Paisajes, escrituras, símbolos y arquitecturas del antiguo Irán

Landscapes, Scriptures, Symbols and Architectures of Ancient Iran

La tumba de Ciro en Pasargada.
Imagen modificada a partir de una fotografía original de © Carole Raddato.

Edición: 2023
Depósito Legal: M-22534-1999
I.S.S.N. : 1575-3492
ISSN Digital: 2659-9090

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Introducción

El antiguo Irán, Persia, pero también Elam, constituye un ámbito de estudio apasionante del que cada vez tenemos más información. El número vigésimo sexto de nuestra revista hace un repaso por distintos aspectos que son objeto de investigación en la actualidad, y lo hace de la mano de investigadores iraníes, franceses, italianos y españoles.

Solemos recordar que la inscripción de Darío en Behistun fue la llave a partir de la cual se pudo descifrar el cuneiforme. La inscripción estaba escrita en persa antiguo, en babilonio y en elamita. A partir del persa se pudo comenzar a descifrar el babilonio, y el elamita tardaría algo más. Es muy interesante que la inscripción estuviese escrita en la lengua originaria de la zona, y que los aqueménidas lo reconociesen con su inscripción como tal. Visiones exógenas y posteriores no siempre han querido ver esta vinculación.

El trabajo de Silva Balatti sobre materiales inscritos del Irán aqueménida continúa una línea de trabajos sobre la escritura irania que aún hoy nos da alegrías y resultados interesantísimos.

La arquitectura irania es objeto de varios artículos en este volumen. El de Davide Solaris y Roberto Dan sobre el significado y la arqueología de Masjed-e Soleyman, reinterpretando su origen y su contexto socio-cultural, es el primero de ellos. El trasvase cultural que estudia Pierfrancesco Callieri de parte de babilonios en Persépolis nos habla de arquitectura, pero también de arqueología y de la información que obtenemos de ellas.

Carlos Fernández Rodríguez aborda la gestión del agua y de su papel en la habitabilidad en el sur de Irán durante la Edad del Hierro, que debe relacionarse con lo que sucede al otro lado del Golfo. Fernando Escribano Martín indaga en lo que conocemos como "jardín persa", en sus orígenes y en cómo ha evolucionado, y para eso debe partir de Pasargada en Persia, pero ir también más atrás para comprenderlo.

Sébastien Gondet aborda el desarrollo de la agricultura y la historia de la ocupación de la Persépolis aqueménida, aspecto clave para entender el funcionamiento de la capital persa, y Alireza Khounani los viñedos de la Nisa arsácida parta, un ejemplo concreto de agricultura y de comercio en otro periodo clave de la historia irania.

El ámbito material viene tratado con el trabajo de Giulio Maresca sobre la cerámica de Sistán en la Edad del Hierro, o el estudio más específico de Negin Meri sobre una bulla concreta conservada en una institución museística de Teherán.

Cerramos esta temática tan variada e interesante que hemos ido tratando de agrupar en esta introducción con el trabajo de Zahara Gharenhkhani, en el que realiza unas reflexiones sobre criaturas híbridas de la Persia preislámica y recapacita sobre su simbolismo, que va mucho más allá del tiempo en el que fueron concebidas.

La panoplia de estudios de diverso orden que aquí presentamos da cuenta del rico mundo que se está investigando en torno al Irán antiguo, cuyas manifestaciones elamita y persa, cada vez más claramente vinculadas, trascendieron también en el tiempo y en el espacio.

F. Escribano Martín, C. del Cerro Linares, C. Fernández Rodríguez y F. L. Borrego Gallardo

Foreword

Ancient Iran, Persia, and Elam constitute a fascinating field of study about which we have more and more information. The 26th issue of our journal allows a revision through several aspects of the current research along with Iranian, French, Italian and Spanish scholars.

We usually remember that cuneiform was deciphered thanks to the Darius' inscription in Behistun. It was written in Old Persian, Babylonian and Elamite. From Persian, it was possible to start deciphering the Babylonian, even if the Elamite took more time. It is indeed very interesting that the inscription was written in the native language of the region, and that Achaemenids recognised it. Some outside and later views have not understood this correlation.

The study of Silvia Balatti about written materials of Achaemenid Iran continues a line of research about the Iranian writing system that even today provides very interesting results.

The Iranian Architecture is the aim of some papers in this issue. The first one is the contribution of Davide Solaris and Roberto Dan about the signification and the archaeology of Masjed-e Soleyman, reinterpreting its origin and socio-cultural context. In the same way, the cultural transfer on behalf of Babylonians in Persepolis analysed by Pierfrancesco Callieri is related to architecture but also to Archaeology and to the information that we obtain from them.

Carlos Fernández Rodríguez explores water management and its function in the habitability of Southern Iran during the Iron Age, showing that it is to the situation on the other side of the Gulf. Fernando Escribano Martín investigates what we know as the 'Persian garden', as well as its origins and development. To do this, he should start from Pasargadae in Persia, but also from more ancient times.

Sébastien Gondet analyses agriculture's development and history of the Achaemenid Persepolis' occupation, which is a key aspect for understanding the functioning of this Persian capital. On the other hand, Alireza Khounani presents the vineyards of the Arsacid-Partian Nisa, a concrete example of agriculture and trade in another important period of Iranian history.

In terms of material culture, Giulio Maresca presented a paper about the Sistan pottery in the Iron Age, and Negin Meri developed specific research of an example of a bulla kept in a Museum of Teheran.

We close this wide ranging and interesting theme that we group in this foreword with the studies of Zahara Gharenhkhani reflects on some hybrid creatures of the Pre-Islamic Persia, reconsidering their symbolism, which goes beyond the time when they were conceived.

The array of studies of different kind that we present in this issue accounts for the rich world that is under investigation around Ancient Iran, whose Elamite and Persian manifestations, progressively more related, transcend both in time and space.

F. Escribano Martín, C. del Cerro Linares, C. Fernández Rodríguez and F. L. Borrego Gallardo

I
ARTÍCULOS
ARTICLES

I MATERIALI SCRITTORI DELL'IRAN ACHEMENIDE

Silvia Balatti
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RIASSUNTO

La scrittura va considerata essenzialmente come un fenomeno d'importazione nell'Iran di periodo achemenide. Nonostante ciò, un'attenta analisi dei documenti disponibili consente di individuare contributi e scelte locali nell'uso dei materiali. Questo breve articolo offre una panoramica dei principali supporti scrittori dell'Iran achemenide e indaga le ragioni alla base del loro utilizzo e della loro diffusione, dimostrando il ruolo fondamentale esercitato da variabili quali la reperibilità dei materiali a livello locale, l'adattabilità alle tradizioni e ai valori della società e la continuità tecnologica.

PAROLE CHIAVE

Scrittura; materialità; Achemenidi.

ABSTRACT

Writing was basically an imported phenomenon in Iran in the Achaemenid period. Nevertheless, a careful analysis of the available documents allows us to identify local contributions and choices in the use of materials. This short article offers an overview on the main writing supports in Achaemenid Iran and investigates the reasons behind their use and dissemination. It shows the valuable role of variables such as local availability of materials, adaptability to societal traditions and values, and technological continuity.

KEYWORDS

Writing; materiality; Achaemenids.

La dimensione materiale della scrittura è diventata da alcuni decenni sempre più oggetto di interesse nell'ambito degli studi testuali. Ciò riguarda anche i testi antichi. Uno studio olistico della scrittura nel Vicino Oriente antico, che includesse anche il tema del contesto archeologico e della materialità del supporto scrittorio, è stato fortemente sostenuto in una conferenza organizzata da K. Piquette e R. Whitehouse presso l'University College di Londra nel 2009. Negli atti della conferenza, gli editori attribuiscono la tendenza a una netta separazione fra contenuto testuale e contesto e lo scarso interesse generalmente dimostrato per la materialità dei testi alle tradizionali divisioni disciplinari tra filologia e archeologia negli studi sul Vicino Oriente antico[1]. Già da queste prime riflessioni emergeva la necessità di superare queste divisioni allo scopo di giungere a un'analisi a tutto tondo dei testi vicino-orientali antichi, simile a quella generalmente svolta dagli epigrafisti nel contesto degli studi classici. Negli ultimi decenni diversi studiosi di ambito sia umanistico che scientifico si sono dedicati allo studio dei testi unito a quello dei supporti scrittori: la Fondazione tedesca per la ricerca (la *Deutsche Forschungsgemeinschaft*), per esempio, ha finanziato un Centro di ricerca con sede presso l'Università di Heidelberg e un Cluster di eccellenza presso l'Università di Amburgo interamente dedicati allo studio di manufatti scritti[2]. Nell'ambito di questi programmi di ricerca, gli studiosi indagano la testualità e la materialità della scrittura in diverse società antiche, medievali e moderne, comprese quelle del Vicino Oriente antico e

[1] Piquette/Whitehouse 2013: 1-2.

[2] Il "Material Text Culture" a Heidelberg (https://www.materiale-textkulturen.org) e il "Centre for the Study of Manuscript Cultures (CSMC)" ad Amburgo (https://www.csmc.uni-hamburg.de/en.html).

dell'Egitto, utilizzando metodi scientifici diversi e fondendo diverse tradizioni accademiche. Alcuni progetti europei recentemente finanziati perseguono obiettivi molto simili, si pensi per esempi al progetto ERC "Context of and Relations between Early Writing Systems" (CREWS) presso l'Università di Cambridge[3]. Queste attività di ricerca integrate hanno dimostrato, attraverso diversi casi studio, che le superfici, i manufatti e i materiali scrittori non sono supporti di scrittura statici ma agenti sociali, contrassegnati da significati e valori non testuali. L'utilizzo di un determinato materiale è solitamente determinato da una scelta socioculturale e veicola specifici significati, non meno dell'utilizzo di una certa fraseologia o di una determinata lingua. Oltre agli aspetti socioculturali, anche altri fattori, per esempio di natura economica, possono influenzare la scelta del materiale scrittorio. La disponibilità a livello locale, i costi di acquisizione e di produzione, le esigenze di stoccaggio o di trasporto possono essere annoverati fra i principali fattori che determinano la scelta di un certo materiale a discapito di un altro. Pertanto, lo studio dei materiali scrittori utilizzati in una società può fornire informazioni importanti su quella società, sui suoi valori, sulle sue basi economiche e sul suo rapporto con l'ambiente naturale circostante.

Lo scopo di questo breve contributo è quello di fornire una panoramica dei principali materiali scrittori utilizzati in ambiente iranico durante l'Impero achemenide (522-330 a.C.) e di indagare le ragioni alla base del loro uso e della loro diffusione. A differenza della ricca produzione testuale mesopotamica ed egizia, gli antichi testi iranici sono stati finora poco studiati dal punto di vista della loro dimensione materiale. Brevi paragrafi su singole tipologie di materiali e supporti scrittori si trovano di norma nelle edizioni filologiche dei testi o nei contributi sulle lingue iraniche e sul tema del multilinguismo nell'impero achemenide[4]. Due fattori possono essere ritenuti determinanti per questa scarsità di interesse scientifico: il numero relativamente limitato di documenti a disposizione e il fatto che la scrittura fosse essenzialmente un fenomeno di importazione. In effetti, le evidenze a nostra disposizione dimostrano che gli Achemenidi si limitarono a rielaborare i principali sistemi scrittori utilizzati nel contesto degli imperi mesopotamici del I millennio a.C., ovvero il cuneiforme e l'alfabeto. Anche i materiali scrittori degli Achemenidi erano già stati tutti precedentemente impiegati in Mesopotamia. La constatazione che i sistemi e le tecniche di scrittura non fossero un'innovazione persiana ha probabilmente portato a sottovalutare l'importanza di specifiche scelte iraniche.

1. Scritture e lingue nell'Iran pre-achemenide e achemenide

Le evidenze testuali provenienti dalle alte terre iraniche sono relativamente limitate per tutto il II e il I millennio a.C. I popoli montani e pastorali dell'Iran occidentale menzionati nelle fonti mesopotamiche, come per esempio i Gutei, i Lullubiti e i Cassiti del III e II millennio a.C. e i Mannei e i Medi del I millennio, ci hanno trasmesso un numero estremamente esiguo di fonti scritte[5]. A conseguenza di ciò, la conoscenza delle lingue di questi popoli resta limitata ed è stata possibile in parte solo grazie allo studio dei prestiti linguistici, toponimi e antroponimi menzionati in altre lingue[6].

Una certa diffusione del cuneiforme accadico è attestata nella zona degli Zagros occidentali, a ridosso della Mesopotamia. Alcuni rilievi rupestri con iscrizioni in accadico

[3] https://crewsproject.wordpress.com.

[4] Le maggiori edizioni filologiche dei testi presi in esame in questo contributo vengono citate nei paragrafi successivi. Per quanto riguarda lo studio delle lingue iraniche si vedano soprattutto i contributi di R. Schmitt (Schmitt 1989; 1993). La tematica del multilinguismo nell'impero achemenide è stata recentemente oggetto di diversi studi da parte di J. Tavernier (Tavernier 2008; 2017; 2018).

[5] Balatti 2017: 247.

[6] A questo proposito va ricordato l'importante contributo di R. Zadok (Zadok 2002) sulle lingue dei popoli degli Zagros di I millennio a.C. ricostruite attraverso riferimenti onomastici e toponomastici nei testi neo-assiri e i contributi di R. Schmitt e A. Rossi sulla/e lingua/e dei Medi (Schmitt 1989; 2003; Rossi 2010).

cuneiforme e di ispirazione chiaramente mesopotamica sono stati rinvenuti nell'area occidentale dei Monti Zagros, a ridosso della Mesopotamia, lungo il moderno confine fra l'Iraq e l'Iran. Questi includono i monumenti dell'Età del Bronzo di Shaikhan, Bitwata e Sar-e Pol-e Zohab, tutti raffiguranti un personaggio principale nell'atto di sottomettere i propri nemici. L'analisi comparata dei rilievi e delle iscrizioni ha portato N. Postgate e M. Roaf a suggerire che questi monumenti raffigurassero il trionfo di signori montani locali sui nemici, forse mesopotamici. Nel fare ciò, i sovrani locali reinterpretarono, ribaltandone i ruoli, il motivo della sottomissione dei popoli montani da parte dei sovrani mesopotamici presente, per esempio, sulla stele di Naram-Sin e sul rilievo di Darband-e Gaw[7]. Brevi iscrizioni cuneiformi accadiche sono state individuate anche su alcune armi appartenenti a distinti gruppi di manufatti in metallo datati all'Età del Bronzo e del Ferro e conosciuti come i Bronzi del Luristan. Tuttavia, nessuno di questi reperti proviene da un contesto archeologico sicuro e può essere considerato come una prova certa di un'ampia diffusione del cuneiforme accadico in Luristan[8]. Recentemente è stata portata alla luce una breve iscrizione frammentaria su cinque mattoni smaltati provenienti da Rabat Tepe, che reca il nome di un sovrano locale e delle divinità babilonesi Bel/Marduk e Nabu[9]. L'identificazione del nome riportato sui mattoni con quello presente in alcune iscrizioni assire del IX secolo a.C. ha permesso di datare il testo a questo periodo. Nonostante ciò, neanche questa iscrizione può essere considerata come un'evidenza di un uso diffuso della scrittura nell'area degli Zagros centrali. Le anomalie nella struttura sintattica dell'iscrizione hanno infatti fatto propendere gli editori per un'ipotesi di interpretazione secondo cui il testo possa essere stato copiato localmente da uno scriba non professionista[10]. Testi accadici più lunghi e complessi, tra cui la stele di Najafabad (RINAP 2, 117), il rilievo roccioso di Tang-e Var (RINAP 2, 116) e la stele frammentaria recentemente pubblicata da Qal'eh-e Iman nella regione di Marivan celebrano l'espansione neo-assira negli Zagros e sono chiaramente di produzione assira[11]. La presenza politica ed economica assira negli Zagros sembra comunque aver portato ad una maggiore diffusione della scrittura, e non solo nelle province soggette a un controllo diretto da parte dell'Assiria. Il riferimento nella *Lettera di Sargon al Dio Assur* a una stele iscritta del re manneo Ullusunu sembra testimoniare l'uso della scrittura nei territori mannei[12]. Un dato che è in parte confermato dal ritrovamento presso il sito di Qalayci Tepe della stele frammentaria di Bukan, scritta in aramaico e datata all'VIII secolo a.C., che va però forse considerata come un'opera di produzione semitica occidentale anziché locale[13].

Contrariamente al resto dell'Iran, l'uso della scrittura è attestato quasi ininterrottamente nelle zone culturali elamite dell'Iran sudoccidentale. Il cuneiforme accadico ed elamico si imposero in questa zona sulla più antica scrittura proto-elamica e su altri sistemi indigeni, rimanendo in uso dal 2500 a.C. circa fino al periodo achemenide[14]. Iscrizioni reali scritte su vari materiali in cuneiforme accadico ed elamico e testi amministrativi principalmente in cuneiforme elamico provengono da diversi luoghi del Khuzestan e del Fars, compresi i centri principali di Susa e Anshan. J. Tavernier ha recentemente dimostrato come soprattutto il periodo neo-elamita, e in particolare la fase successiva alla presa assira di Susa nel 646 a.C., fu oggetto di una maggiore sperimentazione dei generi testuali rispetto alle fasi precedenti.

[7] Postgate/Roaf 1997: 150-154.
[8] Muscarella 1977.
[9] Heidari 2010.
[10] Reade/Finkel 2014: 592-593.
[11] Per i testi delle iscrizioni di Najafabad e Tang-e Var si veda Frame 2020; per la il frammento da Qal'eh-e Iman si veda Radner et al. 2020: 88.
[12] Mayer 1983: 72-73, TCL 3, 54.
[13] Fales 2003: 131-148.
[14] Sulla scrittura nell'Elam si veda Glassner 2018.

