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The Last Traces of Archaic Elamite Engraving Traditions in the Achaemenid Seal Corpus

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Abstract

A substantial proportion of the archaeological material dating to the Achaemenid period consists of seals and seal impressions. This study examines a distinctive mode of execution and engraving evident in a corpus of Achaemenid-period seal impressions hitherto subsumed by previous scholarship under the broad category of "heterogeneous styles." The investigation pursues several interrelated objectives, notably characterizing the mode of execution evident in these seal impressions, an important material medium at the intersection of Achaemenid art and the imperial administrative apparatus, and elucidating a specific facet of the broader social history of Achaemenid art. To determine whether this distinctive mode of execution derives from an archaic Elamite tradition, the analysis situates the seal impressions within their specific historical, political, and geographical contexts and systematically compares their engraving techniques with diagnostic examples from the Elamite glyptic corpus. The results indicate that the designs preserved in these seal impressions exhibit a geometric style characterized by interconnected segments and by straight, angular, and curved lines combined with globular depressions, all executed through drill work. Together, these features represent the continuation of a tradition that originated in the early third millennium BCE, was attested during the Old Elamite period, reached its zenith in the Middle Elamite period, and persisted into the Neo-Elamite and Achaemenid periods. The clearly delimited administrative sphere in which these seal owners operated, western Fars and eastern Elam, strengthens the attribution of these impressions to an engraving style localized in the Elamite region. Thus, rather than subsuming these impressions within a broad, heterogeneous category, their distinctive mode of execution may be understood as the continuation of an archaic Elamite engraving tradition, preserved either in local workshops in Elam or through the work of local engravers employed by these seal owners and committed to this stylistic tradition.

Keywords: Achaemenid Seals, Elamite Seals, Persepolis, Geometric Style, Cultural Continuity.

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Introduction

Understanding the artistic and cultural traditions, as well as the material culture of the Achaemenids, requires that each individual piece of evidence, whether textual or iconographic, be examined within a dialectical framework (Pittman, 2014: 391). The seal impressions preserved in the Persepolis Fortification Archive (PFA)[1], a major component of Achaemenid material culture and the largest glyptic corpus available for reconstructing the history of Achaemenid art, offer considerable potential for studies of the empire's social, political, and religious history (Garrison, 1991: 9–10). The stylistic and iconographic analysis of these seal impressions reveals a highly diverse repertoire of Near Eastern and Mesopotamian motifs, indicating that a broad range of archaic styles persisted within the Achaemenid glyptic corpus.

Foundational studies of ancient Near Eastern and Iranian seals, particularly those of the Achaemenid period, were undertaken by pioneering scholars such as Richard Hallock and Heidemarie Koch and subsequently advanced by researchers including Margaret Cool Root, Mark B. Garrison, and Holly Pittman. Their research has demonstrated the critical importance of glyptic evidence for resolving historical ambiguities and investigating the social and ethnic histories of ancient societies. More specifically, the systematic study of seal impressions preserved in the Persepolis Fortification Archive (PFA) proceeded in tandem with the decipherment and translation of the clay tablets, culminating in Hallock's first specialized publication on the Persepolis cylinder seals in 1969 (Hallock, 1969). Hallock further developed this work in several subsequent publications, focusing primarily on the administrative functions of the seals[2]. A substantial portion of the cataloging and stylistic analysis of the Persepolis glyptic corpus was undertaken through the collaborative research of Garrison and Root (Garrison & Root, 2001). Garrison devoted much of his research to elucidating the organization of engravers and the structure of workshops (Garrison, 1988), while also undertaking comprehensive analyses of the styles represented in the PFA corpus, with particular emphasis on the "heroic encounter" motif (Garrison & Root, 2001: 14; Garrison, 1988). Root, whose research began in the late 1970s, has devoted much of her career to detailed investigations of the history of Achaemenid art[3], focusing on how the empire's sociopolitical framework shaped the iconographic programs of administrative seals throughout the empire, including in its most distant provinces (Root, 2013).

Persepolis functioned not only as a ceremonial center but also as a major hub of administrative and artisanal activity[4]. The evidence provided by the

Persepolis texts and seal impressions attests to a multicultural workforce, particularly along the routes connected to the Royal Road (Miller, 1997: 114; Garrison, 2000). More broadly, the Achaemenid Empire fostered an environment conducive to artistic syncretism, drawing on diverse cultural traditions and aesthetic sensibilities (Dandamayev, 1999; Garrison & Root, 2001: 10). In this context, identifying a specific seal, an important medium for expressing both individual identity and imperial administration, and determining the identity of its owner provide an invaluable opportunity to examine the relationship between the seal-bearer's status and their choice of iconographic style and engraving technique.

The central focus of this study is the analysis of a specific group of seal impressions in the PFA corpus featuring one of the most ubiquitous motifs in Achaemenid iconography: the "hero combating composite creatures" motif[5]. Although they share this subject, these impressions differ markedly from seals in the mainstream Persepolis glyptic corpus in their formal characteristics, modes of execution, and engraving techniques. Consequently, existing classification schemes have subsumed them under the broad category of "heterogeneous styles" (Garrison, 1988; 1991; 2000; Boardman, 1970: 305; Garrison & Root, 2001: 19; Dusinberre, 1997: 111).

By reassessing this prevailing categorization, this study seeks to
1) Characterize the distinctive execution and engraving style of the seal impressions under study; 2) Determine the cultural origins of this style; 3) Assess the potential influence of the geographical location of the seal-bearers' administrative activities or their ethnic ties to the Elamite region on their selection of an archaic local style.

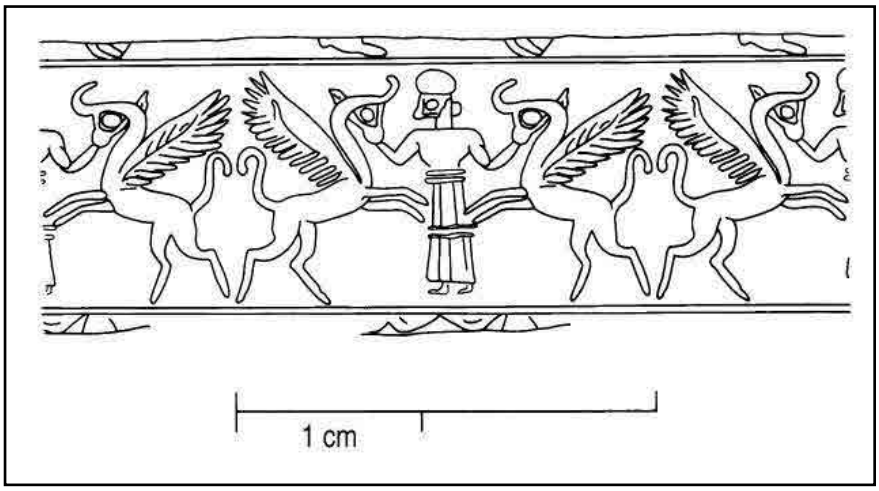
The broader iconographic programs of these seals within the PFA are not the primary focus of this study. Instead, the present study addresses the following key questions: Can the distinctive execution style evident in these seal impressions be traced to an archaic Elamite tradition? Should this style be classified as Elamite or Mesopotamian? Was the selection of this style influenced by the geographical location of the seal-bearers' administrative activities or by their ethnic ties?

