Figure 2. PFA seal recording team at work (From left) Erin Daly, Emma Petersen, and Christina Chandler

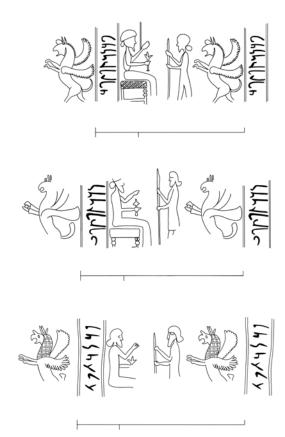


Figure 3. Collated line drawings of PFS 0066a\*, PFS 0066b\*, PFS 0066c\*, three similar but not identical seals, with Aramaic inscriptions naming Prndt (Iranian \*Farnadāta), entitled ptpkn (Iranian piθfakāna), "issuer of rations." The seals were used successively by an office that disbursed grain and flour for the king's entourage, in years 19–21 (PFS 0066b\*), 22 (PFS 0066a\*), and 24–25 (PFS 0066c\*) of Darius I

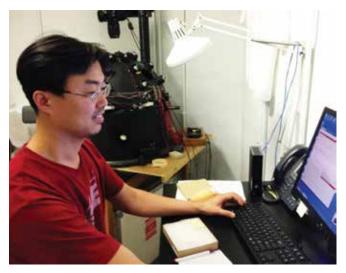




Figure 4. Capturing Polynomial Texture Mapping (PTM) image sets: Young Bok Kim and PTM apparatus

Figure 5. Processing PTM image sets: Clara Dandy and Oliver Natarajan

and fragments. Nilofar Saraj, Thomas Chiodini (both CMES) and Kimia Maleki (School of the Art Institute) edited images of about 350 items, including re-editions to correct color and contrast problems in some previously captured images. Chiodini has also resumed X-Ray fluorescence scanning of selected tablets.

In the Project's high-resolution imaging lab, Theresa Tiliakos, Young Bok Kim (both NELC), and Nathan Downey (college) made about 1,700 dynamic polynomial texture mapping (PTM) image sets of about 280 tablets and fragments, and about 560 high-resolution filtered-light scans of about 40 items (fig. 4). Monica Philips (NELC) assumed oversight of post-processing the accumulated PTM imagery, facilitated by updating the work stations and adding a computer for uploading/downloading the large image files. Along with Michael Bechtel (NELC) and Patrick Howard (CMES) during the academic year, and Oliver Natarajan (Williams College) and Clara Dandy (University of Chicago Lab School) during the summer, she processed scans of about 6,800 surfaces from about 1,000 tablets and fragments, reducing the backlog of unprocessed images to about three years' worth (fig. 5).

Public and academic presentations of PFA-related material include: Mark Garrison's discussion of religion and religious imagery at the Kamran Seminar of the Zoroastrian Association of Metropolitan Washington DC in July; a treatment by Wouter Henkelman and myself on recent work on Achaemenid Arachosia and Bactria at the Franke Institute/Oriental Institute conference on Ancient Afghanistan organized by Richard Payne and Gil Stein in Chicago in October; Annalisa Azzoni's summary of recent findings in the Aramaic Fortification texts at the meeting of the American Schools of Oriental Research in San Antonio in November; Christina Chandler's discussion of the seal PFS 0305\* (see *Annual Report* 2015–2016, p. 146) at the meeting of the Archaeological Institute of America in Toronto in January; and Tytus Mikołajczak's paper on network analysis of seals and proper names in accounting documents at the meeting of the American Oriental Society in Los Angeles in March.

A documentary entitled "Persépolis, le paradis perse," produced, broadcast and streamed by the European culture channel ARTE (http://www.arte.tv/en/, aired in France on February 10, 2017, and in Germany on March 5, 2017), includes remarks on the OI's excavation of the PFA, scenes of Henkelman reading Fortification documents with Iranian students in the

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Figure 6. Reading Persepolis in Tehran; Milad Abedi, Hamaseh Golestaneh and Milad Jahangirfar during a televised course in Achaemenid-Elamite palaeography under supervision of Shahrokh Razmjou and Wouter Henkelman at the National Museum of Iran

National Museum of Iran (fig. 6), and comments on the implications of the PFA for contemporary Achaemenid archaeology around Persepolis.

The Project weblog (http://perse-polistablets.blogspot.com), maintained by Charles E. Jones (Pennsylvania State University) added eight new postings in the past year, for a cumulative 247 entries (including the annual reports of the PFA Project), about 200,000 page views since 2010, 90 subscribers, and 1,300 followers on Facebook and other social media.

A long-delayed entry on "Persepolis Administrative Archives" in the *Encyclopaedia Iranica* (http://www.iranicaonline.org/articles/persepolis-

admin-archive) by Azzoni, Dusinberre, Garrison, Henkelman and myself combines an updated introduction to both the PFA and the Persepolis Treasury Archive with a compendious current bibliography. Other major Project-related works announced in previous publications of the Annual Report also appeared in 2017: Persian Religion in the Achaemenid Period/La religion perse à l'époque Perse (Classica et Orientalia 16), edited by Henkelman and Céline Rédard, with articles by Henkelman and Garrison; Die Verwaltung im Achämenidenreich — Imperiale Muster und Strukturen/Administration in the Achaemenid Empire — Tracing the Imperial Signature (Classica et Orientalia 17), edited by Bruno Jacobs, Henkelman, and myself, with articles by Azzoni, Garrison, Henkelman, and myself, as well as other contributions that draw on PFA material old and new; and Garrison's monograph on The Ritual Landscape at Persepolis (Studies in Ancient Oriental Civilization 71), lavishly illustrated with digital images and drawings of PFA seals.

A dozen more PFA-related articles published or submitted during the last year include: Azzoni's collaboration with Jan Tavernier on aspects language interference in the Aramaic Fortification Documents ("Scribal Confusion in Aramaic Renderings of Iranian Anthroponyms," in the proceedings of the First International BANANA Conference on Babylonian Names and Name-Giving, held in Leiden in September 2016 (see <a href="http://greatermesopotamia.be/events.html">http://greatermesopotamia.be/events.html</a>); Henkelman's survey of Egyptians in the Persepolis archives (in Wasmuth 2017, pp. 276–302, 386–94); my article on a high-ranking "treasury secretary" at Persepolis (<a href="https://www.academia.edu/32662073/M.\_STOLPER\_From\_the\_Persepolis\_Fortification\_Archive\_Project\_6\_The\_Dossier\_of\_%C5%A0arbaladda\_Treasury\_Secretary\_at\_Persepolis); and my companion pieces on the chronology of the PFA, one on intercalary months in Crisostomo et al. [eds.] forthcoming) and another on the earliest and latest texts (in another Festschrift, not yet announced).

Readers will recognize a growing focus on what last year's report described as reviewing and correcting accumulated records, so that even after the tablets themselves leave the custody of the Oriental Institute, the information in them will continue to yield new results. As the discovery of the Coptic tablet and the previous recognition of the seal of Arsames demonstrates, new results can still be expected from the very process of review.

## References

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