Le evidenze mostrano che in questa fase il cuneiforme elamico non fu usato solo per redigere iscrizioni reali e testi amministrativi ma anche testi legali, epistolari e letterari[15]. Nelle zone montuose del Khuzestan orientale e del Fars, anche signori locali realizzarono le proprie iscrizioni in cuneiforme elamico. Casi emblematici di questo fenomeno sono il rilievo con iscrizione di Hanni di Ayapir (EKI 75-76), le iscrizioni su oggetti in metallo dei signori di Samati provenienti dalla grotta di Kalmakarra e l'iscrizione sulla placca di bronzo di Ururu da Persepoli[16].

Negli ultimi decenni di ricerca è stato ampiamente dimostrato come i persiani inizialmente ripresero la preesistente tradizione scrittoria elamica, riadattandola alle proprie esigenze comunicative e politico-amministrative. Tra le più antiche iscrizioni persiane (o più precisamente anšanite) provenienti dal Fars ci sono iscrizioni in cuneiforme elamico su sigillo, come quella sul sigillo di Ciro I (PFS 93*)[17], che testimoniano una certa continuità nell'utilizzo del cuneiforme elamico in ambito amministrativo. È molto probabile che il cuneiforme babilonese venisse invece principalmente utilizzato per redigere le iscrizioni reali, com'era stata prassi comune in Elam fino al tardo periodo neo-elamita. Oltre alle note iscrizioni in cuneiforme accadico di Ciro II provenienti da Babilonia, alcuni frammenti di un'epigrafe su mattoni smaltati da Toll-e Ajori sembrano suggerire l'uso del cuneiforme babilonese nel Fars sotto i Teispidi[18]. La scarsità di documentazione disponibile non permette di stabilire se anche l'elamico cuneiforme venisse impiegato per redigere iscrizioni reali, o eventualmente anche altri tipi di testi, durante il regno di Ciro e del figlio Cambise.

Un utilizzo più diversificato di lingue e scritture é attestato a partire dal regno di Dario I (522-486 a.C.). Le iscrizioni reali dei sovrani achemenidi provenienti dall'Iran sudoccidentale sono di norma trilingui in elamico, babilonese e antico persiano cuneiforme. L'analisi della più antica iscrizione achemenide scoperta finora, quella di Dario I a Bisutun, ha dimostrato che la versione in antico persiano venne aggiunta subito dopo le due versioni più antiche in elamico e babilonese[19]. Il cuneiforme antico persiano può quindi essere considerato un'innovazione achemenide a tutti gli effetti che aveva lo scopo di creare un linguaggio artificiale ufficiale comprensibile ai popoli dell'altopiano parlanti lingue iraniche[20]. Iscrizioni trilingui vennero realizzate dai sovrani achemenidi su superfici rocciose, come a Bisutun, Ganj-nama, Tushpa, Naqsh-e Rostam e Kuh-e Rahmat, e su elementi architettonici, oggetti e lastre metalliche provenienti dalle principali città di Pasargadae, Persepoli, Susa e Ecbatana, per menzionare solo i centri iranici[21]. Va notato che la maggior parte delle iscrizioni reali è databile ai regni dei re achemenidi Dario I e Serse I, mentre il numero di testi diminuisce drasticamente durante il regno dei loro successori.

Oltre alle iscrizioni reali, anche numerosi testi amministrativi provengono dall'Iran achemenide. Questa categoria testuale comprende attualmente tre archivi principali: le tavolette della fortificazione di Persepoli, le tavolette del tesoro di Persepoli e i documenti battriani della collezione Khalili. Il più numeroso è l'archivio delle Tavolette delle Fortificazioni (PFA) che è costituito da circa 15,000-18,000 tavolette in elamico cuneiforme, a cui si aggiungono 700-1,000 tavolette in alfabeto aramaico e una manciata di tavolette in altre lingue e scritture (greco, frigio, antico persiano). Tutte le tavolette sono da datare al periodo di regno di

[15] Tavernier 2018: 311-312.
[16] Vallat 1996.
[17] Sul sigillo PFS 93* si veda Garrison 2011.
[18] Sulle iscrizioni di Toll-e Ajori si può fare riferimento all'appendice di G. B. Basello in Askari Chaverdi et al. 2013.
[19] Sul testo in antico persiano di Bisutun si veda l'edizione di Schmitt 1991.
[20] Huyse 1999.
[21] Per un'edizione completa delle iscrizioni in antico persiano si veda Schmitt 2009.

Dario I, precisamente agli anni fra il 509 e il 494 a. C.[22] L'archivio del Tesoro, anch'esso proveniente dalla cittadella di Persepoli, comprende vari testi in elamico e uno in babilonese concernenti pagamenti in argento da parte del Tesoro a varie categorie di lavoratori. Tutte le tavolette sono databili ad un periodo che va dal trentesimo anno del regno di Dario I (492 a.C.) al settimo anno di regno di Artaserse I (457 a.C.)[23]. Il dossier dei testi achemenidi della collezione privata Khalili è invece da considerarsi più tardo e consiste di quarantotto testi tutti in aramaico, trenta realizzati su pelle e diciotto su supporto ligneo, tutti databili (tranne uno) fra il 353 e il 324 a.C. La maggior parte dei testi è da ricondurre alla corrispondenza di un certo Akhvamazda, identificato come il satrapo della Battriana che risiedeva nella zona di Battra, la moderna Balkh[24]. A questi archivi si aggiunge un ulteriore gruppo di testi che, seppur non provenienti direttamente dal territorio iranico, sono significativi nell'ambito della seguente indagine, in quanto rappresentano un'ulteriore testimonianza della corrispondenza di un satrapo persiano, che in questo caso era probabilmente anche un nipote o bisnipote del Gran Re Dario I[25]. Si tratta della corrispondenza del satrapo d'Egitto Arshama. Le trentasei lettere in aramaico su pelle del dossier di Arshama, conservate nella Bodleian Library di Oxford, sono state acquisite insieme a delle *bullae* sigillate e a due frammenti della borsa che doveva contenerle. Le lettere sono state datate fra il 427 e il 407 a.C.[26]

2. Roccia, metallo, pelle animale: i materiali scrittori "iranici" dell'Iran achemenide

Le esigue testimonianze di periodo teispide sembrano indicare una predilezione per supporti scrittori di chiara derivazione elamita-mesopotamica, come testimoniano i sigilli e i mattoni smaltati provenienti dagli scavi di Persepoli. Nel periodo achemenide è invece attestato, parallelamente all'aumento di fonti scritte disponibili, anche l'impiego di una maggiore varietà di materiali scrittori. In quanto segue ci occuperemo solo marginalmente di materiali quali le tavolette d'argilla e le iscrizioni su elementi architettonici di chiara derivazione elamita-mesopotamica, che continuarono comunque ad essere utilizzati in particolar modo nel Fars di primo periodo achemenide, per concentrarci sui materiali più propriamente "iranici", ovvero maggiormente diffusi sull'altopiano iranico.

La realizzazione di rilievi rupestri, spesso accompagnati da iscrizioni, era una pratica diffusa già nell'Età del Bronzo in tutto l'arco montano che circondava la Mesopotamia e comprendeva le catene montuose del Tauro, del Caucaso e degli Zagros[27]. Il rilievo rupestre con iscrizione di Dario I a Bisutun riprende chiaramente questa consuetudine montana. In particolare, è stato dimostrato come Bisutun si ponga in continuità con il complesso di Sar-e Pol-e Zohab[28]. La scelta del contesto montano è consapevole e dichiarata esplicitamente nell'iscrizione Anubanini 1, secondo la quale il re dei Lullubiti, Anubanini appunto, fece realizzare la sua immagine e quella di Ištar sulla montagna Batir[29]. Il testo aggiunge anche una lunga maledizione per chiunque osi rimuovere le due immagini e l'iscrizione[30]. La roccia della montagna sancisce quindi l'eternità della vittoria sul nemico, ancorandola a quei luoghi. Come a Sar-e Pol-e Zohab anche a Bisutun la roccia perpetua le imprese del

[22] Si faccia riferimento a Henkelman 2008: 65-179 per un'introduzione dettagliata sulle Tavolette delle Fortificazioni. Per l'edizione di una parte delle tavolette si veda Hallock 1969 e Stolper 2006. https://ochre.lib.uchicago.edu/PFA/.
[23] Cameron 1948.
[24] Naveh/Shaked 2006.
[25] Sulla fugura di Arshama si vedano le riflessioni di Tuplin in Ma/Tuplin/Allen 2013: 20-25.
[26] Per un'edizione completa e commentata dei testi si veda Tuplin/Ma 2020.
[27] Per una panoramica su questi rilievi si veda la breve rassegna in Harmanşah 2018: 483-487.
[28] Feldman 2007.
[29] Anubanini 1, I 1-8.
[30] Anubanini 1, I 9-II 11. Su quest'iscrizione si veda in particolare Edzard 1973.

sovrano affinché non vadano dimenticate. Questo è dimostrato dal fatto che il testo di Bisutun, proprio come l'iscrizione di Anubanini, contiene una maledizione che in questo caso è rivolta contro un ipotetico re del futuro che intenda distruggere o trascurare il rilievo e l'iscrizione[31]. La scelta di particolari superfici rocciose come supporti scrittori in contesto montano non sembra essere di tipo casuale; infatti, questi luoghi appaiono frequentemente rivestiti di significati sacri e in alcuni casi è stato accertato che costituissero veri e propri santuari a cielo aperto, generalmente connessi a delle fonti d'acqua. Questo vale probabilmente per le iscrizioni di Ganj-nama e Bisutun, presso le quali sono state identificate anche terrazze cultuali verosimilmente di periodo pre-achemenide[32], ed è certamente il caso per il complesso roccioso di Naqsh-e Rostam, a poca distanza dalla cittadella di Persepoli, dove Dario I, Serse I, Artaserse I e Dario II fecero realizzare le loro imponenti tombe rupestri decorate da rilievi e iscrizioni. La presenza a Naqsh-e Rostam di una fonte d'acqua e di più antichi monumenti elamiti, uno con una chiara scena di culto, suggerisce che Dario e i suoi successori inserirono le proprie tombe reali in un preesistente santuario roccioso a cielo aperto[33].

Particolarmente degno di nota è anche l'impiego del metallo come materiale scrittorio. Sebbene le iscrizioni achemenidi su metallo non siano numerose, è significativo che la gran parte di esse provengano da Hamadan, l'antica Ecbatana. Il corpus di testi su superfici metalliche provenienti da Hamadan include le iscrizioni su tavolette auree attribuite ad Ariaramne e Arsame (AmH e AsH), che però sono da datare con tutta probabilità al regno di Dario I, un'iscrizione su tavoletta d'oro e d'argento di Dario I (DH), un'epigrafe su un frammento di brocca d'argento di Serse I (XH) e due iscrizioni molto simili realizzate su tavolette d'oro e appartenenti a Dario II Noto e Artaserse II Mnemone (D2Ha e A2Hc). Al contrario, nessuna iscrizione su superficie metallica proviene dallo scavo dei livelli achemenidi di Susa, e solo l'iscrizione di Dario DPh, identica a DH, proviene da Persepoli. Questo fatto sembra suggerire una specializzazione nella lavorazione dei metalli preziosi e nel loro utilizzo come materiali scrittori nell'area di Ecbatana. Un evidente limite a questa ricostruzione risiede nel fatto che gli oggetti metallici provenienti da Ecbatana sono stati ritrovati fuori dal loro contesto archeologico[34]. Tuttavia, altre prove suggeriscono che nell'area meda esistesse una tradizione di estrazione e lavorazione dei metalli, incluso l'oro e l'argento. L'iscrizione di Dario riguardante la costruzione del palazzo di Susa (DSf) menziona che gli orafi che lavoravano l'oro e decoravano le pareti del palazzo reale erano medi ed egizi[35]. Recenti indagini archeologiche hanno mostrato un'abbondanza di depositi minerari, in particolare nell'altopiano centrale occidentale. L'estrazione di argento è evidente in siti come Sialk, Arisman e Hissar sin dal IV millennio a.C. ed era cospicua soprattutto nell'Iran centro-settentrionale[36]; mentre l'oro veniva probabilmente estratto in piccole quantità nella parte più nordoccidentale, per esempio nei pressi della moderna Takab[37], ma soprattutto veniva trasportato dalla Battriana lungo rotte carovaniere che attraversavano l'altopiano iranico. La Battriana viene infatti indicata come una delle regioni imperiali che fornivano oro insieme alla Lidia nell'iscrizione di Susa[38]. É quindi probabile che la produzione di oggetti in metallo,

[31] DB §67. Su Bisutun si faccia riferimento alle edizioni di Schmitt 2000 e 2009.
[32] Per quanto riguarda Ganj-nama si veda la foto in Vanden Berge 1959: fig. 138a; Per Bisutun si faccia riferimento a Luschey 1968: 66, fig. 1-2.
[33] Canepa 2020: 213. Anche a Van, l'antica Tushpa, in Anatolia, l'iscrizione di Dario e Serse venne realizzata sulla parete rocciosa che ospitava le tombe dei sovrani urartei.
[34] Muscarella 1987.
[35] DSf § 13 D-F.
[36] Nezafati/Pernicka 2012.
[37] Momanzadeh et al. 2016.
[38] DSf § 10 A.

compresi oggetti iscritti, si concentrasse soprattutto in Media, che comprendeva una vasta zona dell'Iran centro-settentrionale che dall'Armenia arrivava fino ai confini della Partia e dell'Ircania, dove la presenza di riserve minerarie e i contatti commerciali con l'Iran orientale avevano reso possibile una certa specializzazione delle tecniche di lavorazione dei metalli già in periodo pre-achemenide.

Va notato che l'utilizzo di pareti rocciose e metalli preziosi quali materiali scrittori sembra comunque sempre essere rimasto prerogativa del sovrano nell'Iran achemenide. Non vi è, allo stato attuale delle nostre conoscenze, alcuna evidenza di iscrizioni realizzate su roccia o su tavolette in metalli preziosi che non sia riconducibile al Gran Re.

Un materiale scrittorio che sembra aver avuto un certo successo e una più ampia diffusione nell'Iran achemenide è il cuoio o la pelle animale. Questo nonostante le evidenze a riguardo restino comunque molto limitate. Dario ci informa che il testo dell'iscrizione di Bisutun venne copiato su tavolette e su pelle animale, indicata con il termine di *carmā* in antico persiano, e diffuso in tutto l'impero[39]. Questo riferimento supporta quindi l'ipotesi che tavolette d'argilla e pelle fossero i materiali scrittori effettivamente più diffusi per lo scambio di informazioni all'interno del territorio imperiale già all'epoca di Dario I. La pelle in particolare sembra essersi diffusa come materiale scrittorio privilegiato per la corrispondenza dell'élite achemenide. Com'è noto, antichi autori greci quali Erodoto e Senofonte elogiarono nelle loro opere l'efficacia e la celerità del sistema postale persiano, basato sul veloce avvicendarsi di messaggeri a cavallo[40]. Questi messaggeri o inviati regi portavano con sé messaggi scritti sigillati, come testimoniato chiaramente dal caso del persiano Bageo, inviato da Dario a Sardi secondo Erodoto, che venivano poi letti da uno dei segretari reali presenti nel palazzo del satrapo[41]. Sebbene le fonti greche non indichino espressamente su che materiali fossero stilate queste lettere[42], le missive su supporto in pelle del satrapo e principe persiano Arshama e quelle di Akhvamazda suggeriscono che questa tipologia di documenti fosse generalmente redatta in aramaico su pelle dalle élite iraniche. Il fatto che i documenti del dossier battriano presentino errori, cancellature ed elisioni e appaiono redatti in brutta copia[43] sembra confermare che la pelle venisse ampiamente utilizzata e ri-utilizzata nelle pratiche amministrative quotidiane, perlomeno nel tardo periodo achemenide, quando cioè vennero realizzati i testi battriani[44]. Un passo di Ctesia di Cnido citato da Diodoro sembrerebbe indicare che la diffusione della pelle quale supporto scrittorio alla corte persiana andasse però anche oltre un utilizzo quotidiano in ambito amministrativo. Nel passo in questione il medico greco attivo presso la corte persiana afferma di aver attinto alle informazioni contenute nelle pelli reali, inteso ovviamente come l'archivio "storiografico" reale redatto su pelli animali, quale fonte per scrivere la sua opera (pseudo-)storica sui Persiani[45]. Questo riferimento sembra

[39] DB § 70 F.

[40] Hdt. VIII 98; Xen. Cyrop. VIII 6.17-18.

[41] Hdt. III 128.

[42] Il fatto che Erodoto indichi le lettere trasportate da Bageo con il temine di βυβλία sembrerebbe indicare che il materiale utilizzato fosse il papiro. È probabile però che all'epoca di Erodoto il termine βυβλίον avesse già assunto il significato di "documento scritto" come testimonia un altro interessante passo erodoteo in cui si afferma che gli Ioni d'Asia indicavano il documento scritto (βυβλίον) con il termine di pelle conciata (διφθέρα), in quanto precedentemente, in assenza di papiro, usavano le pelli come supporto scrittorio (Hdt. V 58.3). È anche interessante notare che Erodoto aggiunge che, ancora a suo tempo, molti stranieri utilizzavano le pelli animali per scrivere.

[43] Naveh/Shaked 2006: 16-17.

[44] Analisi scientifiche, non ancora condotte, sui dossier achemenidi su supporto in pelle animale sono auspicabili per stabilire il luogo di provenienza e le caratteristiche chimico-fisiche e biologiche dei materiali.

[45] Diod. II 32.4. Sebbene sia molto improbabile che Ctesia fece un uso diretto di questi archivi ufficiali nella sua opera (Bichler 2004: 106), questo non implica necessariamente che il medico greco non fosse in grado di indicare correttamente su che supporto fossero scritti questi documenti.

quindi suggerire la presenza di archivi di documenti di diverso tipo, di natura storiografica e forse anche letteraria e scientifica, alla corte persiana.