The preliminary hypothesis posits that these seal impressions represent a localized style of engraving that was already prevalent in Elam before the rise of the Achaemenids. Given its continued use across multiple periods of Elamite history, this style should be recognized as an archaic, localized Elamite tradition. Furthermore, although the seal impressions derive from an administrative context, in which the seal-bearers' official functions

would theoretically have encouraged adherence to court-sanctioned artistic conventions such as the Court Style[6] for authenticating transactions, they retain distinctive indigenous cultural markers. The study proceeds by analyzing the seal impressions within their historical, political, and geographical contexts and by comparing their engraving techniques with diagnostic Elamite and Mesopotamian parallels. Ultimately, analysis of these distinctive seal impressions sheds new light on the social history of Achaemenid art.

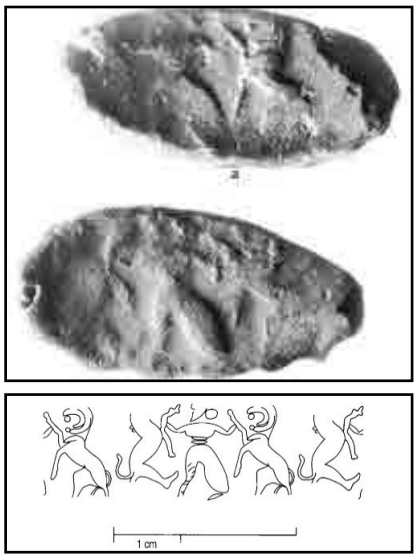
Iconographic Patterns of the Seals in Question

The seal impressions examined in this study—PFS 2, PFS 20, PFS 690, PFS 1519, PFS 740, PFS 1475, PFS 418, PFS 463, and PFS 249—date to the reign of Darius I (522–486 BCE). This section analyzes their iconographic programs and engraving characteristics.



◀ **Fig. 1. Cylinder seal impression, PFS 2 (Cat. no. 3), (Garrison & Root, 2001: 66–67)..**

On PFS 2 (Cat. No. 3; Fig. 1), the hero is depicted with the torso shown frontally and the head in profile, controlling two-winged bulls with long, curved horns. The design of this seal impression is rendered through drill work and characterized by interconnected segments, globular depressions, geometric forms, and straight vertical lines. PFS 2 was the personal seal of Irtupiya (Irtupie). In the administrative tablets, he is identified as the official responsible for grain provisioning between 503 and 499 BCE. In PF 710, which probably belongs to the Group J[7] category (Travel Rations) and dates to 507 BCE, Irtupiya appears as the official overseeing livestock. He also held several other positions within the Achaemenid administrative apparatus (Hinz, 1971; Koch, 1990; Garrison, 1996: 30–31). More broadly, Irtupiya is named in 74 administrative transaction texts from the Persepolis Fortification Archive (PFA), and some tablets that specifically mention him



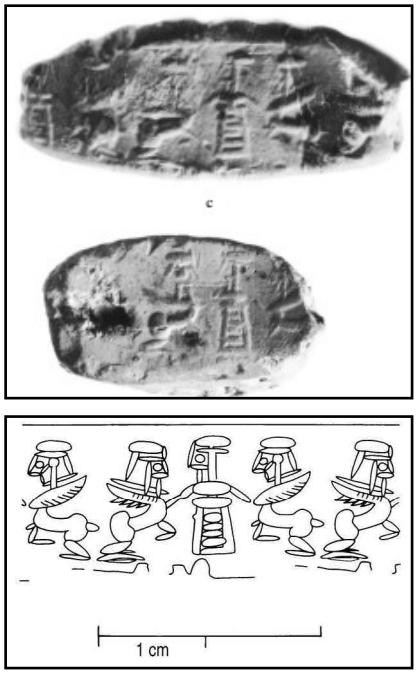
▲ Fig. 2. Cylinder seal, PFS 249 (Cat. no. 27). (Garrison & Root, 2001: 100).

are sealed with PFS 7, a royal-name seal of Darius I, probably the king's personal signet (Aperghis, 1999: 180).

On PFS 249 (Cat. No. 27; Fig. 2), the hero is again depicted in profile, controlling two figures that appear to be rampant, roaring lions or composite creatures standing on their hind legs, their forelegs raised toward the hero. In PFS 249, details such as the hero's double-strand belt, the head of the roaring lion on the right, and the contours of the bodies of both the hero and the lions are rendered using curved lines, interconnected segments, and geometric forms.

On PFS 20 (Cat. No. 145; Fig. 3), the hero is depicted frontally, with his head turned to the left and his arms extended vertically downward as he controls two rampant, winged, human-headed creatures. In the design of PFS 20, the engraver relied extensively on geometric forms, interconnected segments, and angular and straight lines to delineate the hero and the composite creatures. This rendering constitutes a highly abstract variant of a classical Near Eastern glyptic motif: the hero's mastery over animals or composite creatures.

On PFS 463 (Cat. No. 264; Fig. 4), of which only the right-hand portion survives, the hero, who may be winged, controls a composite creature, probably a winged horse advancing toward him. In PFS 463, as in PFS 249, the engraver employed straight and curved lines, interconnected segments, and geometric forms to render the composition, although their use was far less extensive than in PFS 20.



▲ Fig. 3. Cylinder seal, PFS 20 (Cat. no. 145). (Garrison & Root, 2001: 229).

On PFS 690 (Cat. No. 139; Fig. 5), the hero is depicted facing right, using his bent arms to control two abstractly rendered animals. These two rampant beasts, likely lions, feature long, pointed ears and gaping mouths. The rendering of the hero's face on PFS 690 closely resembles that on PFS 2 and, to some extent, that on PFS 20; the engraver clearly relied on geometric forms, interconnected segments, and straight and curved lines to render the motifs.

On PFS 1475 (Cat. No. 177; Fig. 6), although portions of the upper and lower edges of the impression are missing, a densely composed combat scene between the hero and animals remains visible. In this impression, the hero is rendered in an abstract manner through straight and curved lines and geometric forms, particularly in the treatment of the head. The hero, with his bent arms, grasps the inverted creatures, each by one of its hind legs. Among the beasts, only the outline of an ibex in the center of the scene is clearly identifiable.

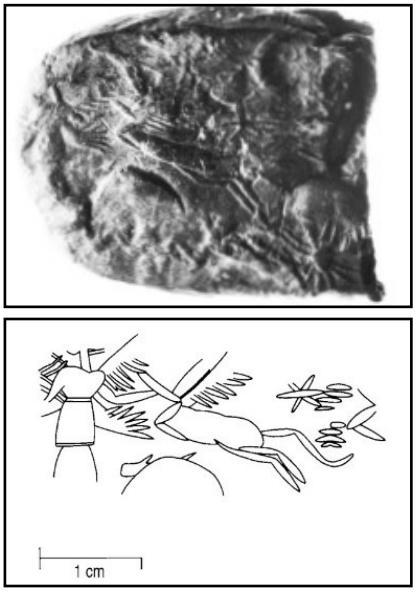
On PFS 418 (Cat. No. 201; Fig. 7), a fully abstract representation of a winged human figure wearing a long robe is rendered through drill work

using geometric forms, interconnected segments, and straight and curved lines. Additionally, at the center of the composition, an abstract human figure is depicted controlling two serpent-like creatures. Triangular motifs are engraved above the heads of both abstract human figures.

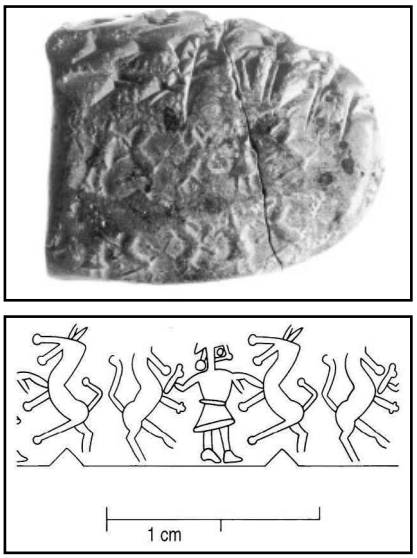
On PFS 740 (Cat. No. 146; Fig. 8), the hero is depicted in profile, his right arm bent as he grasps the foreleg of a winged creature, while his left hand extends toward a second winged beast. The engraver employed globular depressions, geometric forms, interconnected segments, and straight, angular, and curved lines to render the motifs, particularly to convey a sense of movement in the wings and bodies of the composite beasts.

On PFS 1519 (Cat. No. 167; Fig. 9), the hero is depicted frontally, his head turned to the right, controlling two-winged animals with both hands. These composite beasts are carved in a configuration unlike those in the other seal impressions analyzed here; they face one another, with one pair of forelegs meeting while the other pair overlaps the opposing shins, creating a dynamic composition. Although the hero's damaged headgear cannot be identified, his attire comprises a tiered skirt and a double belt. The hero's attire and body, together with the composite beasts, are rendered through drill work using geometric forms, interconnected segments, straight, angular, and curved lines, and globular depressions. The prominent use of curved lines for the composite creatures, in contrast to the more rigid rendering of the hero, was probably intended to emphasize the beasts' forward momentum.

In sum, all seal impressions from the PFA examined here share the general iconographic program of a hero combating composite creatures (such as winged horses) or animals (such as snakes). Although PFS 1475, PFS 418, PFS 463, and PFS 249 bear no inscriptions or direct indicators of ownership, their stylistic attributes, particularly the use of drill work to produce straight, angular, and curved lines, globular depressions, geometric forms, and interconnected segments, closely correspond to those of the other five seal impressions: PFS 2, PFS 20, PFS 690, PFS 1519, and PFS 740.



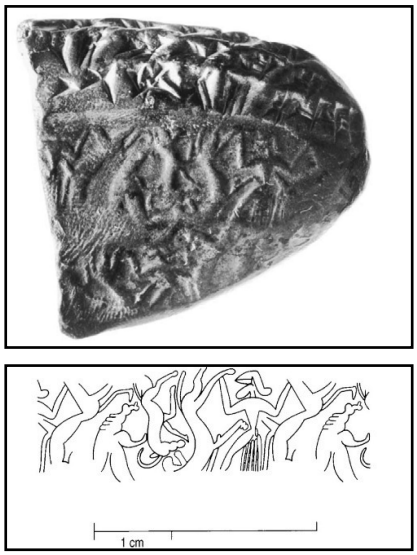
▲ **Fig. 4. Cylinder seal, PFS 463 (Cat. no. 264), (Garrison & Root, 2001: 374).**



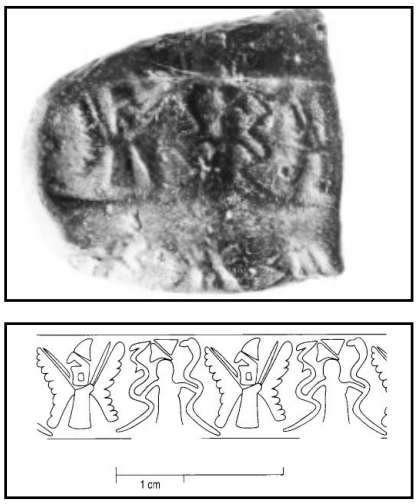
▲ **Fig. 5. Cylinder seal, PFS 690 (Cat. no. 139), (Garrison & Root, 2001: 223).**

Engraving Style and Execution of the Motifs

Although administrative seals generally belonged to offices rather than specific individuals, the Achaemenid glyptic corpus, particularly the seal impressions from Persepolis, attests to several prominent officials who directed particular administrative bureaus and used their corresponding office seals. PFS 2, examined in this study, is attested alongside PFS 859,



▲ Fig. 6. Cylinder seal, PFS 1475 (Cat. no. 177), (Garrison & Root, 2001: 265).



▲ Fig. 7. Cylinder seal, PFS 418 (Cat. no. 201), (Garrison & Root, 2001: 294).

PFS 38, and PFS 51 on the J texts (travel rations)—a group of tablets associated with designated individuals (Garrison, 1996: 25)—within the Persepolis Fortification Archive (PFA). As noted above, PFS 2 belonged to the administrative official Irtupiya. Irtupiya's administrative prominence is demonstrated by the exceptional frequency of his personal seal, one of the few seals of Achaemenid officials to occur consistently alone; on the J tablets, it appears more frequently than any other personal seal in the PFA corpus and is attested far more often outside the J texts (Aperghis, 1999: 181). Analysis of the administrative transactions supervised by Irtupiya underscores his considerable importance within the Achaemenid administrative apparatus (Garrison, 1996: 30).