Sebbene la pratica di scrivere in aramaico su pelle animale fosse già utilizzata in contesto mesopotamico in periodo neo-assiro e neo-babilonese e giunse quindi in Iran da occidente[46], è chiaro che questa fu adottata diffusamente soprattutto in ambiente iranico. Le ragioni alla basa di questa diffusione vanno ricercate soprattutto nella reperibilità del materiale nelle aree pastorali iraniche e dell'Asia centrale e nelle abilità tecniche nella conciatura e lavorazione delle pelli animali. Sia le fonti greche che vicino orientali testimoniano infatti un ampio uso della pelle da parte delle genti iraniche soprattutto come materiale per la produzione di capi di vestiario, paramenti per cavalli e armi in cuoio. Erodoto, certamente esagerando, fa affermare al lido Sandani che non solo gli anassiridi, i tipici calzoni delle genti iraniche, ma l'intero abbigliamento dei Persiani (e si intende in questo contesto probabilmente in primo luogo il vestiario militare) era realizzato in cuoio[47]. La diffusione della pelle fra le genti iraniche è stato recentemente confermato anche dal ritrovamento di numerosi frammenti di cuoio appartenenti alle mummie di Zanjan e in alcuni corredi funebri provenienti dagli scavi di tombe scitiche nell'area del Mar Nero[48]. Inoltre, le tavolette dell'Archivio delle Fortificazioni di Persepoli presentano, come già notava l'Hallock, dei riferimenti sparsi a pelli animali, solitamente indicate con il logogramma KUŠ.GUD^{MEŠ}[49]. Alcuni di questi riferimenti menzionano esplicitamente la scrittura su pelle animale o scribi che scrivevano su pelle animale e vanno quindi interpretati come conferma dell'utilizzo di questo materiale scrittorio a Persepoli, parallelamente alle tavolette d'argilla, durante il regno di Dario I[50]. Come D. Potts e W. Henkelman tengono a precisare in un recente articolo dedicato alle pelli animali nell'archivio di Persepoli, il numero esiguo dei riferimenti dipende soprattutto dal fatto che l'archivio in questione non sia specifico per la distribuzione delle pelli animali, e che quindi non possa essere considerato come statisticamente indicativo, ma possa invece restituite soltanto uno spaccato limitato dell'effettiva produzione conciaria di Persepoli[51].

Per riassumere: questa breve panoramica sui materiali scrittori nell'Iran achemenide mostra come i Gran Re inizialmente preferirono l'utilizzo di pietra, superficie rocciosa e metallo per realizzare le proprie iscrizioni celebrative nell'area dei monti Zagros, in continuità con le antiche pratiche locali di utilizzo dei materiali in contesto ambientale montano. Questo seguiva un modello di comportamento adottato anche in Fars, dove l'utilizzo di tavolette d'argilla ed elementi architettonici come supporti scrittori si poneva in continuità con la tradizione elamita-mesopotamica preesistente. Le pelli animali, leggere e facilmente trasportabili, si diffusero invece progressivamente durante il periodo achemenide, per diventare il materiale scrittorio probabilmente più diffuso su tutto il territorio iranico e con molta probabilità anche in gran parte dell'impero. La reperibilità a livello locale e l'abilità tecnica nella lavorazione della pelle animale in contesto pastorale iranico e la portabilità e robustezza del materiale, che poteva essere conservato in borse di cuoio e facilmente trasportato a cavallo, contribuirono certamente al successo di questo materiale in contesto iranico. Un successo che è confermato dal perdurare dell'utilizzo delle pelli animali come supporti scrittori nell'Iran partico e sasanide, come testimoniato per esempio dai testi partici

[46] Sull'utilizzo dell'aramaico su supporti in pelle animale nell'impero assiro si veda Radner 2011.
[47] Hdt. I 71.2.
[48] Sulle mummie di Zenjan si veda Aali/Stöllner 2015: 77-83; sui frammenti in pelle provenienti dalle tombe scitiche dell'Ucraina meridionale di IV secolo a.C. si veda Daragan et al. 2022.
[49] Hallock 1969: 4.
[50] Sulla scrittura su pelle animale si vedano per esempio i testi PF 323 e PF 1986; sugli scribi babilonesi specializzati nella scrittura su pelli animali si vedano PF 1808, PF 1810 e PF 1947.
[51] Potts/Henkelman 2020: 288.

di Avroman e dai riferimenti alle profumate pelli sasanidi per la scrittura nei testi islamici[52]. Il rischio che questo materiale scrittorio di origine organica si deperisse nel corso dei secoli, cancellando gran parte della memoria storica degli antichi persiani, non doveva rappresentare evidentemente un limite contingente agli occhi degli Achemenidi, esattamente come non lo ha rappresentato per i Greci l'archiviazione su supporto papiraceo e per noi su supporto cartaceo.

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BABILONESI A PERSEPOLI. NUOVI STUDI SULL'ARCHITETTURA DELL'ANTICA PERSIA

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RIASSUNTO

Il periodo che vide sull'altopiano iranico l'affermazione della supremazia della Persia nella seconda metà del VI secolo a.C. fu un'epoca caratterizzata dalla mescolanza di realtà culturali ed etniche eterogenee. I resti architettonici di questo periodo mostrano planimetrie di tradizione locale con tratti iconografici di origine genericamente mesopotamica, e una veste architettonica di tradizione ionica. Nel suo studio sulla regalità achemenide, Gh. Gnoli ha sottolineato come la componente mesopotamica abbia costituito un riferimento fondamentale per la costruzione dell'ideologia dei re persiani. La scoperta nei pressi di Persepoli da parte della Missione Archeologica Congiunta Irano-Italiana della Porta di Tol-e Ajori, una replica modificata della Porta di Ishtar a Babilonia, testimonia l'adozione di accorgimenti costruttivi tipicamente babilonesi, che si comprendono meglio se attribuiti ad artigiani babilonesi. Tol-e Ajori estende il ruolo primario della cultura babilonese in Persia dalle sole raffigurazioni di esseri fantastici negli edifici di Pasargadae a un intero monumento.

PAROLE CHIAVE

Persia; Babilonia; Ionia; Ciro il Grande; Tol-e Ajori; Persepoli.

ABSTRACT

The period that saw the assertion of Persia's supremacy on the Iranian plateau around the mid-6th century BC was a time characterised by the mixing of heterogeneous cultural and ethnic realities. Architectural remains from this period show plans in the local tradition with iconographic traits of a generic Mesopotamian origin, and an architectural appearance in the Ionian tradition. In his study on Achaemenid kingship, Gh. Gnoli emphasised how the Mesopotamian component constituted a fundamental reference for the construction of the ideology of the Persian kings. The discovery near Persepolis by the Iranian-Italian Joint Archaeological Mission of the Gate of Tol-e Ajori, a modified replica of the Ishtar Gate in Babylon, testifies to the adoption of typically Babylonian construction devices, which are best understood when attributed to Babylonian craftsmen. Tol-e Ajori extends the primary role of Babylonian culture in Persia from only depictions of fantastic beings in the buildings of Pasargadae to an entire monument.

KEYWORDS

Persia; Babylon; Ionia; Cyrus the Geat; Tol-e Ajori; Persepolis.

Il periodo che vide sull'altopiano iranico l'affermazione della supremazia della Persia, che con Ciro II il Grande pose le basi per la creazione, per la prima volta nel mondo iranico, di una vera e propria entità statale di tipo imperiale, fu un'epoca caratterizzata da una straordinaria commistione di realtà culturali ed etniche eterogenee, a partire dalla stessa casa salita al potere, quella dei Teispidi, in cui l'elemento elamita giocò un ruolo pari se non superiore a quello persiano, almeno a giudicare dall'onomastica. La transizione tra Cambise II e Dario I, con l'ascesa al trono di quest'ultimo, segnata da pesanti sospetti di azioni illegittime da parte sua, segna l'affermazione della casa degli Achemenidi, termine usato in archeologia anche per Ciro e Cambise. Ma il lavoro di D. Stronach a Pasargadae, presto affiancato dal contributo di A.A. Sarfaraz a Charkh-ab, vicino a Borazjan, nell'entroterra del Golfo Persico, ha portato alla messa in luce di numerose caratteristiche architettoniche che

Stronach ha associato al periodo di Ciro il Grande, coniando il termine "proto-achemenide" con un significato cronologico. Il lavoro di tesi di dottorato di E. Matin, con la sua brillante intuizione di non legare il termine a una valenza puramente cronologica, ha coniato il concetto di "stile architettonico proto-achemenide" come combinazione di diversi aspetti chiaramente evidenti nell'architettura e nell'arte dei monumenti della dinastia, che includono una palese scelta iconografica mesopotamica e una nuova tradizione artigianale nell'architettura e nella lavorazione della pietra in cui sono evidenti tratti di origine ionica. Nel suo fondamentale studio sulla regalità in epoca achemenide del 1974, Gh. Gnoli sottolineava come la componente mesopotamica costituisse un riferimento fondamentale per la costruzione dell'ideologia e della concezione della regalità dei sovrani persiani: questa visione, tuttavia, non sembrava essere confermata fino a pochi anni fa da testimonianze artistiche e architettoniche che attestavano legami molto più stretti con il mondo egizio o ionico. La scoperta della monumentale Porta di Tol-e Ajori, replica modificata della Porta di Ishtar di Babilonia, nei suoi raffinati sistemi costruttivi tipicamente babilonesi testimonia la presenza di maestranze babilonesi, certamente appartenenti a quella sorta di colonia babilonese nella piana di Persepoli all'epoca di Cambise II citata nei documenti babilonesi. La nostra comprensione della cultura dei regni di Ciro e Cambise, valutata sulla base della scoperta di Tol-e Ajori, non è più quella che interpreta il re Ciro solo come colui che, tornato dalla vittoria su Creso, aveva voluto dimostrare nella sua terra l'eccezionale portata delle sue conquiste, portando con sé quei maestri muratori abili nell'uso della pietra calcarea tagliata in blocchi parallelepipedi o in morbidi tori a cuscino, che ebbero campo quasi libero e orientarono subito l'architettura persiana del periodo achemenide verso modelli greco-ionici. La successiva conquista della metropoli per eccellenza del suo tempo, Babilonia, lasciò un'impronta ancora più profonda sulla cultura dei Persiani. Se in precedenza erano stati solo filologi come Gnoli a sottolinearne l'importanza evidenziandone le tracce nell'ideologia della regalità e nelle concezioni astrali, ora Tol-e Ajori estende la presenza mesopotamica in Persia dalle sole raffigurazioni di esseri fantastici della Porta R e del Palazzo S di Pasargadae a un intero edificio monumentale, la porta di un probabile "paradiso" con lo stesso schema planimetrico di Pasargadae. L'articolo intende presentare un'illustrazione critica di questo nuovo quadro, mostrando come la società persiana si sia dimostrata profondamente aperta e ricettiva.

Nel 1970 l'archeologo classico Carl Nylander pubblicava la sua tesi dottorale dal titolo eloquente di *Ionians in Pasargadae. Studies in Old Persian Architecture*, che veniva a porre autorevolmente fine alle discussioni sulla posizione cronologica e culturale che le testimonianze di quel sito del Fars settentrionale avevano suscitato tra gli studiosi a partire dalla pubblicazione della tesi dottorale di Ernst Herzfeld nel 1908.

Il periodo che vide sull'altopiano iranico l'affermazione della supremazia della Persia alla metà del VI secolo a.C. fu un'epoca caratterizzata dalla mescolanza di realtà culturali ed etniche eterogenee. I resti architettonici del sito di Pasargadae, definiti da Nylander con il termine di "arcaici", come anticipato dal titolo resero possibile a questo archeologo evidenziare diversi tratti di origine inequivocabilmente ionico-lidia, che risultavano comprensibili solo se rapportati alle vicende politiche e militari di Ciro il Grande, accanto ad altri tratti certamente non greci. Una serie di indizi riportabili a quanto affermato nelle fonti greche avevano infatti permesso da subito a Herzfeld di attribuire gli edifici di Pasargadae a questo sovrano: un'attribuzione che risultava pienamente accettabile anche alla luce delle sensibili differenze tra l'architettura di Pasargadae e quella dei monumenti sulla Terrazza di Takht-e Jamshid nel sito di Persepolis, circa 80 km più a sud di Pasargadae, ben noti in Occidente grazie ai resoconti di numerosi viaggiatori[1].

[1] Il noto sito di Persepolis, *Pārsa* nella forma antico-persiana, è generalmente identificato con la Terrazza Imperiale fondata da Dario intorno al 518 a.C., ma oltre a questa comprendeva anche un insediamento urbano: per questo motivo, il nome di origine greca nel presente articolo verrà utilizzato per il sito nel suo complesso, riservando il toponimo neo-persiano di Takht-e Jamshid alla Terrazza.

Fig. 1. Pasargadae, veduta del Palazzo R, ingresso al *paradeisos* (P. Callieri).

Fig. 2. Pasargadae, una base a gradini con toro con scanalature orizzontali nel Palazzo P (P. Callieri).

L'indagine dettagliata su questioni specifiche legate sia alle forme architettoniche sia alle tecniche di lavorazione della pietra, condotta dallo studioso svedese grazie alla sua profonda conoscenza dell'architettura ionica, gli aveva infine permesso di comprendere quanto fosse impossibile postulare un arrivo degli elementi ionici nei monumenti di Pasargadae attraverso scambi culturali e commerciali lungo la distanza di più di 3.000 km tra la riva orientale del mare Egeo e il sud dell'altopiano iranico, proponendo invece che fossero da attribuire a scalpellini giunti a Pasargadae dalla Ionia, evidentemente per volontà del sovrano persiano.

Una questione molto importante, spesso dimenticata dai non archeologi, è il ruolo fondamentale della trasmissione diretta, soprattutto quando una tradizione artigianale di origine straniera compare in un'altra area. Maggiore è il grado di specializzazione tecnologica coinvolto in questa produzione, sia essa scultura, pittura, glittica o altra produzione artigianale, maggiore deve essere la presenza sul posto di artigiani esperti in quella nuova tradizione che possono addestrare nel giro di qualche anno artigiani locali, ai quali viene lasciato l'onere di portare avanti quella nuova tradizione.

In questa prospettiva, l'arrivo programmato di maestranze ionico-lidie costituiva un elemento di grande rilevanza socio-politica, perché dava avvio a quella politica di inclusione e incorporazione culturale che ha caratterizzato i sovrani persiani per tutta la durata della loro supremazia. Gli archeologi e gli storici dell'arte che hanno dedicato opere alla Persia di Ciro e di Dario sino alla metà del XX secolo hanno frequentemente accusato i Persiani di essere stati costretti a ricorrere a maestranze immigrate a causa della loro origine nomade e alla conseguente incapacità tecnica di creare raffinate testimonianze architettoniche e artistiche. La più sbilanciata e perniciosa, a causa dell'alta diffusione della serie cui appartiene, "The Pelican History of Art," è quella espressa dal manuale di H. Frankfort, *The Art and Architecture of the Ancient Orient*, pubblicato nel 1954 ma ristampato fino al 1970.

Al contrario, l'inclusione di elementi di origine non persiana nell'architettura e nell'arte dei sovrani persiani tra la metà del VI e la metà del V sec. a.C. ha le sue origini da un lato nel clima multietnico e multiculturale che caratterizza le fasi iniziali di questo impero, dall'altro nel principale sforzo di questi dinasti, quello di creare un'architettura e un'arte adatte a trasmettere ai sudditi persiani l'idea della straordinaria estensione dell'impero dopo le conquiste di Lidia, Ionia e in seguito Mesopotamia, Egitto e Urartu.

Anche se queste dinamiche sono esplicitate in numerose iscrizioni ufficiali, prima fra tutte la cosiddetta Carta di fondazione di Susa (DSf), dove sono menzionate le specializzazioni e i contributi alla realizzazione dei programmi di costruzione imperiale apportati da ciascuna delle popolazioni dell'impero, l'atteggiamento della maggior parte degli epigrafisti e filologi è stato di profondo scetticismo nell'accettare un'interpretazione letterale dei testi, visti piuttosto come una manifestazione dell'ideologia universalistica del potere achemenide derivante dal *topos* delle precedenti iscrizioni reali mesopotamiche relative alla costruzione di un grande monumento che avrebbe attratto merci e persone da ogni parte del mondo conosciuto.

Ma quando nello stesso testo della Carta di fondazione di Susa leggiamo la descrizione degli strati con cui fu preparato il terreno per ospitare le fondamenta del Palazzo di Dario I, ci sorprende la precisa corrispondenza con quanto gli scavi hanno portato alla luce, con solo qualche differenza nelle misure menzionate dalle diverse versioni della Carta. Se, dunque, la parte che descrive la costruzione è attendibile e corrisponde allo stato dei fatti, perché la parte in cui vengono indicati i contributi individuali dei vari gruppi di artigiani provenienti da ogni provincia dell'impero non dovrebbe corrispondere al vero, pur essendo questi ovviamente carichi di una forte componente ideologica? Naturalmente, la Carta non è un documento amministrativo, ma un'iscrizione ufficiale, e come tale va interpretata.

E come chiarito dal fondamentale studio di M.C. Root, *The King and Kingship in Achaemenid art: Essays on the creation of an iconography of empire* (Leiden 1979), alla fine si era affermata un'impostazione i cui principali modelli per la rappresentazione visiva dell'impero persiano erano in Assiria, Babilonia ed Egitto: e solo in tempi più recenti, anche il non trascurabile contributo dell'eredità urartea era stato riconosciuto (Dan 2015).

Una disamina delle fonti sul periodo dei primi re persiani mette in risalto questo ambiente multietnico e multiculturale. Per quei trenta anni che intercorrono tra la metà del VI secolo a.C., momento indicato dagli storici come quello della fine della tanto problematica supremazia politica dei Medi sull'altopiano iranico, e il 522 a.C., anno dell'evento avvolto nel

dubbio con cui ebbe inizio la carriera politica di Dario I, il fondatore della dinastia achemenide propriamente detta, le recenti scoperte archeologiche ci aprono la possibilità di indagare le prime fasi dell'insediamento di Persepoli, che ci confermano la presenza babilonese indicata dalle fonti.

Sono gli anni che abbracciano il ventennio di regno di Ciro il Grande, mitizzato da tutte le fonti antiche e moderne, e i non molti anni di regno del figlio Cambise II, al contrario del padre vittima di forti pregiudizi di origine egizia che ne offuscarono la considerazione. Ma sono anche gli anni degli antenati citati esclusivamente nelle genealogie reali, per i quali sono state avanzate proposte di attribuzione di manufatti archeologici. Insomma, si tratta di un punto di partenza che di per sé mostra un forte orientamento interculturale.

Se un tempo anche i primi re delle genealogie reali persiane erano considerati appartenenti alla dinastia achemenide, oggi le analisi più attente della loro onomastica e delle fonti dirette e indirette propongono di assegnarli a una dinastia distinta da quella degli Achemenidi, quella dei Teispidi, il cui capostipite, Shishpish, ovvero Teispes per le fonti greche, è indicato dall'unica iscrizione di Ciro di autenticità asseverata, il famoso Cilindro ritrovato a Babilonia nel 1879 e realizzato per il contesto babilonese (Finkel 2013: 4-34).

Fig. 3. Il Cilindro di Ciro da Babilonia al British Museum. BM 90920
(gentile concessione del Museo Nazionale dell'Iran).

Nonostante questo documento, il termine "achemenide" è comunemente, anche se genericamente, utilizzato per definire i re di Persia a partire da Ciro, il primo conquistatore dell'impero persiano menzionato da fonti storiografiche, anche sulla base di alcune iscrizioni, pur problematiche, rivenute a Pasargadae.

In queste iscrizioni, CMa e CMc (Lecoq 1997: 185-186), ripetute su elementi architettonici e figurativi in pietra, Ciro appare come un Achemenide: secondo questi testi, quindi, la dinastia achemenide dovrebbe includere anche Ciro, anche se egli non è esplicitamente citato da Dario I nell'iscrizione di Bisotun come uno dei suoi predecessori.

Non molti studiosi, tuttavia, accettano il fatto che tali documenti appartengano veramente a Ciro, e l'opinione più diffusa le considera una delle azioni della strategia organizzata da Dario I per legittimare la sua irregolare ascesa al potere (sulle iscrizioni si veda Briant 1996: 74, 102; Stronach 1997a, 1997b; Benvenuto, Pompeo 2022: 17; *contra*, Lecoq 1997: 82). Queste iscrizioni sono, infatti, l'unico documento che colloca Ciro all'interno di una stirpe achemenide e che, in ultima analisi, collegherebbe Dario a Ciro attraverso l'antenato comune Achemenes, che in realtà non viene mai menzionato da Ciro (cfr. Waters 2004: 91).

Nello stesso tempo, nei suoi documenti epigrafici ufficiali Ciro il Grande fa risalire la sua genealogia all'antenato Teispes, che compare anche nella genealogia di Dario come figlio di Achemenes ma come padre di Ariaramnes e non di Ciro I, come invece troviamo nella genealogia di Ciro il Grande. Infine, mentre il casato di Ciro il Grande è quella dei "re di Anshan", Dario non menziona mai questo dominio (cfr. Waters 2004: 98). Nella sezione introduttiva del gia' menzionato cilindro portato alla luce a Babilonia, Ciro compare come "re di Anshan". Nelle sue stesse parole, il re, che porta il titolo babilonese di "re dell'universo, gran re, potente re, re di Babilonia, re di Sumer e Akkad, re dei quattro quarti del mondo", descrive la sua genealogia come derivante da una dinastia di "re di Anshan", presentandosi come "figlio di Cambise, il gran re, re della città di Anshan, nipote di Ciro, il gran re, re della città di Anshan, discendente di Teispes, il gran re, re della città di Anshan" (Finkel 2013: 6, l. 20-21)[2].

Risalendo indietro nel tempo, incontriamo altri Kurash (Ciro), per i quali sono stati proposti ipotetici legami con gli antenati di Ciro il Grande. Negli annali del neo-assiro Assurbanipal (seconda metà del VII secolo a.C.), troviamo la menzione di un Kurash re di Parsumash (Potts 2005: 18). Basandosi sulla identificazione di Parsumash con Pārsa, accolta da molti ma non dimostrata, M. Waters (Waters 2004: 94) è arrivato a proporrre di identificare questo re di Parsumash con il re Kurash di Anshan (*contra*, Briant 1996: 28; Potts 2005: 18). In effetti, il fatto che i due Kurash non potessero essere uno stesso personaggio era stato dimostrato in modo convincente anche da P. de Miroschedji nel suo fondamentale lavoro sulla nascita dell'Impero persiano (de Miroschedji 1985: 276, 280).

Una testimonianza archeologica associata da alcuni studiosi (cf. Boucharlat 2013: 504; da ultimo Potts 2016: 334, che modifica la posizione scettica di Potts 2005: 18) al Kurash nonno di Ciro il Grande è costituita dalle impronte di sigillo rinvenute su alcune tavolette delle fortificazioni di Persepoli (PFT), che mostrano un cavaliere che trafigge un nemico, con la legenda elamica "Kurash l'Anshanita figlio di Shishpish" (Garrison & Root 1996: nn. 596-695). Il fatto che il sigillo sia stato riutilizzato in un contesto imperiale suggerisce a de Miroschedji che l'identificazione con il nonno di Ciro potrebbe essere possibile anche se il Kurash del sigillo non è definito un re (de Miroschedji 1985: 286). Anche W.F.M. Henkelman, che non ritiene l'identificazione con il nonno di Ciro sufficientemente solida, allo stesso tempo non esclude la possibilità che il Kurash del sigillo possa essere un antenato più lontano di Ciro il Grande (Henkelman 2011: 602, n. 71).

Quanto ad Anshan, durante tutto il periodo elamita tale toponimo rappresentava una delle regioni dello Stato elamita, situata sull'altopiano iranico a est di Susa. Ma al tempo di Ciro e oltre, "Anshan" era una regione o un sito? E l'archeologia cosa indica?

Che in questo periodo Anshan rappresenti una regione, anche se non l'intero Fars come nel periodo elamita ma solo il bacino del fiume Kur, è stato proposto da D. Stronach (2003: 256) e K. Abdi (2005). M. Waters, invece, ha proposto che l'Anshan di Ciro si riferisca a una città, corrispondente al sito di Tol-e Malyan indagato dagli archeologi (Waters 2004: 93). D'altra parte, poiché Anshan compare come luogo specifico nei PFT, Potts deduce che doveva indicare una città (Potts 2011: 41).

[2] Inoltre in un testo iscritto su un mattone proveniente da Ur (UET 1.194), Ciro è definito "figlio di Cambise, re di Anshan", e anche nella Cronaca di Nabonedo sul cilindro di Sippar a Ciro viene attribuito il titolo di "re di Anshan" (Grayson 1975: 106, ii.1). Sulla base di queste fonti, nel 2005 D.T. Potts ha avanzato un'ipotesi che esclude qualsiasi legame di Ciro non solo con gli Achemenidi e Dario, ma anche con Pārsa, facendo di lui, piuttosto, un re anshanita di pura identità elamita, come indicato anche dall'origine elamita del suo nome Kurash (Potts 2005: 22): parlare del regno di Shishpish e dei suoi discendenti come di un regno persiano o achemenide di Anshan sarebbe quindi "un ossimoro" (*ibid*.: 21). La posizione espressa da Potts, tuttavia, non è condivisa nemmeno da quegli studiosi che sottolineano l'importanza dell'eredità elamita dei re persiani (Henkelman 2011: 610), e non può essere accettata se si prendono in considerazione anche le fonti archeologiche.

Fig. 4. Disegno dell'impronta del sigillo di Kurash (da Potts 2016).

Nel cilindro di Ciro da Babilonia, il toponimo Anshan è preceduto dal determinativo *URU* = città (Henkelman 2011: 610; Potts 2011: 36; Zournatzi 2011: 6). In merito alla presenza del toponimo Anshan sul cilindro babilonese, de Miroschedji ha osservato che "re di Anshan" è un titolo del tutto sconosciuto alla cancelleria babilonese (de Miroschedji 1985: 297), mentre A. Zournatzi ha fornito una spiegazione molto ragionevole per l'uso di questo titolo sul cilindro di Ciro: la funzione ideologica di questo uso in un contesto specificamente mesopotamico sarebbe quella di mostrare che la regalità della Mesopotamia, dopo essersi spostata nel corso della storia da una città mesopotamica all'altra, era infine approdata in una città di un Paese straniero (Zournatzi 2011: 7; 2019), la cui conoscenza risaliva ai tempi degli Elamiti.

Henkelman ha giustamente osservato che sul già citato mattone iscritto di Ur e sulla Cronaca di Nabonedo Anshan appare come una terra (Henkelman 2011: 610): grazie alla sua idea che il toponimo avesse un "significato geografico neutro" (Henkelman 2008: 56; *contra* Zournatzi 2011: 4), il fatto che "Anshan" potesse essere usato con valenze diverse a seconda del luogo d'uso appare abbastanza ragionevole.

L'assunzione del titolo di "re di Anshan" da parte di Shishpish e dei suoi successori è un gesto profondamente simbolico, dal momento che Anshan era stata abbandonata da decenni, e dimostra la volontà di essere considerati in Mesopotamia come i legittimi successori dei re elamiti (de Miroschedji 1985: 291), che avevano usato il titolo fin dall'inizio del II millennio a.C. (Potts 2005: 15). Henkelman non esclude tuttavia che nel contesto domestico Ciro II potesse essere designato anche come "re di Pārsa" (Henkelman 2011: 610).

Ciò che conta è il fatto che anche nelle tavolette elamite di Susa "Anshan" è un toponimo senza identità "anshanita" alle spalle (Henkelman 2011: 604, 610; Basello in stampa: § 2, § 4.1), e ciò lascia aperta la possibilità che Shishpish e i suoi discendenti appartenessero a un ambiente culturale e linguistico misto elamita-persiano. Appare quindi molto attraente la ricostruzione dell'etnogenesi dei Persiani proposta da de Miroschedji nel 1985: "on est tenté d'en déduire que c'est au Fārs à la fin du VIIe siècle plutôt qu'au Zagros central au début du IXe siècle qu'il conviendrait de situer l'éthnogenèse des Perses", che è il risultato della fusione di popolazioni autoctone (gli Elamiti) e di popolazioni immigrate da lungo tempo (gli Iranici), dopo secoli di coesistenza (de Miroschedji 1985: 295). Anche la posizione radicalmente elamizzante assunta da Potts su questo punto rimane aperta, accettando egli che la famiglia di Ciro non fosse necessariamente "monoculturale, monoetnica o monolingue" (Potts 2005: 22; si veda anche Potts 2016: 305).

Alla luce di queste considerazioni, possiamo avvicinarci al tema dell'Anshan "achemenide" senza essere necessariamente costretti a cercarlo a Tol-e Malyan, il sito ai margini occidentali della pianura di Marvdasht, nel Fars centrale, che è stato identificato su solide basi con la città elamita di Anshan (cfr. Reiner 1973): qui gli scavi archeologici hanno portato alla luce le prove di un insediamento con un'importante occupazione durante il III e il II millennio a.C., e qui sono stati ritrovati documenti epigrafici che riportano il nome di Anshan. Tuttavia, nel corso del II millennio a.C. l'insediamento urbano di Malyan e della sua regione iniziò a decadere e si è ipotizzato un vero e proprio abbandono dell'intero bacino del fiume Kur da parte degli agricoltori dei villaggi (Sumner 1988: 316). Il vuoto lasciato dal declino dell'insediamento sedentario aprì la strada al graduale emergere della pastorizia di tipo nomade (de Miroschedji 1985: 290-91). Nel X secolo a.C. Malyan e i suoi dintorni furono quasi completamente abbandonati e la situazione raggiunse il suo punto estremo nel VII secolo a.C. (cfr. Carter 1994: 66; 1996: 47; Potts 2016: 280): nel sito di Malyan è finora assente materiale risalente al periodo neo-elamita (de Miroschedji 1985: 278, 292). Anche durante il periodo achemenide la regione di Malyan sembra aver visto un insediamento estremamente limitato (Sumner 1972: 268; Gondet 2011: pl. 47), come anche confermato da J. Hansman (1985: 31), che in una ricognizione sulla superficie del sito rinvenne ben pochi frammenti ceramici attribuibili al periodo achemenide (cfr. Sumner 1986: 11, ill. 2; Abdi 2005). R. Boucharlat colloca la regione nella terza e più esterna zona di attività tracciata per la pianura di Persepoli in quest'epoca: questa "zona esterna era presumibilmente dedicata alla pastorizia ed è probabilmente quella che è cambiata meno tra il secondo millennio e il periodo achemenide" (Boucharlat 2003: 265), una interpretazione che viene confermata dal fatto che secondo Sumner i testi delle PFT "forniscono prove di una pastorizia locale concentrata nei pascoli naturali tra Rakkan, Hadaran e Anshan" (Sumner 1986: 30).

L'unica presenza achemenide chiara nel sito di Malyan è rappresentata da alcune basi di colonne in pietra che sono state trovate in loco, ma non in contesti di scavo (Callieri 2019). Ma va tenuto in considerazione il fatto che, nonostante la presenza di questi elementi architettonici, non è stata identificata alcuna struttura monumentale di epoca achemenide in quel luogo e, se è possibile che le basi provengano da un edificio achemenide non ancora scoperto nell'area di Malyan, sembrerebbe più plausibile che esse vi siano state trasportate in epoca islamica, come è avvenuto anche a Qasr-e Abu Nasr. Tale situazione rafforza la validità dell'interpretazione simbolica che A. Zournatzi fornisce del titolo di "re di Anshan" (*supra*).

Al contrario, alcune testimonianze archeologiche collegano effettivamente Ciro con Pārsa, in particolare buona parte degli edifici del sito di Pasargadae, un toponimo la cui etimologia è stata fatta risalire, tra le altre ipotesi, a *Pārsa-grda*, la "città (o l'accampamento) dei Persiani" (Tavernier 2007: 392, n. 4.3.166), che è anche l'equivalente letterale del greco *Persepolis* (Lecoq 1997: 78). L'analisi rigorosa delle caratteristiche architettoniche e tecniche di alcuni edifici di Pasargadae, condotta da D. Stronach, li colloca in un periodo decisamente precedente agli edifici di Susa e Persepoli, che invece furono certamente commissionati da Dario I a partire dal 518 a.C. circa. Si tratta della Porta R, del Palazzo S, della prima fase del Tall-e Takht e, infine, della tomba identificata con sicurezza come tomba di Ciro (Stronach 1978), mentre la datazione del Palazzo P sembra dipendere dalla valutazione dei rapporti tra l'architettura e i rilievi figurati che sono sicuramente coevi a Susa e alla Terrazza di Persepoli (cfr. de Miroschedji 1985: 301 e fn. 147).

Sulla base di queste osservazioni, non si può negare un'associazione di Ciro con la "Città dei Persiani": perché il re avrebbe dovuto costruire questi monumenti in questo sito se era estraneo alla cultura persiana?

Quanto alle riflessioni sulle caratteristiche stilistiche definite "arcaiche" da Nylander, D. Stronach nella pubblicazione del rapporto finale delle attività britanniche

a Pasargadae aveva preferito utilizzare la definizione di "proto-achemenide" (Stronach 1997), sempre con una valenza cronologica: ma questo concetto non era privo di criticità in tutti quei siti che non sembravano risalire all'età di Ciro e Cambise pur se accomunati dalle stesse caratteristiche tecnico-stilistiche dei monumenti più antichi, primo fra tutti il Palazzo P di Pasargadae. In quest'ultimo la lavorazione e le tipologie architettoniche analoghe a quelle del Palazzo S si abbinano a un repertorio iconografico delle immagini scolpite negli stipiti delle porte che si distingue nettamente dalla serie di creature fantastiche di tradizione neo-assira che caratterizza le porte del Palazzo S, e che invece è dominato dalle immagini umane del re e dei suoi assistenti analoghe alle figure dell'epoca di Dario I e successori, attestate a Persepolis e a Susa. Invece il concetto di "stile architettonico proto-achemenide" formulato da E. Matin nella sua tesi dottorale del 2018, ancora inedita, definisce le caratteristiche di una tradizione architettonica che di certo è stata la prima a essere stata sviluppata ma che esula da ogni vincolo di cronologia, dato che è assolutamente plausibile che gli architetti e gli artigiani formati secondo questa tradizione abbiano continuato a seguirla anche in anni nei quali l'introduzione della martellina a gradina da parte delle squadre assoldate da Dario I per il lavoro a Takht-e Jamshid aveva modificato notevolmente la prassi seguita. Matin, senza negare la presenza di tracce della tradizione artigianale lido-greca nell'architettura achemenide, elabora una serie di dati che dimostrano l'importanza in essa dell'influenza della cultura materiale mesopotamica, insistendo sul fatto che la rilevanza della cultura mesopotamica meridionale non sia stata recepita come invece opportuno (Matin 2018).

Nella serie di ricerche che hanno reso possibile affermare l'esistenza di un importante insediamento precedente al regno di Dario, vanno segnalati i rinvenimenti nella piana di Marvdasht da parte di Giuseppe e Ann Britt Tilia, della missione di restauro dell'IsMEO (1964-1979), così come la relazione che Sumner presentò all'Annual Meeting dell'Archaeological Institute of America nel dicembre 1982 e che diventerà poi il suo articolo del 1986 sull'insediamento achemenide nella piana di Persepoli.