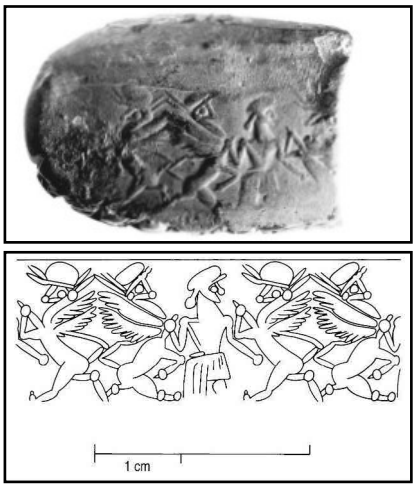
The engraving style of PFS 2 differs markedly from the established stylistic categories of Achaemenid glyptic art. The engraver demonstrated considerable technical proficiency in executing this seal design, using drill work to create precise straight, angular, and curved lines alongside geometric forms. By giving the human figure a square-shaped head and the animal figures triangular heads, and by carefully accentuating the human figure's eyes, nose, and headgear, the engraver produced a highly detailed, complete, and stylistically distinctive glyptic composition. The rendering of the hero's skirt, characterized by the geometrically precise execution of vertical and horizontal lines, finds close parallels in PFS 740 and PFS 1475. By employing condensed geometric imagery and stylized linear configurations to delineate both human and animal anatomies within a composition framed by horizontal borders at its upper and lower edges, the maker of PFS 2, whether consciously or unconsciously, produced a distinctive seal design that remains stylistically separate from the broader Achaemenid glyptic corpus.

The stylistic characteristics and design syntax of PFS 2 are echoed in PFS 740, PFS 690, PFS 20, PFS 1519, PFS 418, PFS 1475, PFS 463, and PFS 249, though these examples were likely executed by different hands with less precision. Among this group, PFS 740 and PFS 249 exhibit the closest compositional affinity to PFS 2, while PFS 1519, PFS 1475, and PFS 418 display a strong resemblance in the geometric schematization of the human and animal heads. Although some of these impressions differ from PFS 2, particularly in the execution of the wings and the placement of the composite beasts flanking the hero, a more pronounced exaggeration of the geometric style is evident in PFS 463, PFS 690, PFS 740, and PFS 418. According to Garrison and colleagues, the style of PFS 2 shares certain features with both the Fortification Style and the Court Style, but this seal impression, like the others analyzed here, must be assigned to the category

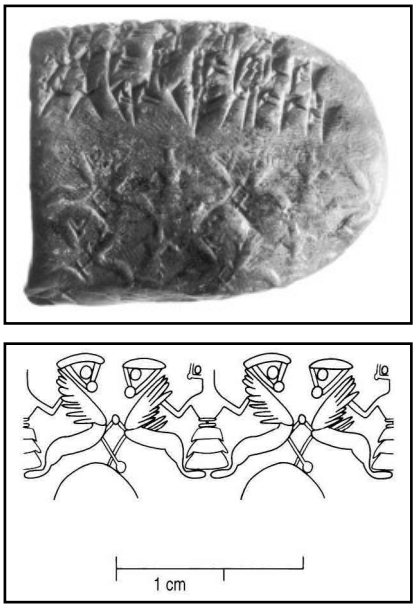
of "heterogeneous styles" (Garrison, 1988; Garrison & Root, 2001: 20, 67). The stylistic divergence and formal irregularities evident in the execution and engraving of PFS 740 and the related impressions examined here, especially the geometric configurations employed to render faces, mark them as highly distinctive artistic products.

Analysis of the geographical distribution of these seal-bearers' administrative activities may help reconstruct the possible ethnic affiliations of the owners or patrons and identify the local workshops or engravers responsible for producing the seals. Records of the administrative duties performed by Irtupiya, the user of PFS 2, during the sixteenth and seventeenth regnal years of Darius the Great identify him as a distributor of sesame, barley, figs, sheep, and goats in Hunar (near the Elam–Parsa border), Teleman, and Kasat in western Parsa. However, in regnal year 18 or possibly 19, PF 1790 records that Irtupiya received instructions from Parnaka to provide sheep as rations for a vast administrative territory stretching from Hunar, near the Elam–Parsa border, and Liduma in the west to Hidali on its eastern frontier. This administrative record indicates that a major shift in Irtupiya's administrative jurisdiction had occurred by this date (Aperghis, 1999: 181). Between regnal years 19 and 23, Irtupiya is recorded as the supplier or recipient of a wide range of commodities across a territory extending along the Royal Road between Kurdushum and Hidali and encompassing eastern Elam and western Parsa. In one instance (PF 15), Irtupiya was required to transport grain beyond his immediate administrative zone to Matezzish, near Persepolis. The administrative use of PFS 2 on Persepolis documents began in year 19 and continued through year 23, indicating that this seal was the second most frequently occurring seal within the Persepolis corpus (Ibid: 181–182).

According to Garrison (Garrison, 1991: 12–13), PFS 2 reflects the deliberate choice of an influential state official who sought a distinctive seal produced outside mainstream glyptic workshops and differentiated from conventional engraving templates, presumably as an expression of his awareness of both his administrative status and the seal's transactional authority. The present study, however, departs from Garrison's hypothesis on the basis of the formal similarities in execution technique and engraving style between this seal impression and examples from Elamite glyptic traditions, together with the geographical scope of Irtupiya's activities in western Parsa and eastern Elam. Instead, the present study argues for the influence of regional and ethnic affiliations on the selection of this specific execution style and engraving technique. Accordingly, the present study suggests that this seal impression and probably the others examined



▲ Fig. 8. Cylinder seal, PFS 740 (Cat. no. 146), (Garrison & Root, 2001: 230).



▲ Fig. 9. Cylinder seal, PFS 1519 (Cat. no. 167), (Garrison & Root, 2001: 251).

here were produced in a local workshop or by regional engravers who specialized in a distinctive local style whose products are only sporadically represented in the Persepolis archive.

Heidemarie Koch (1990) attributes PFS 20 to an official named Mamannuwiš, who supervised the grain storehouses at Kesat in the sixth region of Elam during regnal years 21–26 (501/500–496/495 BCE). The linear carving style of the heads on this seal closely recalls the engraving style of PFS 2. Furthermore, the rendering of the hero's body exhibits close affinities with the classic Middle Elamite "connected segments style" (Negahban, 1991: 91, 101).

PFS 690 was rolled twice on the reverse of tablet PF 460, dated to year 22 (499/500 BCE), with the two impressions vertically superimposed, while PFS 69 was impressed on the tablet's edge. The text of the tablet, likewise, dated to year 22, states: "30 (BAR) of grain for seed were received and entrusted to Harzakka. Azzakra (received it) and set (it) aside in the Ibat (place) storehouse. Year 22" (Hallock, 1969: 173). Most likely, the geometric composition of the scene and the extensive drill work characterizing this and the previously discussed impressions indicate that they were produced by a single engraver or in a particular local workshop (Garrison, 1988: 447–450; Garrison & Root, 2001: 223).