I resti architettonici in pietra portati alla luce, a seguito dell'aratura meccanizzata, nell'area di Dasht-e Gowhar furono assegnati da A.B. Tilia a una datazione compresa tra la costruzione di Pasargadae e quella di Persepolis, intorno al 530-520 a.C., o addirittura a una datazione precedente a Pasargadae (Tilia 1978: 80; cfr. anche Sumner 1986: 4). Al contrario, la tomba a plinto con due livelli di Takht-e Rostam, a breve distanza da Dasht-e Gowhar, interpretata da E. Herzfeld come la tomba incompiuta di Cambise II (Stronach 1978: 302-304), è ora considerata un monumento portato a termine (Bessac & Boucharlat 2010), forse costruito da Dario I per suo padre Hystaspes (Henkelman, in stampa).

Tilia menziona anche il ritrovamento di tori con la stessa tipologia di quelli di Dasht-e Gowhar in altre aree della piana di Persepoli, soprattutto nella zona di Bagh-e Firuzi, a cui appartiene anche Tol-e Ajori (Tilia 1978: 80). Questo fatto può costituire un importante indicatore della frequentazione dell'area di Pārsa prima del regno di Dario I.

Purtroppo non abbiamo informazioni sulla ceramica associata a questi reperti (Sumner 1986: 4; Abdi & Atayi 2014: 75). Infatti, come sottolineato da de Miroschedji (1985: 293), sulla base del materiale esistente non è stato finora possibile distinguere un orizzonte ceramico corrispondente al periodo dal 550 al 520 a.C., che K. Abdi e M.-T. Atayi riferiscono ai "Persiani proto-imperiali"[3] e che W. Sumner ha proposto di definire convenzionalmente come "Early Achaemenid" (Sumner 1986: 7, n. 10), come distinto da quello della Late Plain Ware che va dalla metà del VI al III secolo a.C. Mentre W. Sumner ha suggerito che "è

[3] Per quanto riguarda i periodi precedenti ai "Persiani proto-imperiali", Abdi e Atayi associano i "Persiani appena arrivati" con la ceramica grigia della Teimuran B Ware (dopo il 900 a.C.) e i "Persiani pre-imperiali" con la ceramica di colore scuro con decorazione dipinta rossastra della Djalabad Ware (Abdi & Atayi 2014: 74-75).

ragionevole supporre che i tipi ceramici conosciuti dagli scavi e dai rilievi dovevano essere in uso già negli ultimi decenni del VI secolo" (Sumner 1986: 4), R. Boucharlat ha proposto di associare l'inizio della Late Plain Ware con la nascita dell'impero e i cambiamenti apportati da questo evento (Boucharlat 2003: 263).

De Miroschedji e Sumner hanno interpretato il complesso di evidenze archeologiche portate alla luce nell'area della piana di Persepoli a nord-ovest e a ovest della Terrazza come la città di Matezziš menzionata nelle PFT, insieme ad altri insediamenti della zona, già fiorenti alla fine del VI secolo a.C. (de Miroschedji 1985: 293; Sumner 1986: 23). Infatti, secondo i testi delle PFT Matezziš, che è menzionato anche in fonti babilonesi datate tra il IV anno di Cambise e il I anno di Bardiya (Stolper 1984), dovrebbe trovarsi nelle immediate vicinanze di Pārsa (Hallock 1977: 130). Secondo Potts, dopo che Ciro ebbe fondato una "nuova capitale geograficamente 'anshanita' a Pasargadae", anche il bacino del fiume Kur vide svilupparsi un'occupazione sedentaria (Potts 2016: 310)[4].

Le preziose informazioni sul terreno fornite da Tilia e Sumner furono a loro volta elaborate da M. Stolper (Stolper 1984: 306), che si avvalse dell'interpretazione di R.T. Hallock secondo cui Matezziš, il luogo più frequentemente incontrato sulle tavolette PFT dopo Pārsa, si trovava "immediatamente adiacente a Persepoli" e si classificava come "il sito più importante, dopo Persepoli, nell'area di Persepoli" (Hallock 1977: 127). M. Stolper, partendo dalla pubblicazione di alcuni testi babilonesi rinvenuti nelle fortificazioni di Persepoli, aggiunge alla discussione l'evidenza costituita da undici testi babilonesi di natura giuridica, purtroppo di origine incerta, risalenti al regno di Cambise e di Bardiya e che fanno riferimento alla presenza di lavoratori babilonesi del tempio in un luogo che in babilonese è chiamato Humadēšu: si tratta di una località che R. Zadok (Zadok 1976: 69-70), a sua volta guidato da un suggerimento di I. Gershevitch, ha equiparato all'antico persiano Uvādaicaya dell'iscrizione di Bisotun, corrispondente all'elamico Matezziš. Questi testi dimostrano quindi che Matezziš "era la sede di un'enclave di babilonesi durante il regno di Cambise" (Stolper 1984: 307) ed "era già il luogo principale della regione prima del regno di Dario e quindi prima dell'inizio della costruzione di Persepoli" (Stolper 1984: 307). L'affermazione di Dario I, contenuta nell'iscrizione elamita DPf, secondo cui egli avrebbe costruito la sua "fortezza" (*halmarraš* elamico) dove prima non esisteva alcuna fortezza[5], è stata spesso presa più che alla lettera, tanto da far ritenere che egli fosse stato il primo a rivolgere la sua attenzione a questa fertile pianura, che invece Sumner e altri studiosi dell'ultimo quarto del XX secolo avevano giustamente sottolineato essere già frequentata in epoca anteriore al regno di Dario I. A questo proposito, va notato che la maggiore opera storiografica recente sull'Impero persiano, di P. Briant, anticipa con convinzione quello oggi viene dimostrandosi grazie alle scoperte archeologiche, ovvero che l'affermazione di Dario riguardava solo Takht-e Jamshid e che invece la scelta di costruire il suo complesso dinastico a Pārsa era motivata proprio dall'esistenza nella pianura della preesistente città di Matezziš[6].

Grazie al complesso delle testimonianze prodotte da Tilia e Sumner, Stolper aveva descritto la pianura tra Kuh-e Rahmat e il fiume Polvar come "un unico complesso insediativo, che si estende per circa 150-200 ettari, di densità relativamente bassa, ma con gli ornamenti

[4] Potts riconosce anche la possibilità di un'altra capitale di Ciro nell'area di Persepoli, a seconda dell'interpretazione finale di Tol-e Ajori (Potts 2016: 310).

[5] DPf § 2 (solo elamita; cfr. Weissbach 1911: 82-83; Schmidt 1953: 63).

[6] "La scelta di Persepolis si spiega con gli sviluppi precedenti, che hanno fatto della regione un centro palaziale e urbano attivo e popoloso, in relazione con i centri babilonesi - e quindi anche un centro capace di offrire le basi materiali (in particolare alimentari) per i giganteschi lavori che il re e i suoi consiglieri avevano progettato sulla terrazza. [...]" (Briant 1996: 99).

architettonici di un considerevole centro politico", per dirla con Stronach una "capitale giardino incompiuta" (Stolper 1984: 307 e fn. 29).

Stolper aveva affermato che la maggior parte degli edifici aristocratici di Bagh-e Firuzi appartenevano a una pianificazione territoriale precedente al regno di Dario I. Sumner riteneva che, sebbene nel Fars non fossero ancora stati individuati assemblaggi ceramici risalenti al primo periodo achemenide (Sumner 1986: 4), il sistema insediativo discusso nel suo articolo "si presume che rappresenti il paesaggio culturale della pianura di Persepoli e dei distretti circostanti da una data di poco successiva alla fine del regno di Ciro fino ai cambiamenti sociali ed economici successivi alla conquista di Alessandro" (Sumner 1986: 7)[7]. Sulla base delle discussioni precedenti, secondo Sumner, Matezziš doveva essere una città importante già durante il regno di Cambise, se il ribelle Vahyazdata fu portato qui nel 521 a.C. per essere giustiziato: "A quel tempo la città di Matezziš (Persepoli Ovest) era abitata e le abitazioni dell'élite a Firuzi e Dasht-e Gowhar erano già in piedi" (Sumner 1986: 28). La ricostruzione proposta da Sumner era straordinariamente vicina a ciò che le ricerche successive stanno dimostrando: "Matezziš era già una città importante durante il regno di Cambise, con una popolazione cosmopolita che comprendeva babilonesi che registravano contratti legali nella loro lingua e viaggiavano avanti e indietro per le città della Mesopotamia[8] [....] Quando Dario ordinò la costruzione di Persepoli [Takht-e Jamshid], Matezziš divenne improvvisamente una città in piena espansione, ospitando centinaia di lavoratori stranieri, portati qui con le loro famiglie per il grande progetto" (Sumner 1986: 28). Sumner quindi mette in risalto la presenza di lavoratori babilonesi, ma li immagina destinati alla realizzazione di Takht-e Jamshid, visto che ancora non era venuta alla luce nessuna realizzazione di data precedente.

L'utilizzo da parte dei sovrani persiani di manodopera babilonese nei templi, un'usanza babilonese ereditata dalla conquista di Babilonia, è attestata fin dall'epoca di Ciro per quanto riguarda il sito che nelle fonti greche è chiamato Taoke: questo sito è identificato da W. Henkelman con il Tamukkan dei testi elamici di Persepoli e anche con il Tahmaka dei testi babilonesi che menzionano i lavoratori babilonesi inviati lì (Henkelman 2008: 116-117; cfr. Tolini 2008). Un'altra località del Fars in cui furono impiegati lavoratori babilonesi, questa volta durante il regno di Cambise, è Matnânu, identificata con la località di Matannan menzionata nei testi persiani (Stolper 1984; Henkelman, Kleber 2007: 164).

Il consenso su queste identificazioni e sulla collocazione di Matezziš nell'area di Persepoli sembra oggi aver superato i dubbi iniziali che in risposta ad Hallock avevano portato alla formulazione di proposte alternative (Zadok 1976; Hansman 1975). Riteniamo quindi non troppo azzardato seguire Stolper, Sumner e Henkelman nell'accettare la loro proposta: ma anche se questa ipotesi si rivelasse infondata, la documentazione sugli altri siti è comunque sufficiente per poter affermare che la presenza nel Fars di maestranze babilonesi, che a Tol-e Ajori è documentata da testimonianze materiali, è confermata dalle fonti.

La scoperta nel 2011 nel sito di Tol-e Ajori, nelle vicinanze di Persepoli, di una porta monumentale interamente costruita in mattoni cotti e crudi, e decorata con mattoni invetriati - una copia della Porta di Ishtar di Babilonia su scala più ampia - ha suscitato grande interesse poiché la sua architettura, la tecnica di decorazione, l'iconografia e persino

[7] Non tutti hanno accettato incondizionatamente queste proposte. S. Gondet, infatti, nel 2011 ha espresso un parere diverso, negando che gli edifici di Bagh-e Firuzi e il palazzo di Dasht-e Gowhar siano contemporanei. Questa opinione deriva dalla sua osservazione che l'orientamento della tomba di Takht-e Rostam e quello del grande edificio di Dasht-e Gowhar coincidono: poiché J.-C. Bessac e R. Boucharlat hanno rivisto l'attribuzione di Takht-e Rostam a Cambise e avanzato l'ipotesi della sua costruzione da parte di Dario I per il padre Hystaspes - condivisa anche da W. Henkelman - Gondet propone che anche Dasht-e Gowhar risalga all'epoca di Dario e sia un'estensione della sua fondazione imperiale (Gondet 2011: 338-339).

[8] Zadok 1976: 61-78; Stolper 1984: 307 n. 31.

l'epigrafia confermano una presenza di artigiani babilonesi, ma diversamente da quanto proposto da Sumner sembrano essere decisamente precedenti alla Terrazza di Persepoli costruita da Dario.

Nel suo fondamentale studio sulla regalità achemenide, G. Gnoli aveva sottolineato come la componente mesopotamica costituisse un riferimento basilare per la costruzione dell'ideologia dei re persiani (Gnoli 1974): questa visione, tuttavia, non sembrava fino a tempi recenti essere confermata da testimonianze artistiche e architettoniche, che invece attestavano legami molto più stretti con l'Egitto o la Ionia. Se in precedenza solo filologi come Gnoli evidenziavano il ruolo primario della cultura babilonese in Persia, ora Tol-e Ajori estende questa presenza in Persia dalle sole raffigurazioni degli esseri fantastici degli edifici di Pasargadae a un intero monumento.

La Porta di Tol-e Ajori, costruita in mattoni cotti e crudi, con la stessa pianta e la stessa decorazione in mattoni invetriati piani e a rilievo della Porta di Ishtar, si impone come il principale monumento dell'area di Bagh-e Firuzi Est: grazie alle sue eccezionali caratteristiche, permette di distinguere l'area di cui è parte dall'area di Pārsa centrata su Takht-e Jamshid, non solo per la sua cronologia ma anche per la sua funzione (Askari Chaverdi, Callieri, Gondet 2013; Askari Chaverdi, Callieri, Matin 2016; Askari Chaverdi, Callieri, Matin 2017; Askari Chaverdi, Callieri, 2020).

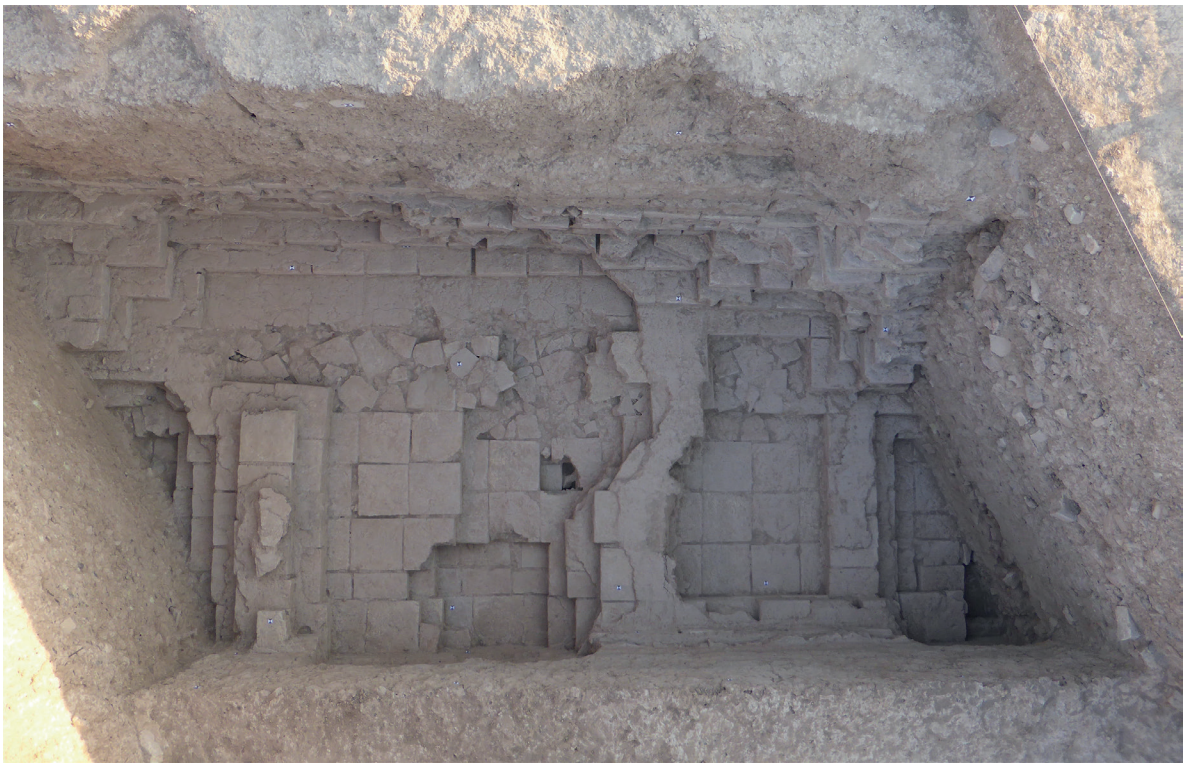

Fig. 5. Tol-e Ajori, muratura di mattoni cotti risparmiata dalle spoliazioni nella Trincea Tr. 12: al centro dell'area si nota una piccola canaletta vuota per il drenaggio, tipica della prassi babilonese (Iranian-Italian Joint Archaeological Mission in Fars).

Il recente lavoro di correlazione della stratigrafia di tutte le 27 trincee scavate e delle loro fasi ha portato a definire i periodi di vita della porta, a partire dal più antico: grazie allo studio dei materiali, è ora possibile proporre una precisa, seppur provvisoria, cronologia relativa, valida sia per il monumento sia per l'intero complesso a cui appartiene.

La pianta dell'edificio scavato a Tol-e Ajori è stata identificata come una copia, sovradimensionata e con alcune differenze planimetriche, della sezione meridionale della

Porta di Ishtar di Babilonia, con la quale condivide anche il modulo metrico dei mattoni di circa 33 cm di lato. Inoltre, mentre la parte scavata corrisponde alla sezione meridionale della Porta di Ishtar, anomalie magnetiche lineari nel campo a nord del *tepe* suggeriscono che in origine esisteva anche un analogo della sezione settentrionale della porta babilonese ora non visibile in superficie.

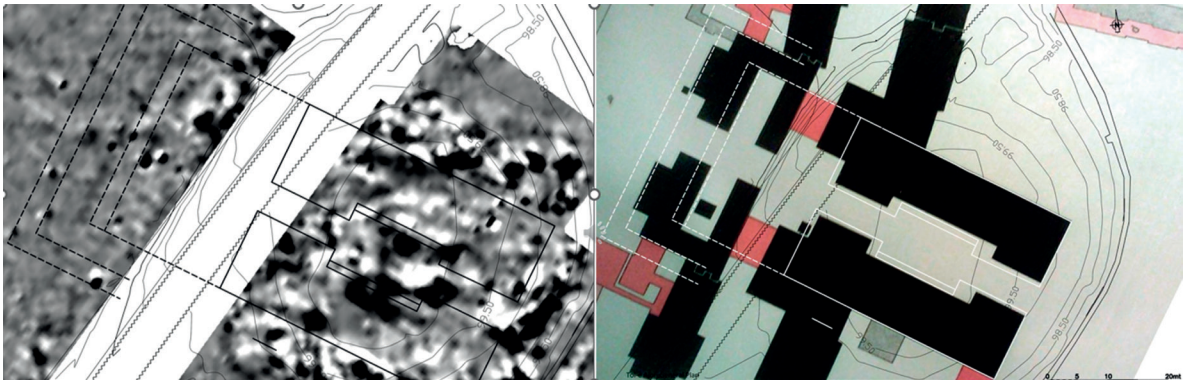

Fig. 6. Tol-e Ajori: a sn. la situazione del terreno a nord della Porta con la ricostruzione di una sezione indicata dalle anomalie della prospezione geofisica, corrispondente esattamente alla pianta della Porta di Ishtar a dx. (Iranian-Italian Joint Archaeological Mission in Fars).

Abbiamo inoltre riscontrato che i motivi decorativi e figurativi dei suoi mattoni invetriati replicano fedelmente quelli di Babilonia, oggi conservati al Pergamonmuseum di Berlino. Innanzitutto, le sezioni di decorazione con mattoni piani invetriati conservate *in situ* nei tratti di muratura sfuggiti all'intenso saccheggio medievale presentano una decorazione che corrisponde *in toto* a quella presente a Babilonia. Inoltre, la maggior parte dei reperti derivanti dagli strati di crollo causati da un forte terremoto è rappresentata da frammenti di mattoni invetriati a rilievo appartenenti alla decorazione originale della Porta[9]. I pannelli rettangolari decorati con i due motivi del toro e del serpente-drago *mushkhushshu* ottenuti assemblando i vari mattoni, che in gran numero si suppone decorassero la Porta di Tol-e Ajori come la Porta di Ishtar di Babilonia, vengono gradualmente ricostruiti con nuovi frammenti che vengono a trovare una loro perfetta collocazione nello schema compositivo dei pannelli babilonesi.

Anche lo studio dei segni per la messa in opera (*fitters' marks*) dipinti sulla superficie superiore di ogni mattone smaltato per assistere il muratore nell'assemblaggio dei mattoni per comporre i motivi decorativi e figurativi, rivela l'assoluta somiglianza con il sistema scoperto sui mattoni babilonesi e compreso nella sua struttura da R. Koldewey: lo studio di alcuni mattoni rinvenuti *in situ* conferma la ricostruzione del loro utilizzo proposta dallo studioso tedesco (Koldewey 1914: 104-105, fig. 65; Matin 2017: 236-239).

[9] Lo studio dei laterizi, in particolare di quelli invetriati, è condotto con ampio spazio all'archeometria, per poter inquadrare materiali e tecniche di produzione: temi importanti come la presenza di mattoni a rilievo non invetriati, l'interfaccia tra la parte decorata a rilievo e il corpo del mattone, i vari stati di conservazione dello smalto e il decadimento del colore originale, sono in corso di studio grazie alla collaborazione della prof. Maria Letizia Amadori e del suo strumento portatile di fluorescenza XFR e del microscopio ottico, mentre alcune questioni specifiche sul corpo argilloso dei mattoni sono state indagate attraverso la raccolta di dati e informazioni analizzate sia dall'Università di Urbino sia presso l'Università delle Arti di Esfahan dal Prof. Amin Emami (Amadori *et al*. 2023).

Fig. 7. Tol-e Ajori, tratto di muratura di mattoni cotti con il rivestimento di mattoni invetriati piani *in situ* nella Trincea Tr. 11 (Iranian-Italian Joint Archaeological Mission in Fars).

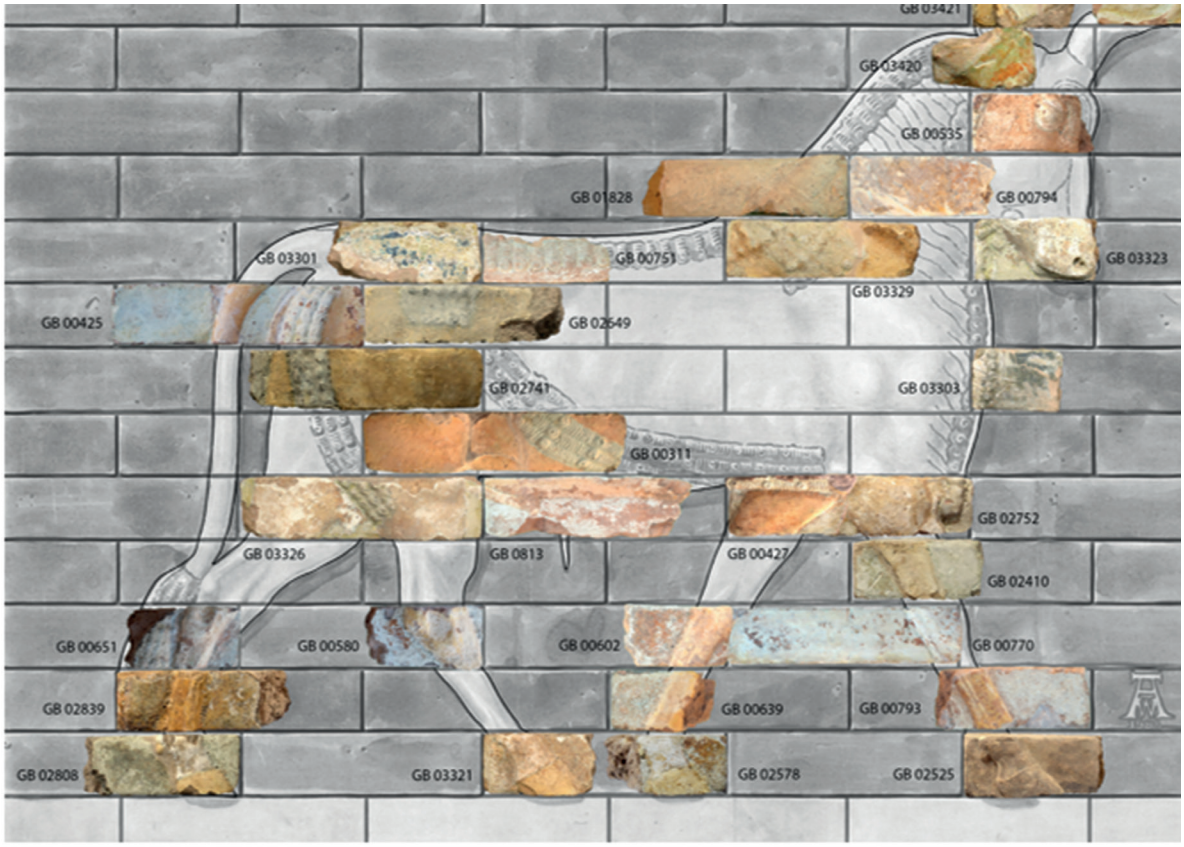

Fig. 8. Tol-e Ajori, Ricostruzione di un pannello con l'immagine del toro babilonese ottenuta inserendo i frammenti da Tol-e Ajori nello schema grafico di un pannello della Porta di Ishtar (Iranian-Italian Joint Archaeological Mission in Fars).

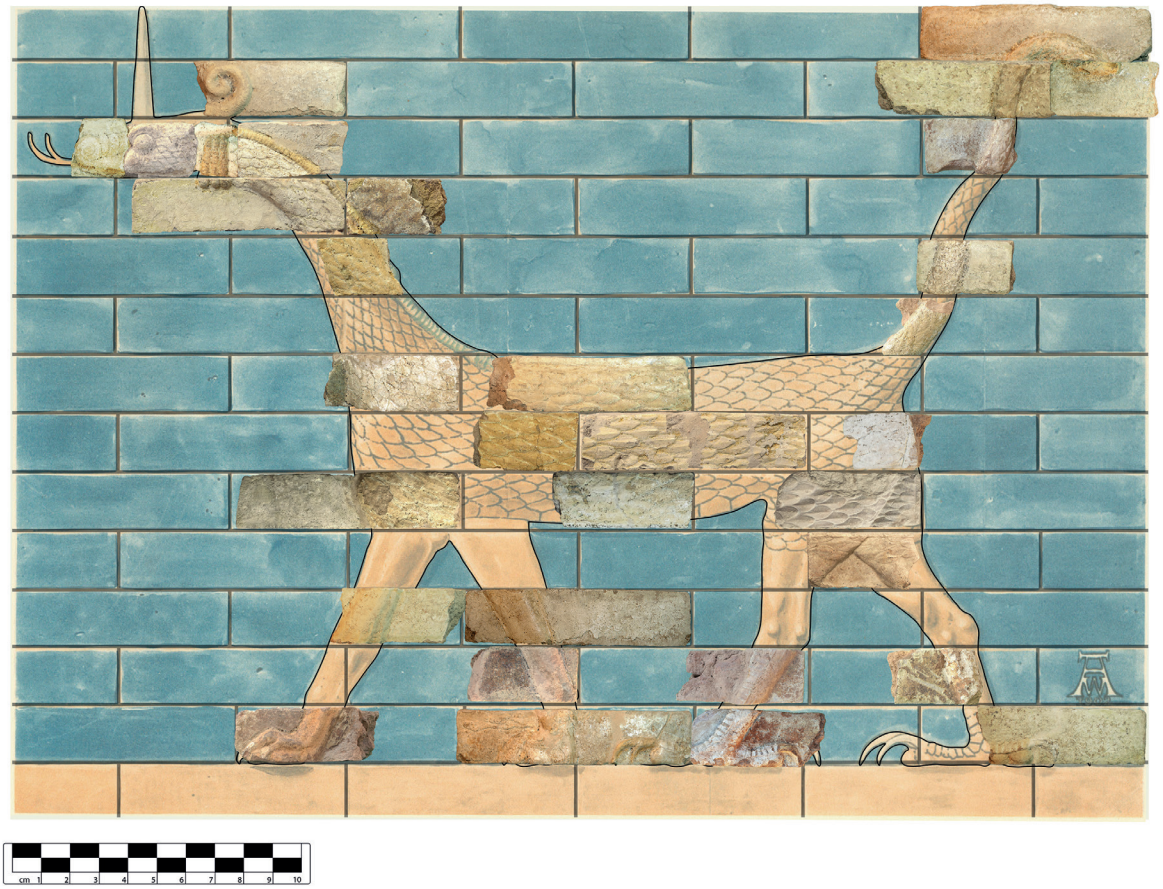

Fig. 9. Tol-e Ajori, Ricostruzione di un pannello con l'immagine del *mušḫuššu* babilonese ottenuta inserendo i frammenti da Tol-e Ajori nello schema grafico di un pannello della Porta di Ishtar (Iranian-Italian Joint Archaeological Mission in Fars).

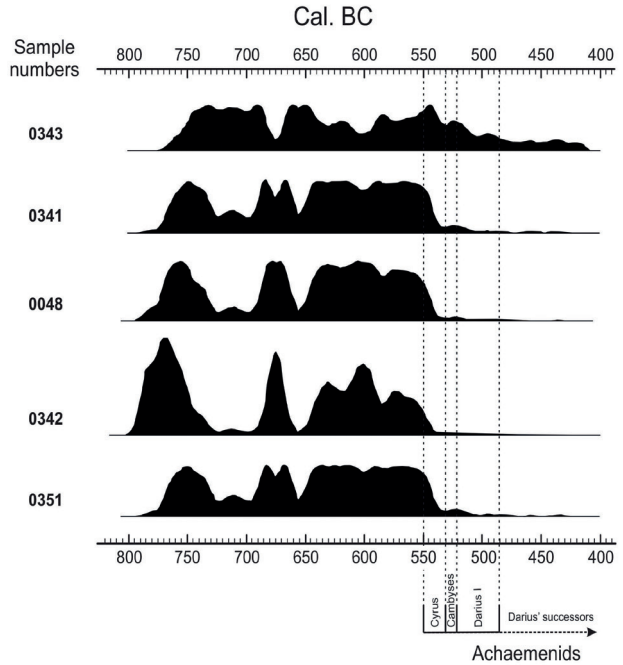

Fig. 10. Tol-e Ajori, grafico con le datazioni al radiocarbonio, elaborazione M. Djamali (Iranian-Italian Joint Archaeological Mission in Fars).

Per quanto riguarda la datazione della Porta, dobbiamo innanzitutto esaminare i risultati dello scavo, a partire dall'analisi della datazione al radiocarbonio.

Grazie al sostegno del progetto franco-tedesco "Paleopersépolis", diretto da Morteza Djamali presso l'IMBE di Aix-en-Provence-Marseille, cinque campioni di ossa di animali di grandi dimensioni provenienti da Tol-e Ajori - quattro dei quali provenienti dall'occupazione secondaria - sono stati sottoposti a datazione al radiocarbonio, effettuata presso il Laboratorio della Seconda Università di Napoli a Caserta.

L'arco temporale entro il quale è possibile datare i campioni è particolarmente ampio e va ben oltre il periodo che meglio giustifica da un punto di vista storico la presenza babilonese in Persia, cioè dalla conquista che Ciro fece della città di Babilonia nel 539 a.C. Ma la mancanza di altri dati cronologici di tale antichità ci porta a essere più cauti e a escludere una datazione pre-achemenide per questo edificio. Pertanto la parte significativa delle curve per tre dei campioni appartenenti all'occupazione secondaria si riduce alla loro fine, cioè intorno al 540 a.C.: a questa data dobbiamo aggiungere lo spostamento causato dalla cosiddetta "età apparente" della sepoltura, dovuta al fatto che i campioni erano composti da ossa, che porta il limite inferiore al 530 a.C. La scarsa affidabilità del radiocarbonio per l'Età del Ferro in Iran suggerisce una certa cautela nell'accettare alla lettera il dato quantitativo, ma la concordanza delle date è comunque un indizio a favore della datazione alta.

Non mancano altri indizi cronologici forniti dai reperti. Tra questi, le evidenze epigrafiche occupano un posto di rilievo, ammontando a tredici frammenti di mattoni con iscrizioni cuneiformi tracciate con lo smalto sulla superficie anteriore. Finora a Tol-e Ajori sono stati attestati solo logogrammi o sillabe in elamico o babilonese, mentre non è stata trovata alcuna iscrizione in antico persiano (Basello 2013; 2014; 2017). Questa assenza dell'antico persiano, sebbene statisticamente debole perché potrebbe essere presto smentita, rimane per il momento significativa nella considerazione di tutti i dati. L'aspetto più importante per la datazione della costruzione della Porta, tuttavia, è il fatto che gli aspetti paleografici dei tredici frammenti mostrano un'affinità non con lo stile di scrittura delle due lingue nelle iscrizioni achemenidi di Dario I e dei suoi successori, ma piuttosto con i segni dei periodi neo-elamita e neo-babilonese (Basello 2017: 270, 272), un fatto che conferma l'appartenenza della Porta a una fase proto-achemenide[10].

Le indicazioni cronologiche fornite dagli altri reperti di scavo, piuttosto disorientanti se prese singolarmente, acquistano maggiore consistenza se esaminate nel loro complesso. Per esempio, lo studio della ceramica sta dando alcuni primi risultati molto utili. I frammenti ceramici rinvenuti nei livelli di occupazione secondaria successivi all'abbandono della Porta, pur essendo pochi, contengono comunque materiali riconducibili alla Late Plain Ware, la cui datazione purtroppo varia in un lungo intervallo cronologico tra il VI e il I secolo[11]. Negli stessi strati successivi alla fine del primo periodo di occupazione sono state rinvenute anche punte di freccia in bronzo di tipo achemenide.

Va inoltre considerato che, poiché un violento terremoto successivo alla prima fase di saccheggio e abbandono causò la grande distruzione del monumento di Tol-e Ajori, l'assenza di segni evidenti di forti terremoti a Takht-e Jamshid fa pensare o che i danni siano stati riparati completamente ed esaustivamente in modo da nasconderli, oppure che la Terrazza non fosse ancora stata costruita al momento dell'evento sismico che distrusse Tol-e Ajori, ipotesi che

[10] Utilizziamo qui, in modo assolutamente convenzionale, la terminologia proposta da Stronach 1997. Sumner specifica inoltre che "nella discussione che segue, 'Early Achaemenid' si riferisce a siti ritenuti anteriori all'inizio della costruzione di Persepoli, circa il 520 a.C." (Sumner 1986: 7, fn. 10).

[11] I frammenti ceramici di epoca medievale islamica (IX-XIII sec. d.C.) rinvenuti sul fondo delle numerose fosse di spoliazione individuate durante gli scavi stratigrafici hanno permesso di datare anche gli episodi di saccheggio che hanno prodotto l'asportazione di una parte considerevole della muratura in mattoni cotti.

appare tutto sommato più verosimile (Berberian, in preparazione). In questa seconda ipotesi, la distruzione della Porta avrebbe suggerito a Dario I di costruire la sua Terrazza sulla roccia della collina e non sulla terra della pianura.

Oltre a questi dati intrinseci forniti dai ritrovamenti degli scavi, dobbiamo considerare anche altri elementi che indicano che Tol-e Ajori è stata costruita prima di Takht-e Jamshid.

La tradizione muraria e architettonica di Tol-e Ajori affonda le sue radici nella Mesopotamia, anche se la concezione tipologica di una porta monumentale che conduce all'area del palazzo richiama quella di Pasargadae con la Porta R, che però è dotata di una sala ipostila di tradizione iranica.

La tecnica dei mattoni invetriati di Tol-e Ajori appartiene a una tradizione artigianale più arcaica rispetto a quella dei mattoni di Takht-e Jamshid o di Susa, che sono senza dubbio il risultato di un enorme progresso tecnologico che porta a preferire l'applicazione dell'invetriatura su un mattone di impasto siliceo e non di argilla cotta (Razmjou 2004; Amadori et al. 2017a, 2017b; Daucé 2010: 329-330). Inoltre, l'iconografia composto solo da creature mitiche differisce da quella di Takht-e Jamshid e ricorda piuttosto il Palazzo S di Pasargadae. La più singolare di queste testimonianze è la presenza del motivo del *mushkhusshu*, totalmente assente a Pasargadae così come nell'abbondante immaginario della terrazza di Takht-e Jamshid e di Susa e presente solo nelle impressioni su argilla dei sigilli tardo-babilonesi utilizzati nell'archivio di Persepoli (Garrison 2009: 46; Matin 2019).