In PFS 740, as in PFS 249, PFS 1475, and PFS 418, the engraver represented the hero with a frontal torso and profile head, whereas the composite beasts were deeply carved using straight and curved lines together with geometric forms and globular depressions produced by extensive drill work. Whereas the wings and animal bodies are rendered with fluid, curving lines, the hero's body is executed using a combination of curved, straight, and angular lines. According to Garrison and Root (2001: 230), the design preserved in this seal impression appears to have been engraved in haste and depicts an Assyrianizing garment that combines several earlier iconographic models. Amiet (1972: 256, pl. 175, no. 2005), however, argues that the hero's garment partly reflects Old Elamite designs of the early second millennium BCE, characterized by narrow-waisted figures wearing vertically striped skirts that project sharply at a right angle from the waist. This seal was impressed on the reverse of tablet PF 513, dated to 499/498 BCE (Garrison, 1988: 447–450). The text, dated to year 23, records the delivery of seed grain for sowing: it was prepared by Parru, delivered to Padadda, and distributed by Pirtiš at Saramina (Hallock, 1969: 182).

In PFS 1519, as in PFS 740, the engraver employed drill work to combine angular and curved lines, globular depressions, and geometric

forms in rendering the glyptic imagery, although PFS 1519 exhibits greater precision of execution than PFS 740. PFS 1519 was rolled twice on the reverse, producing superimposed impressions, and once on the upper edge of PF 1667, dated to 505/504 BCE (Garrison, 1988: 462). This administrative text, dated to year 17, records that grain prepared by Napunuš was received by Kapriya to feed four horses kept at Pitlan (Hallock, 1969: 458–459). As these records demonstrate, the administrative sphere of the seal-bearers discussed here—particularly the activities associated with the seals of Irtupiya (PFS 2) and Mamannuwiš (PFS 20)—was concentrated in the borderlands between western Parsa and eastern Elam. Consequently, it may be argued that, owing either to their regional administrative functions or ties with local ruling elites, these officials deliberately favored workshops near Elam—or local engravers preserving ancient engraving and iconographic traditions—over the newer, court-centered workshops of Parsa and other satrapies. The engravers who carved these seals adopted standard iconographic programs shaped by the political and artistic models of the Achaemenid period yet remained technically and stylistically committed to an archaic Elamite tradition that had persisted since the third millennium BCE.

Tracing a Comparable Engraving Technique in Elam

The geographical sphere of administrative activity associated with the owners and/or users of the seals examined in this study, all from the Persepolis Fortification Archive (PFA), together with the close stylistic parallels in motif rendering between these examples and seals and seal impressions recovered from Mesopotamia and Elam, warrants closer examination of this engraving technique. These parallels include the use of geometric imagery, interconnected segments, and drill-produced globular depressions; the technique has long and broadly parallel trajectories in Mesopotamia and, especially, Elam.

Elam is recognized as one of the earliest centers for the emergence, growth, and development of glyptic art within the cultural sphere of southwestern Iran. Its glyptic corpus is comparable to assemblages recovered from archaeological sites farther east, specifically Tepe Yahya and Tepe Shahdad, as well as to material from Mesopotamia to the west. The Elamite engraving tradition followed a distinct trajectory, originating in the early third millennium BCE, appearing during the Old Elamite period, reaching its zenith in the Middle Elamite period, and persisting through the Neo-Elamite and Achaemenid periods. Many motifs employed on seals of the Middle Elamite period have no known precedents. Indeed,

the art of seal production during the Middle Elamite period may be regarded as superior to that of Elam's western neighbours (Talayi, 2013: 100–102). However, during the Neo-Elamite period (ca. 1000–539 BCE), Elam's long-established culture and civilization gradually declined amid political and military rivalry with the powerful Assyrian Empire (Ibid: 102–104). Under such political conditions, it is unlikely that substantial innovation would have occurred in the cultural and artistic spheres, at least in the production of seals, during this phase of Elamite history. Rather, one should anticipate the continuation of earlier traditions from the Old Elamite and, especially, the Middle Elamite periods into the Neo-Elamite period.

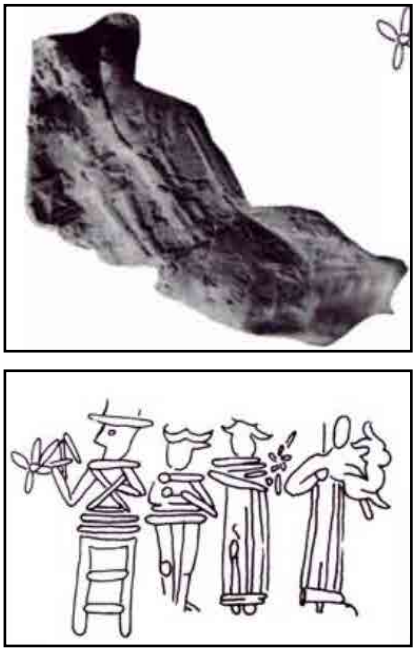
Nevertheless, on the basis of his study of a group of Neo-Elamite seals recovered from the Apadana and Acropolis at Susa and dated to the early seventh or sixth century BCE, Amiet interpreted advances and refinements in their manufacture as evidence of a third phase in the development of Late Neo-Elamite art. He associated this phase with Elam's revival after the Assyrian attacks of 645 BCE and termed it the "glyptic art of the end of Elam" (la glyptique de la fin d'Élam), (Amiet, 1973a). Amiet further interpreted the resemblance between a few seals from the PFA and Neo-Elamite examples as evidence for the reuse of Late Neo-Elamite seals (Ibid: 15, 25), at times presenting PFA seal impressions as evidence of this third phase of Late Neo-Elamite glyptic art. He further suggested that this style spread from Susa to Anshan and other regions (Ibid: 4–6, 24–25). By contrast, Garrison identifies a group of seals in the PFA that are stylistically very close to the cylinder-seal corpus represented on the Acropolis and Apadana tablets—a corpus that Amiet designates as the "glyptic art of the end of Elam" (Garrison, 2002: 68). Garrison and Root further note that the number of seals bearing Elamite inscriptions and engraved in Elamite styles within the PFA and dating to the reign of Darius I in the Achaemenid period is substantially greater than Amiet had previously recognized (Ibid: 70).

Although the Neo-Elamite period, especially when compared with the Middle Elamite period, was characterized by decline, considerable developments in seal production, particularly advances in engraving techniques and the tools employed, occurred in the regions surrounding Elam, resulting in high-quality output. Therefore, some seal-making workshops operating in Elam during the sixth and fifth centuries BCE may have been overshadowed by workshops in neighbouring regions; nevertheless, archaic and localized traditions of administrative and official seal production may have persisted within these Elamite workshops and among particular Elamite engravers.