Tutti gli elementi appena citati, quindi, suggeriscono fortemente una fondazione della Porta di Tol-e Ajori prima della costruzione della cittadella imperiale di Takht-e Jamshid da parte di Dario I, forse nell'arco di tempo compreso tra il 539 a.C. e il 518 a.C. Se questi elementi isolatamente non possono supportare una datazione affidabile del monumento, la loro convergenza è una conferma reciproca e quindi conferisce alla datazione proposta un'elevata verosimiglianza. Per questo motivo altre proposte di datazione, basate su singoli elementi come quelle discusse da K. Kaniuth[12], non hanno la stessa solidità, anche se siamo consapevoli che altri elementi saranno necessari in futuro per consentire una maggiore precisione.

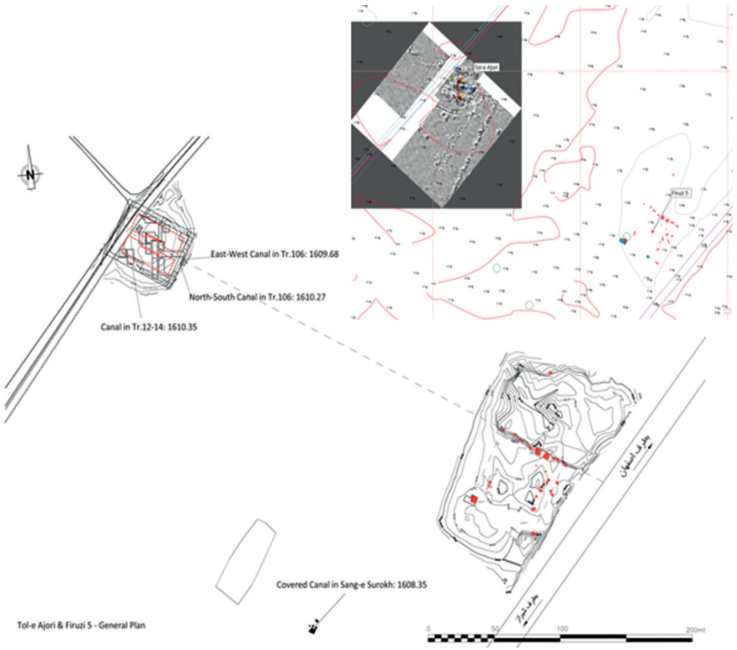

Fig. 11. Tol-e Ajori, relazione topografica tra la Porta a nord-ovest e l'edificio di Firuzi 5 a sud-est (Iranian-Italian Joint Archaeological Mission in Fars).

[12] K. Kaniuth afferma che Tol-e Ajori fu costruito "forse già all'inizio del V secolo a.C." (Kaniuth 2018: 351).

La Porta ha un chiaro collegamento topografico con l'adiacente edificio monumentale di Firuzi 5, situato a circa 360 m a sud-est di Tol-e Ajori, che appare grazie alle indagini irano-francesi e ai limitati scavi irano-italiani come un'imponente struttura palaziale, purtroppo molto danneggiata - forse incompiuta - e nota solo attraverso alcune fondazioni in pietra per basi di pilastri o colonne (Gondet 2011: 292 sgg.; Askari Chaverdi, Callieri 2013). Gli assi delle due strutture, così come quelli delle anomalie localizzate dalle indagini geofisiche nel campo circostante e che rappresentano fossati o canali, condividono lo stesso orientamento.

Il terzo monumento di questo complesso è l'adiacente struttura costruita in blocchi di calcare ben tagliati, registrata come Sang-e Surakh, interpretata come un ponte che attraversa un canale, che è stata nuovamente esplorata brevemente nel 2017 (Askari Chaverdi, Callieri, 2020). Per valutare la possibilità che la struttura fosse effettivamente un ponte e che ci fosse un collegamento tra questa struttura e Tol-e Ajori, si è approfittato della scoperta di due canali di drenaggio sul lato sud-est di Tol-e Ajori. È stato effettuato un rilievo topografico dei loro livelli e di Sang-e Surakh. Sembra che ci fosse un pendio dal lato nord-ovest di Tol-e Ajori al suo lato sud-est e che poi il pendio continuasse verso sud fino a Sang-e Surakh. Questo fatto rafforza la percezione della struttura di Sang-e Surakh come facente parte dello stesso progetto architettonico di Tol-e Ajori e Firuzi 5. Il fatto che Sang-e Surakh condivida con l'edificio monumentale di Firuzi 5 un uso raffinato della muratura in pietra tagliata, in stretta associazione con la porta in mattoni di Tol-e Ajori, suggerisce che due diverse tradizioni architettoniche si siano sviluppate fianco a fianco nell'area di Bagh-e Firuzi Est in un probabile unico complesso architettonico.

Fig. 12. Tol-e Ajori, la struttura nota come Sang.e Surakh nel campo tra la Porta a nord-ovest e l'edificio di Firuzi 5 a sud-est (Iranian-Italian Joint Archaeological Mission in Fars).

Gli scavi hanno inoltre portato alla luce un breve tratto di un muro in mattoni crudi di 33 cm di lato, che si addossava ad angolo retto al lato esterno nord-est della Porta nella sua estremità sud, la cui prosecuzione nell'area circostante purtroppo è stata completamente distrutta durante il livellamento dei campi che circondano il *tepe*, tanto da non essere visibile

neppure nell'indagine geofisica (Askari Chaverdi, Callieri, 2020). A differenza di altri monumenti di natura simile, per i quali è stata ipotizzata l'assenza di muri di recinzione (Gondet 2018: 202), è probabile che nel caso della Porta si tratti di un muro di recinzione del complesso sopra descritto: forse in origine tali recinzioni esistevano ma, anche a causa del fatto che erano costruite in mattoni crudi, sono scomparse del tutto.

È difficile capire la relazione del complesso scoperto a Tol-e Ajori con gli altri siti delle diverse zone dell'area di Firuzi, anch'essi classificati da Sumner come "achemenidi" sulla base della loro architettura in pietra (Sumner 1986: 4), che si trovano nel settore di Bagh-e Firuzi West, la cui funzione e cronologia non è mai stata affrontata in modo esaustivo. La maggior parte di questi siti non è mai stata oggetto di un'adeguata ricerca archeologica[13] ed è quindi metodologicamente debole considerarli acriticamente coevi. Per questo motivo, nell'autunno 2019 la Missione Archeologica Congiunta Irano-Italiana ha avviato un nuovo progetto multidisciplinare[14], con l'obiettivo di raccogliere una documentazione completa di tutti i siti della regione di Bagh-e Firuzi West e di determinarne la cronologia, la funzione e la pertinenza con la pianificazione territoriale di Takht-e Jamshid o con quella di Bagh-e Firuzi East (Colliva, Matin 2020).

Allo stesso tempo Tol-e Ajori si distingue anche come il principale monumento conservato appartenente a una pianificazione del territorio diversa da quella illustrata per l'area di Pārsa centrata su Takht-e Jamshid. L'orientamento dell'impianto a cui appartengono la Porta, Firuzi 5, Sang-e Surakh e i canali adiacenti concorda con quello evidenziato nei campi tra i siti di Bagh-e Firuzi dalle indagini geofisiche che hanno riconosciuto l'esistenza di lunghe anomalie lineari attestanti una rete di fossati o canali. Degno di nota è il fatto che l'orientamento di queste linee differisca da quello dell'area più vicina a Takht-e Jamshid, essendo spostato di 65° verso E rispetto all'asse del Quartiere Reale di Takht-e Jamshid (Gondet 2018: 201): sembra evidente che i due schemi di pianificazione territoriale siano stati realizzati in due fasi diverse, come inteso anche da S. Gondet (Gondet 2011: 324; poi anche 2018: 201).

Riconsiderando l'interpretazione complessiva proposta da Sumner per Pārsa/Matezziš, che unisce l'area di Persepoli Ovest, topograficamente legata a Takht-e Jamshid, e quella di Firuzi, che comprende Tol-e Ajori e Firuzi 5 appartenenti a una fase precedente[15], si sottolinea il fatto che, nonostante la mancanza delle informazioni recenti su cui oggi possiamo contare, Sumner aveva a disposizione sia i dati raccolti vent'anni prima di persona durante le sue ricognizioni, che riguardavano soprattutto l'epoca protostorica, sia le importanti scoperte fatte da G. e A.B. Tilia negli anni Settanta e il brillante uso che ne fece D. Stronach nella sua pubblicazione del 1978 sugli scavi di Pasargadae. In particolare A.B. Tilia aveva ampiamente dimostrato che i vari edifici portati alla luce a Bagh-e Firuzi e Takht-e Rostam, per tecnica muraria e stile architettonico, erano più simili all'architettura di Pasargadae che a quella di Takht-e Jamshid e quindi dovevano essere datati al periodo di Ciro o Cambise (Tilia 1974, 1978a).

Stronach, da parte sua, aveva accettato questa proposta e affermato che "[...] la pianura di Persepoli [...] fu centro della prima attività edilizia achemenide sia durante che subito dopo il regno di Ciro", e aveva usato in modo "profetico" una frase che solo molto più tardi

[13] Oltre alla sintetica descrizione di Sumner e alle informazioni provenienti dalle prospezioni geofisiche, le uniche informazioni più dettagliate sono quelle pubblicate da A.B. Tilia, relative soprattutto alla documentazione di siti venuti alla luce durante i lavori agricoli, e da S. Gondet, che ha effettuato nuove ricognizioni di superficie (Gondet 2011: 277-290).

[14] Direttori Emad Matin e Luca Colliva.

[15] In effetti, Sumner solleva anche la questione della successione cronologica: "L'occupazione contemporanea di questi siti non può essere stabilita in modo inequivocabile sulla base delle prove attuali. È tuttavia ragionevole supporre che i primi edifici di pregio abbiano continuato a essere utilizzati, forse con funzioni modificate, dopo la costruzione delle botteghe di produzione e delle abitazioni associate" (Sumner 1986: 9).

si rivelò effettivamente vera: "le falesie di Naqsh-i Rustam erano già poco distanti da una 'capitale giardino' incompiuta, simile a quella di Pasargadae, al momento dell'ascesa al trono di Dario" (Stronach 1978: 135). Anche W. Kleiss ha riconosciuto con grande interesse le scoperte di Tilia, ma ne ha limitato l'attribuzione al solo Cambise, che intendeva costruire una nuova residenza reale a Pārsa sul modello di quella costruita a Pasargadae da Ciro (Kleiss 1980: 205).

Da parte nostra, tuttavia, le informazioni recenti rendono preferibile il limite cronologico proposto da Stronach e accettato da Stolper per l'inizio delle costruzioni imperiali nella piana di Pārsa, "sia durante che direttamente dopo il regno di Ciro", piuttosto che il solo regno di Cambise come proposto da Sumner.

Anche se per il momento non è possibile dare una risposta definitiva, un'ipotesi verosimile è quella di associare la sua costruzione a una sorta di trionfo per il ritorno a Pārsa dopo la conquista di Babilonia del 539 a.C.: in questo caso il re a cui dovremmo attribuire la Porta sarebbe Ciro il Grande (Askari Chaverdi, Callieri, Matin 2014: 237-239), le cui vittoriose campagne militari contro la Lidia-Ionia e la Babilonia avrebbero prodotto anche conseguenze architettoniche (Callieri 2020: 316-317). Se gli scavi futuri forniranno nuove prove che confermano un ruolo di parte di un complesso imperiale della Porta di Tol-e Ajori, si rafforzerebbe l'ipotesi di una Persepoli precedente, o di una seconda *Pārsa-grda*, costruita da Ciro.

Anche per quanto riguarda l'interpretazione funzionale, l'attribuzione della Porta di Tol-e Ajori a un ambito imperiale, certa per le caratteristiche intrinseche del monumento e confermata dalla presenza tra i frammenti di iscrizioni cuneiformi della parola "re" in babilonese ed elamico, permette di orientare in modo solido l'interpretazione dell'intero complesso come una struttura imperiale (Askari Chaverdi, Callieri 2020), simile al vasto *paradeisos* di Pasargadae, con il quale condivideva la presenza di una porta monumentale, di un grande palazzo e di un ponte: anche la presenza di maestranze babilonesi a Tol-e Ajori si spiega pienamente alla luce di una prassi che riguardava le attività imperiali.

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EL JARDÍN PERSA, INTENTO DE EXPLICACIÓN Y BÚSQUEDA DE ORÍGENES Y TRASCENDENCIAS

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RESUMEN

Los jardines persas son un elemento arquitectónico y paisajístico que se mantienen y recrean en Irán como una parte fundamental de su cultura y de su tradición. En este trabajo se intenta analizar cuáles son sus componentes, cómo se relacionan entre sí, y cómo esta interacción crea un tipo de construcción con una fuerte carga simbólica. Sin embargo, lo que aquí analizamos es fundamentalmente lo que ingenieros, arquitectos y paisajistas tienen en cuenta a la hora de analizar qué son estos jardines, y cómo continuar y recuperar su tradición nacional.

A continuación, se pretende resumir y analizar los últimos trabajos arqueológicos llevados a cabo en Pasargada, que recuperan la existencia y planificación de una capital estable, con todos los elementos necesarios para sustentar los servicios que toda capital requiere, también la primera aqueménida. Aunque queda trabajo por hacer, las investigaciones que citamos demuestran la existencia de estos elementos constitutivos, y así viene señalado. En relación con el tema que tratamos, y viene también analizado, Pasargada estaría construida en torno a un jardín, de nuevo con un fuerte componente simbólico, en este caso de manifestación del poder real, y lo que intentamos dilucidad es cuántos de estos elementos, también el cómo se transmiten, podemos observar en los de los jardines persas posteriores que se analizan en la primera parte del artículo.

El jardín persa es un ejemplo del paraíso que recrean y señalan distintas religiones. Este trabajo empieza hablando de alguna de estas manifestaciones, las que tenemos todos en la cabeza, y tratando de hilvanar relaciones entre ellas. Que esta concepción del paraíso tuviese un ejemplo o manifestación en los jardines o paraísos persas es sin duda una posibilidad atractiva, pero, como se señala en distintos momentos del artículo, queda mucho por investigar y buscar para comprender de dónde procede y cómo se construye y manifiesta este concepto de paraíso.

PALABRAS CLAVE

Paraíso, jardín persa, Pasargada, aqueménidas.

ABSTRACT

Persian gardens are an architectural and landscape element that are maintained and recreated in Iran as a fundamental part of its culture and tradition. This work attempts to analyze what its components are, how they relate to each other, and how this interaction creates a type of construction with a strong symbolic load. However, what we analyze here is fundamentally what engineers, architects and landscapers take into account when analyzing what these gardens are, and how to continue and recover their national tradition.

Next, it is intended to summarize and analyze the latest archaeological works carried out in Pasargadae, which recover the existence and planning of a stable capital, with all the necessary elements to sustain the services that every capital requires, including the first Achaemenid capital. Although there is still work to be done, the works we cite demonstrate the existence of these constituent elements, and this is indicated. In relation to the topic we are dealing with, and it has also been analyzed, Pasargada would be built around a garden, again with a strong symbolic component, in this case the manifestation of royal power, and what we are trying to clarify is how many of these elements, We can also see how they are transmitted in those of the later Persian gardens that are analyzed in the first part of the article.

The Persian garden is an example of the paradise that different religions recreate and point out. This work begins by talking about some of these manifestations, the ones that we all have in our heads, and trying to weave relationships between them. That this conception of paradise had an example or manifestation in the Persian gardens or paradises is undoubtedly an attractive possibility, but, as pointed out at different points in the article, there remains much to investigate and search to understand where it comes from and how it is built and manifests this concept of paradise.

KEYWORDS

Paradise, Persian garden, Pasargadae, Achaemenids.

La palabra paraíso tiene una antigua historia, y nos retrotrae, es cierto, a la historia antigua persa, pero no solo. Paraíso, en español, proviene del griego, *paradeisos*, y de aquí el latín *paradisus*. En la Biblia griega, o Septuaginta, el término alude al Jardín del Edén. El término griego se señala a veces que proviene del persa, *paerdís*, que significaría cercado. La palabra del persa antiguo, *paridaidam* podría ser la antecesora de la palabra griega, pero también está la palabra elamita *partetaš*, presente en las tablillas de Persépolis, y que denominaría un lugar de almacenamiento de mercancías (Bouchalart 2011: 558), pero también plantación, y por lo tanto de significado similar a lo que aquí estamos tratando. Hay distintas posibles interpretaciones sobre el origen de la palabra y de su significado. Fuentes clásicas hablan del jardín o paraíso persa, que sería un jardín cuidado y agradable, donde suele haber animales además de plantas. El término persa antiguo podría provenir del término asirio (dialecto del acadio) *pardesu*, dominio. La idea de recinto cerrado no sobrevive en la evolución del persa, de tal modo que pardis, o *pālīz*, significa huerto o zona de cultivo.

La idea del paraíso está presente en el judaísmo, en el cristianismo, en el islam o en el zoroastrismo, también en otras religiones, y no difieren tanto entre sí en la idea que significa. Su representación y su simbología han estado presentes desde entonces en nuestra cultura y en nuestra imaginación, y la imagen que hoy tenemos de lo que es un paraíso está sin duda condicionada por lo que vamos a plantear en estas líneas.