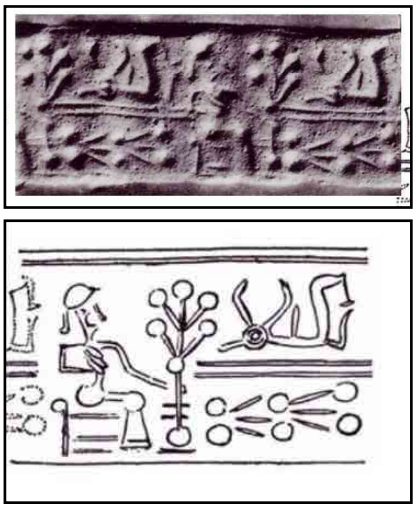
Seals and seal impressions recovered from Elam have been studied extensively by scholars including Amiet (1959, 1971, 1972, 1973a, 1973b), Pittman (1990, 1994, 1997, 2001, 2006), Porada (1948, 1964, 1965, 1993), and Roach (2008), leading to the establishment of stylistic classifications.

One such mode of image rendering attested during the Old Elamite period is the Jemdet Nasr-related style (JNRS). In this style, human and animal figures were rendered geometrically, through interconnected segments, shallow incisions, and drill work. As its name suggests, the JNRS reflects the Jemdet Nasr period in southern Mesopotamia (Amiet, 1980: 29–31); however, the evidence clearly indicates the coherent, contemporaneous presence of this style in both Mesopotamia and southwestern Iran before the emergence of Elam (Roach, 2008, vol. 1: 351). This mode of image rendering continued into the Susa III/IV style (STF) during the early third millennium BCE. Amiet dates STF to the same period as the Proto-Elamite tablets and recognizes two subgroups within this style: the glazed steatite style and the ancient geometric-pattern style (Amiet, 1972: 173–183). In both the Susa III/IV and the subsequent Susa IV (SF) styles, geometric rendering and interconnected segments are widely attested on Elamite seals. During the SF phase, the subject matter consists predominantly of banquet, contest, and mythological scenes (Collon, 2005: 27–31). The use of this style persisted through several phases of the Old Elamite period and continued into the Middle Elamite period. In the Early Middle Elamite (EME) style, dating to approximately the mid-second millennium BCE, Elamite seals and seal impressions include examples closely comparable to the style examined in this article and characterized by increased use of the heavy drill (Figs. 10 and 11; Amiet, 1972: 258–264).

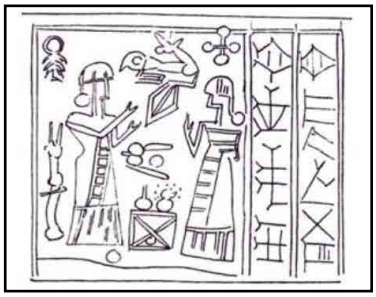
The subsequent Kassite-related style (KRS) was a shared style with Mesopotamia, in which most Elamite seals were executed. However, in the Late Middle Elamite (LME) style, the seal style of the pre-KRS period was revived, and more examples like the style under discussion here appear among Elamite seals and seal impressions (Figs. 12 and 13), (Ibid: 265-272).



▲ Fig. 10. Cylinder seal recovered from Haft Tappeh, EME period (Roach, 2008, vol. 2: 460).



▲ Fig. 11. Cylinder seal recovered from Chogha Zanbil, EME period (Roach, 2008, vol. 2: 476).



▲ Fig. 12. Cylinder seal recovered from Chogha Zanbil, LME period (Roach, 2008, vol. 2: 521).

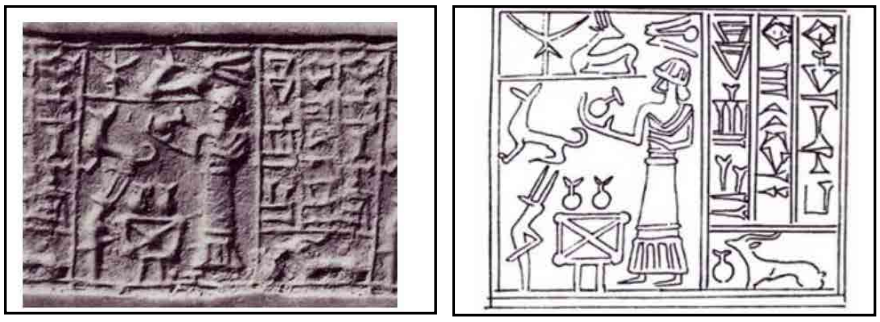


Fig. 13. Cylinder seal recovered from Chogha Zanbil, LME period (Roach, 2008, vol. 2: 520). ▶

Among the Neo-Elamite seals, we can also trace the continued execution of geometric images, connected segments, and globular cavities created via drill-work, alongside straight, angular, and curved lines. Several of these will be examined below. In the execution of images on seals 14, 15, and 19, the use of geometric images, connected segments, and globular cavities is evident, while the designs on seals 16, 17, 18, and 20 display a combination of geometric forms and connected segments executed with drill-work and straight, angular, and curved lines. Thus, this engraving technique, characterized by geometric and connected-segment execution, can be traced among certain Neo-Elamite seals, much like in the Late Middle Elamite (LME) style.

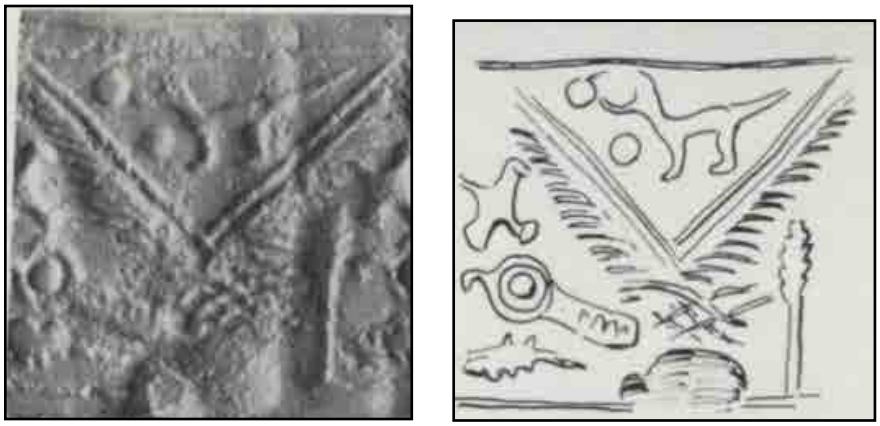
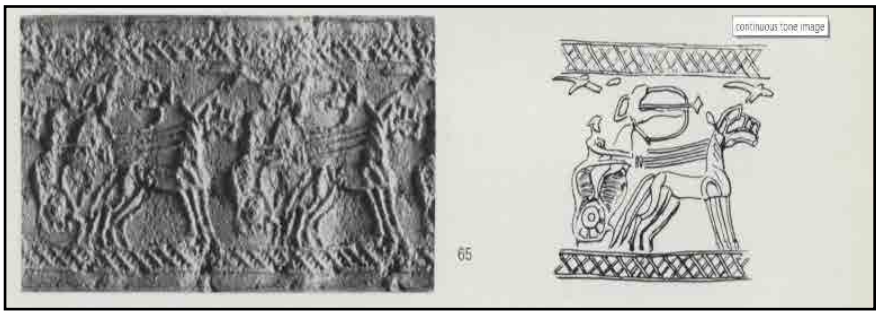
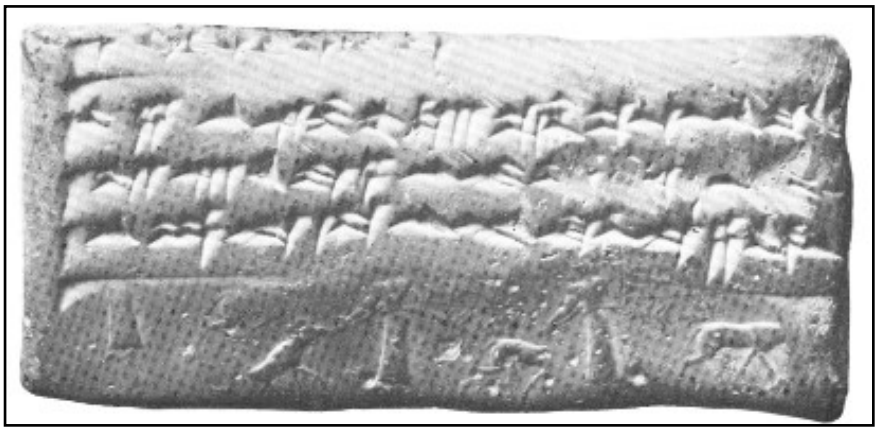


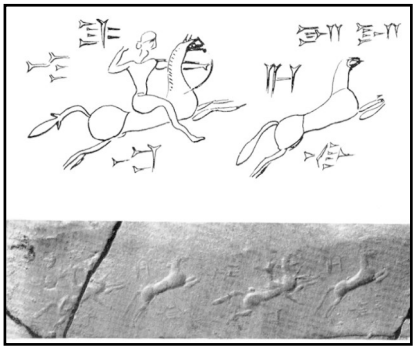
Fig. 14. Cylinder seal from the Neo-Elamite period (Amiet, 1973a, plate XV, no. 62). ▶

Fig. 15. Cylinder seal from the Neo-Elamite period, with a combination of faunal and floral imagery (Amiet, 1973a, plate XV, no. 64). ▶

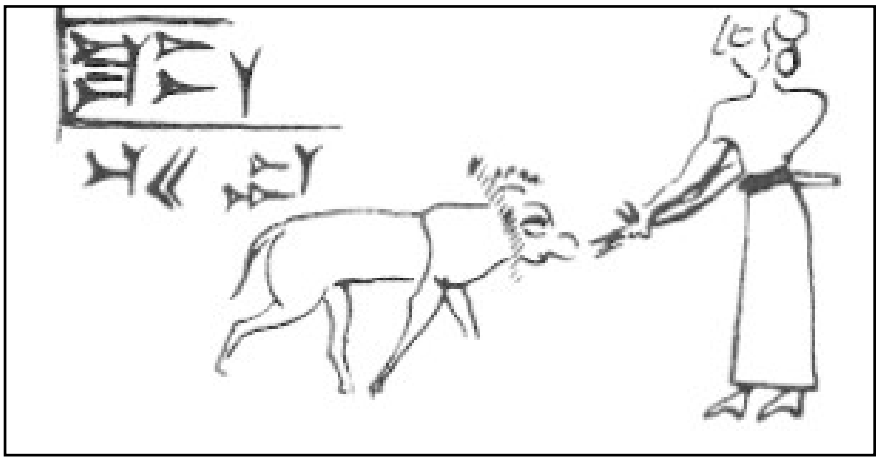


◀ Fig. 16. Cylinder seal from the Neo-Elamite period (Amiet, 1973a, plate XV, no. 65).





▲ Fig. 17. Cylinder seal from the Neo-Elamite period (Potts, 2004: 300; Amiet 1973b, plate IV, no. 16).



◀ Fig. 18. Cylinder seal from the Neo-Elamite period (Potts, 2004: 300; Amiet 1973b, plate V, no. 19).

◀ Fig. 19. Cylinder seal from the Neo-Elamite period. (The Metropolitan Museum of Art (https://www.metmuseum.org/art/collection/search/323996).

▲ Fig. 20. Cylinder seal from the Neo-Elamite period. (Catawiki Archaeology category, https://www.catawiki.com/en/c/569-archaeology).

Although the absolute number of seals declines markedly in the Neo-Elamite period, the execution of seal imagery through geometric forms, connected segments, and globular cavities created by drill-work remains traceable. This engraving style and technique of motif execution were incorporated into the Elamite glyptic corpus from the Old Elamite period under the influence of the Jemdet Nasr style, reached their peak in the Middle Elamite period, and persisted into the Neo-Elamite era. Accordingly, this style may be characterized as an archaic, localized style within Elamite civilization. The use of this style on Achaemenid seals, irrespective of possible influences from other regions (such as Mesopotamia or Egypt) or the independent initiatives of Achaemenid engravers, may, given the temporal and spatial proximity of the Achaemenid political center to Elamite cultural centers, reflect a continuation of Elamite seal-making practices in the Achaemenid era.

Conclusion

The seal impressions examined in this study, PFS 2, PFS 20, PFS 690, PFS 1519, PFS 740, PFS 1475, PFS 418, PFS 463, and PFS 249, although belonging to the wider PFA glyptic corpus and displaying features associated with the Court Style, differ significantly from the broader Achaemenid-era glyptic corpus recovered from Persepolis in terms of their engraving technique, mode of execution, and rendering of motifs. This distinction is explained by three key factors: 1) the clearly defined administrative sphere of activity of the owners of two of these seals, Irtupiya and Mamannuwiš, in western Fars and eastern Elam; 2) the distinct engraving technique of the seal impressions in question, characterized by straight and curved lines combined with globular cavities created by drill-work; and 3) the stylistic rendering of these motifs, which utilizes a geometric, connected-segment style closely related to Elamite engraving traditions current since the early third millennium BCE. Consequently, the Achaemenid-era seal impressions analyzed here represent the latest surviving manifestations of an archaic, localized style rooted in the cultural history of Elamite civilization.

Therefore, although contemporary engraving techniques and advanced methods of motif execution were readily available within official Achaemenid workshops, and although their administrative function would, in theory, have aligned them with court-sanctioned artistic conventions such as the Court Style, the deliberate choice of engravers or workshops practicing such an archaic style and technique suggests a conscious effort. The owners of these seals appear to have sought to project their

ethnic and regional affiliations, or to emphasize their connection to local administrative and governmental institutions.

Seals, used by individuals or administrative offices to establish personal identity and authenticate administrative transactions, provide an invaluable medium for tracing the personal preferences, ethnic backgrounds, and religious identities of their owners. Furthermore, they facilitate the identification of localized styles and the study of how the Achaemenid administrative apparatus, and its standardized artistic canons influenced the art and culture of subject populations. In this regard, glyptic evidence serves as a unique diagnostic tool for reconstructing ancient societies, offering deeper insights into culture, religion, ritual beliefs, and the social history of art in antiquity. Ultimately, within the framework of the social history of art, the findings of this study elucidate the complex reciprocal interactions between glyptic styles in the ancient Near East and the persistence of regional artistic traditions within the vast administrative network of the Achaemenid Empire.

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Conflict of Interest

In adherence to ethical publication standards, the author affirm that there are no conflicts of interest, either personal or financial, that could have influenced the content or conclusions presented in this research.

Endnote

1. For further discussion of the history of the discovery of the Persepolis documents, seals, and seal impressions, see: Wouter F. M. Henkelman, "Administrative Realities: The Persepolis Archives and the Archaeology of the Achaemenid Heartland," in The Oxford Handbook of Ancient Iran, ed. D. T. Potts (Oxford: Oxford University Press, 2013), 530–534.

2. For a representative example, see: Richard T. Hallock, "The Evidence of the Persepolis Tablets," in The Cambridge History of Iran, vol. 2, The Median and Achaemenian Periods, ed. I. Gershevitch (Cambridge: Cambridge University Press, 1985), 588–609.

3. For further discussion, see: Margaret C. Root, "The Cylinder Seal from Pasargadae: Of Wheels and Wings, Date and Fate," in Neo-Assyrian, Median, Achaemenian and Other Studies in Honor of David Stronach, Iranica Antiqua 34, eds. R. Boucharlat, J. E. Curtis, and E. Haerinck (1999): 271–303; and Margaret C. Root, "Defining the Divine in Achaemenid Persian Kingship: The View from Bisitun," in Every Inch a King: Comparative Studies on Kings and Kingship in the Ancient and Medieval Worlds, eds. L. Mitchell and C. Melville (Leiden: Brill, 2013), 23–65.

4. Many of the documents recovered from Persepolis preserve evidence for reconstructing both discrete and interrelated functions within administrative offices, as well as information concerning the officials responsible for administrative matters relating to food commodities. These documents further demonstrate that Persepolis was not merely a center of royal ceremony but also one of the principal administrative centers connected to other administrative regions throughout the empire

(Garrison & Root, 2001: 9–10). As a critical administrative node, Persepolis drew activity from a territory encompassing much of the Marvdasht Plain, the area surrounding modern Shiraz, and the road from Shiraz to Susa, thereby functioning as a magnet for administrative activity (Stolper, 1992; Garrison, 1996; Koch, 1990: 247–310).

5. According to Garrison, the recurrence of only a limited range of scenes on Court Style seals—namely heroic encounters, archery scenes, offering scenes, and scenes of worship before an altar—indicates that officially sanctioned glyptic imagery was closely controlled by the Achaemenid court (Garrison, 1991: 17).

6. Achaemenid seals and seal impressions have been classified according to their stylistic treatment into the "Court Style," the "Fortification Style," the "Persepolitan Modeled Style," the "Linear Style," the "Mixed Styles I and II," and the "Broad and Flat Styles" (Garrison, 1988; Garrison, 1991; Garrison, 2000; Boardman, 1970: 305; Dusinberre, 1997: 111).

7. A classification system has also been established for the texts recovered from Persepolis, encompassing the T, Q, and J categories. The J texts concern the distribution of commodities presented to the king, issued by him, or presented to other high-ranking members of the court, such as royal women; consequently, the seals impressed on tablets in this category are particularly well documented. Accordingly, only a restricted group of seals occurs on the J texts; these function as personal seals identifying the principal individuals involved in the transactions, such as the seal of Darius I (PFS 7*), that of Irdabama (PFS 51[II]), and that of Irtašduna (PFS 38), (Garrison & Root, 2001: 11).

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آخرین نشانه‌های سبکی کهن از سنت‌های حکاکی ایلامی در مجموعهٔ مهرهای هخامنشی

مینا صفا[I]

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چکیده

بخش مهمی از شواهد مادی به‌دست آمده از دورهٔ هخامنشیان مهرها و اثرمهرها هستند. مسئلهٔ اصلی در این پژوهش بررسی سبک متفاوت اجرا و حکاکی تعدادی از اثرمهرهای مکشوفه از دورهٔ هخامنشی است؛ که تاکنون در پژوهش‌های انجام شده در مجموعهٔ سبک‌های ناهمگون دسته‌بندی شده‌اند. در بررسی این سبک متفاوت اهدافی دنبال می‌شود، ازجمله مشخص نمودن سبک اجرای تعدادی از اثرمهرهای به‌دست آمده از دورهٔ هخامنشی، به‌عنوان یکی از بسترهای مهم تجلی هنر قوم و یا سیستم حکومتی هخامنشی، و همچنین روشن نمودن بخشی از تاریخ اجتماعی هنر هخامنشیان. بررسی مسئله مطرح در این پژوهش و پاسخ به این پرسش که، آیا سبک متفاوت اجرای اثرمهرهای مورد بررسی در این پژوهش را می‌توان به سبکی کهن در ایلام نسبت داد؟ ازطریق تحلیل اثرمهرهای موردنظر در بافت تاریخی، سیاسی و جغرافیایی آن‌ها و همچنین مقایسهٔ تکنیک اجرا و حکاکی آن‌ها با نمونه‌هایی از حکاکی مهرهای ایلامی انجام خواهد شد. نتایج این پژوهش نشان‌داد، سبک‌هندسی و قطعات متصل در اثرمهرهای موردنظر، که ازطریق متکاری و با استفاده از خطوط صاف، زاویه‌دار و منحنی و حفره‌های گوی‌مانند اجرا شده‌اند، تداوم سبکی از دورهٔ ایلام کهن است که ترقی و اوج کاربرد آن در دورهٔ ایلام میانه اتفاق افتاد. محدودهٔ اداری مشخص فعالیت مالکان تعدادی از این مهرها در غرب فارس و شرق ایلام احتمال تعلق اثرمهرهای موردنظر به سبکی بومی‌شده در ایلام را تقویت می‌کند. به این‌ترتیب، سبک اجرای خاص اثرمهرهای مورد بررسی در این پژوهش را به‌جای دسته‌بندی کلی در مجموعه سبک‌های ناهمگون می‌توان تداوم یکی از سبک‌های کهن ایلامی دانست، که در کارگاه‌های محلیِ محدودهٔ ایلام و یا توسط هنرمندان محلی استخدام‌شده توسط مالکان این مهرها، که متعهد به این سبک بودند، اجرا شده‌اند.

کلیدواژگان: مهرهای هخامنشی، مهرهای ایلامی، تخت‌جمشید، سبک هندسی، تداوم فرهنگی.

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