La Biblia habla así del Paraíso o del Jardín del Edén:

> Luego plantó Yahvé Dios un jardín en Edén, al oriente, donde colocó al hombre que había formado. Yahvé Dios hizo brotar del suelo toda clase de árboles deleitosos a la vista y buenos para comer, y en medio del jardín, el árbol de la vida y el árbol de la ciencia del bien y del mal. De Edén salía un río que regaba el jardín, y desde allí se repartía en cuatro brazos. Uno se llama Pisón: es el que rodea todo el país de Javilá, donde hay oro. El oro de aquel país es fino. Allí se encuentra el bedelio y el ónice. El segundo río se llama Guijón: es el que rodea el país de Cus. El tercer río se llama Tigris: es el que corree al oriente de Asiria. Y el cuarto río es el Éufrates. Tomó, pues, Yahvé Dios al hombre y lo dejó en el Jardín de Edén, para que lo labrase y cuidase. Dios impuso al hombre este mandamiento: "Puedes comer de cualquier árbol del jardín, pero no comerás del árbol de la ciencia del bien y del mal, porque el día que comieres de él morirás sin remedio"(Gn, 2 8-17).

En el Corán encontramos referencias al jardín celestial en numerosas suras como un espacio cercado del tamaño de la tierra y el cielo juntos (3,133 y 57,21); un lugar umbrío poblado de árboles frutales y variadas especies vegetales que proporcionarán alimentos inagotables, con abundancia de agua en forma de ríos o arroyos que fluyen, o fuentes que manan perpetuamente (Silva 2011: 39).

La propia declaración de la UNESCO del jardín persa como patrimonio de la humanidad habla de que su separación en cuatro sectores (*chahar bagh* o Cuatro Jardines) abiertos en las cuatro direcciones a través de dos ejes principales (*Chahar Taqi*), que simboliza tanto la

creación del Edén como los cuatro elementos zoroastrianos (cielo, tierra, agua y el elemento vegetal), y que estos deberían ser siempre tenidos en cuenta cuando se crea un jardín.

Estamos, por lo tanto, ante una creación humana que tiene un fuerte componente espiritual, tal y como estas religiones monoteístas muestran con claridad. No se puede entender su estructura y su forma si no entendemos qué creencias y simbologías están detrás. El jardín persa es un paraíso en la tierra, y como tal tiene que ser analizado para tratar de comprenderlo.

Como veremos en este artículo, el concepto de jardín persa está perfectamente asentado en la mentalidad de Irán, de la antes llamada Persia y, desde un origen aqueménida, se habla de unas características concretas, a la vez metafóricas y difusas, que se han mantenido desde entonces hasta hoy. Lo que pretendemos aquí es entender qué es un jardín persa, comprender su estructura y sus partes, sus elementos constitutivos, también su significado y, siguiendo a arquitectos y urbanistas más o menos contemporáneos, ver cómo se mantienen o recuperan los que hubo, y cómo estos se integran en el medio ambiente. Para eso es también nuestra intención repasar los precedentes que influenciaron o moldearon aquellos supuestos primeros jardines creados en Pasargada, y haremos también alguna incursión en posibles expansiones de este modelo de jardín o paraíso, que metafórica y visualmente tomaron forma y cuerpo desde la antigüedad hasta nuestros días.

1. Características del jardín persa

Existen distintos trabajos que intentan esquematizar, resumir o interpretar las características que conforman y configuran el jardín persa, casi siempre partiendo de una conciencia colectiva de que estos son los mismos que existieron y que, de un modo u otro, han permanecido hasta hoy.

Así, los jardines persas registrados en la Lista del Patrimonio Mundial de la UNESCO compartirían patrones similares y características comunes en su forma: diseño geométrico, estar encerrados por un muro, existencia de un orden y de una simetría visual, existencia de una ordenación axial y centralizada, etc. Estarían siempre divididos en cuatro sectores, y el agua juega un importante papel en la irrigación y en la ornamentación, también en la creación de una atmósfera. El jardín persa sería una metáfora del paraíso, sobre todo en zonas especialmente áridas y con climas cálidos y secos (Mirsafa & Pourali 2021: 45). Podría ser que la propia idea de lo que es un paraíso tenga origen en ese contrate entre desierto y vergel.

Los conceptos que hacen de un jardín un patrimonio natural y cultural diferente de otros jardines en otros lugares son las diferentes capas conceptuales, semánticas, estructurales y de características funcionales de cada región (Shahcheraghi 2015: 41). Los jardines son diferentes en cada lugar y se adaptan a unas necesidades, al medio y a las intenciones que motivan su construcción o transformación, pero son siempre una construcción humana que responde a un bagaje cultural y a unas intenciones.

El trabajo de Mirsafa & Pourali (2021) analiza las pautas de diseño de los jardines persas en jardines del norte de Irán, donde las condiciones climáticas son diferentes a las de la llanura persa, que sería el lugar de origen de estos jardines. Lo que vamos a hacer en este artículo a continuación es tomar su clasificación como referencia, enumerar esas seis características que ellos señalan, y comentarlas para intentar entender qué es un jardín persa, o al menos cómo lo interpretan estos y otros autores[1].

[1] Este trabajo no es, ni mucho menos, el único en su tipo. El de Teimouri, S., Moaddab Chaijan, E., & Pourhashemi Sikaroudi, S.R., 2016, "Skeletal Characteristics of Iranian Garden Design Pattern and Effective Factors in Recreating Iranian Garden in Contemporary Era", *International Journal of Advanced Biotechnology and Research* (IJBR) [en red], por ejemplo, sigue las mismas pautas, las mismas intenciones, aunque reflexiona de modo diferente sobre las características que definen al jardín persa.

1.1- Imaginar y definir un jardín. No es necesario pensar en la recreación de un paraíso en forma de vergel, que se contrapone al desierto de la meseta central de Irán, supuesto origen de la concepción de esta estructura arquitectónica y natural. En otros lugares, con otras condiciones climáticas (los autores presentan un estudio de caso en la región de Guilán) también se dan. El jardín tampoco es necesariamente un lugar apartado o reservado a los privilegiados, se pueden construir jardines para un público general y como un lugar donde se desarrolla la vida cotidiana. Otra cosa sería para quién fueron concebidos los de Pasargada (o los de Asiria, por ejemplo), o qué imaginamos a través de los textos sagrados qué eran los paraísos, pero aquí hablamos de otros tiempos pretéritos o relativos a la fe.

Independientemente de hasta dónde podamos retrotraer el origen del jardín persa, las características que le asignemos deberían perdurar, incluso en condiciones climáticas diferentes. Cada jardín es único, y la interacción entre sus elementos se produce en función de muy diversas circunstancias.

Fig. 1. *El Paraíso terrenal*. Brueghel el Joven, Pieter (Obra copiada de: Brueghel el Viejo, Jan). Museo Nacional del Prado, Madrid, España. www.museodelprado.es.

1.2- Orden geométrico del jardín. Una de las características del jardín persa es su orden geométrico. El orden estructural se basa en el orden geométrico, y lo que organiza todo son las vías de agua.

Los jardines persas se organizan en planos rectangulares tanto como sea posible, y muestran una belleza propia independiente del entorno. La primera de estas ideas puede extenderse a todo el jardín o a alguna de sus partes, y la segunda puede ser una pauta general. Los jardines se pueden integrar más o menos en el medio que lo circunda, pero, si hay un muro, muestra claramente un espacio diferenciado. Buscar esta geometría puede ser un buen elemento definidor.

1.3- Contradicción e interacción del jardín con el medio natural circundante. Un jardín, también el persa, es por definición una obra humana. Los jardines persas originales, nacidos en la meseta irania (y este comentario lo realizamos dejando a un lado que partiesen

de los modelos mesopotámicos, urartianos o elamitas previos) están en contradicción con el medio que le rodea (Mirfendereski 2001: 5) y por eso son un paraíso, y han despertado tanta mitología y significado como concepto. Lo sorprendente es que, en lugares donde las condiciones climáticas son otras, la mayor parte de estas características se han repetido como pauta, pudiéndose entonces entender que forman, efectivamente, un conjunto que, aun adaptándose al medio, se puede entender como un tipo de unidad que se pretende reproducir o rememorar.

1.4- Cerco del jardín. El jardín persa estaría encerrado en un muro, y este cerco iría tomando más importancia como elemento propio del jardín, y se iría cuidando más su belleza (Mansouri 2005, 63). Si concebimos este elemento como esencial, siendo soporte de decoración vegetal, ornamentado con otros materiales, o a través de su propia arquitectura, no podemos dejar de pensar en los famosos jardines colgantes de Babilonia, que Dalley (2013) sitúa sin embargo en el mundo asirio. Así, uno de los precedentes claros de los jardines persas, estaría ya desde un principio condicionado por la arquitectura que lo alberga.

1.5- Edificios en el jardín. La arquitectura local está influenciada por la geografía y las condiciones naturales del terreno, por la climatología, por el modo de vida y las condiciones económicas de los residentes, así como por sus características culturales (Khakpour 2011: 20). Los elementos arquitectónicos del jardín son fundamentales, y los pabellones pueden servir como elementos organizadores del resto de los elementos construidos y plantados que configuran la arquitectura paisajística creada.

1.6- El elemento acuático en el jardín. La presencia y el movimiento del agua es una de las características más originales y agradables de los jardines persas (Heidar Nattaj 2010: 60).

Si tomamos como pautas estos elementos, podemos analizar si otros jardines posteriores, en Irán y otros lugares, responden al mismo esquema y se podrían definir como de origen o influencia persa (en la bibliografía se recogen varios ejemplos). Pero también podemos buscar precedentes, e intentar dilucidar si lo que conocemos como jardín persa es una elaboración en origen aqueménida, que se basó en ejemplos que existieron previamente y que estos iraníes habrían adoptado y adaptado a sus necesidades, intereses y gustos. También se puede plantear que estos elementos sean solo en parte únicos a este tipo de espacios creados por los hombres, y solo en parte responder a transferencias más o menos directas de estilos, formas o significados.

El sistema de aguas en el jardín persa es un elemento fundamental en su construcción, mantenimiento, imagen y también a nivel espiritual (Yarahmadi, Ansari & Mahdavinejad 2023). El agua tiene un papel fundamental en los jardines persas y, por lo tanto, su traída también es crucial. En este sentido, el sistema de canales, a veces *qanats*, utilizados para la obtención del agua desde fuera del jardín, son elementos muy relevantes. El sistema de aguas es un sistema cíclico, con el líquido corriendo continuamente, que permiten la propia existencia del jardín (tanto desde un punto de vista material como espiritual). Este sistema empieza con la traída del agua al jardín desde su fuente, que se hace con un consumo mínimo de energía y es compatible con el medio ambiente y el sustrato material de la zona (aquí de nuevo los *qanats* pueden tener un papel fundamental). El agua está presente en el jardín de muchas formas: quieta o fluyendo, como espejo, en fuentes, piscinas, cisternas, sifones… (Ojaghlou & Khakzand 2019: 10). El agua crea un ambiente de relax, disfrute y concentración, y por lo tanto condiciones adecuadas para el sosiego espiritual. Los árboles, las plantas y los muros evitan la evaporación y por lo tanto su pérdida. Creándose así un micromundo que podemos también calificar como sostenible, por su poco consumo, y por el reaprovechamiento de las aguas ya utilizadas y relación con el medio.

El agua en la literatura persa tiene una función simbólica y alegórica, y los jardines persas tienen en cuenta sin duda esta interpretación. Pero el agua también es muy importante

en las creencias persas, antes y después del islam (Nejad, Azenati, Zurghani & Abad 2017: 46) y, por lo tanto, también por eso, tienen un papel trascendente en los jardines persas.

Independientemente del lugar donde esté situada en el jardín persa, la presencia del agua, las plantas, sus tipos y su distribución, así como el propio factor que constituye el muro que le rodea, es obvio que implica unas condiciones de temperaturas que influyen (o determinan) esa agradable sensación que todos intuimos que debe reinar en un paraíso. El cómo se articulan estos elementos para conseguir un confort térmico es también objeto de estudio cuando se diseña un jardín (Ojaghlou & Khakzand 2019).

Extrapolar este concepto de jardín en el marco de un desarrollo sostenible para una ciudad (Dabir & Moradi 2014), puede parecer una evolución natural dentro de las modernas pautas arquitectónicas, pero significa también introducir un factor más para comprender qué es un jardín persa histórico o actual.

Desde tiempos muy antiguos, ritos y rituales iranios han establecido una íntima relación con la santificación de los árboles y la naturaleza, en los que esta santidad es vivida como un hecho objetivo y científico desde la base. Prestar atención a cada uno de los cuatro elementos clásicos (agua, tierra, aire y plantas) del jardín persa tiene un significado antiguo y profundo. Cada uno de estos cuatro elementos viene integrado en el jardín persa según sus características (Bahreyni & Taghadosi 2003). Si este sentir y filosofía está en la base de la construcción de jardines persas, puede haber habido una traslación de creencias manifestadas solo en las formas, lo cual es una idea más que interesante para su estudio. Así, el construir de un modo acorde a la naturaleza y respetando sus designios (por lo tanto, sostenible) sería también una vuelta a aquellos saberes que quizá no habrían estado tan olvidados.

El jardín persa es una construcción humana física que tiene un alto componente espiritual. Su desarrollo puede haber influido en otros jardines situados en tiempos y geografías remotas, y hoy en día es una referencia y reivindicación muy clara en Irán. Si bien sus formas se adaptan a las necesidades, y a las intenciones de quienes los construyen, claramente tienen unas características físicas y conceptuales que les pueden hacer reconocibles en ámbitos muy distintos. Colegir que todo aquel jardín que tenga características similares o siga pautas parecidas es un jardín persa trasladado en el tiempo o en el espacio, debería ser justificado y explicado en cada uno de los ejemplos analizados, y también se debería trazar la línea de continuidad o transferencia en cada estudio de caso.

Lo que vamos a estudiar ahora es la posibilidad de que el que se construyó en Pasargada, la primera capital aqueménida, sea un precedente de estos jardines que los iraníes consideran como propios de su cultura.

2. El sitio arqueológico de Pasargada. El jardín en el centro de todo

En 1999 se lanzó el programa de reconocimiento del sitio de Pasargada y sus alrededores con dos objetivos: 1.- el deseo de las autoridades iraníes para presentar el dossier de Pasargada para su clasificación en la lista UNESCO de patrimonio mundial, lograda en 2004, para la cual era necesario definir con precisión la zona a proteger, y 2.- el objetivo arqueológico de aprovechar la organización espacial del sitio. Los trabajos anteriores (E. Herzfeld 1929, A Sami 1956 y, sobre todo, D. Stronach 1978) permitieron despejar una media docena de construcciones. Estos vestigios, muchos solo visibles hoy, reflejaban mal la imagen política, económica y social que podría mostrar una residencia real aqueménida (Benech, Boucharlat & Gondet 2011: 1-2).

La distribución general sitúa en la parte central un sistema de canales de piedra encajado entre palacios y pabellones, a 1,3 km al SW de la tumba de Ciro, a 80 m al NE la plataforma (Takht-e Solaiman), y a 1 km aproximadamente al N un sector (el *Recinto Sagrado*) que reagrupa dos cubos monolíticos voluminosos y una elevación del terreno (*tepé*).

Una primera imagen de Pasargada que la clasificaba incluso como un campamento temporal (Herzfeld, 1935: 28) situada junto a unos pocos edificios que han permanecido hasta hoy, debe ser absolutamente descartada. El vacío que rodeaba estos edificios hicieron pensar que no había nada entre ellos. Sin embargo, los trabajos de D. Stronach (1978, 1990) demostraron la cuidada planificación de Pasargada, la primera capital aqueménida, construida por Ciro el Grande alrededor de 550 a.C., y el papel central del jardín, que era *di fatto* lo que organizaba el espacio entre el palacio real y los pabellones, de los cuales habían quedado en pie algunas de sus columnas.

Como Boucharlat (2002, 2007, 2011, 2014a, 2014b, 2016 & 2019) había señalado casi desde el principio, en torno y como núcleo de la capital de Ciro, un jardín de varios cientos de hectáreas fue construido, y también todas las estructuras necesarias para la traída de agua. Así, puede ser que lo que descubrió y sacó a la luz en Pasargada (queda aún mucho por hacer) sea el primer precedente del jardín persa. Pero, tomando esto como factible, tendríamos que estudiar la influencia de los jardines asirios, babilonios o elamitas en esta construcción, y rastrear la historia de las infraestructuras hidráulicas que permiten la construcción y mantenimiento de estos paraísos[2].

La creación de una capital se acompaña de todos los servicios necesarios, y supuso el desarrollo territorial a gran escala del territorio. La capital se convirtió en el lugar central de la explotación del territorio que le circundaba, y esta función continuó también después de que Darío I fundase Persépolis alrededor del 520 a.C. y se convirtiese en el lugar principal de la región de Parsa. Los archivos de Persépolis indican que Pasargada era un engranaje de la administración aqueménida (Gondet, Mohammadkhani *et alii* 2021: 97). Por lo tanto, y esto es un cambio sobre el antiguo análisis acerca de la primera capital aqueménida, Pasargada no quedó solo como la antigua capital de Ciro y lugar de su memoria, sino que mantuvo una función administrativa y a la población que la sostenía.

Es cierto que esta población no parecía tener límites claramente definidas entre la ciudad y su territorio adyacente (Gondet, Mohammadkhani *et alii* 2021: 98). La relación entre la parte urbana y la explotación del territorio es otro, y los estudios arqueológicos necesitan de sondeos a gran escala en toda la planicie circundante, modo de trabajo de los equipos irano-franceses que han investigado en la zona.

El proyecto arqueológico de rescate Tang-i Bulaghi (2004-2007) supone la recuperación de otro de los espacios importantes de Pasargada. La llamada puerta Tang-i Bulaghi está localizada a 2 km al sur de la ciudad, y el valle en sí tiene unos 10 km de longitud. Los trabajos realizados documentan, y demuestran, la ocupación del territorio en época aqueménida. Son ejemplos de núcleos agrícolas que existieron y debieron suministrar productos a Pasargada desde época aqueménida, y cuya existencia se dio gracias a la construcción de canales y vías de agua que les daban suministro desde el río Pulvar (Benet, Boucharlat & Gondet 2012, 10; Fazeli Nashli 2009; Atayi & Boucharlat 2009).

En Tang-i Bulaghi (Atayi & Boucharlat 2009: 1), un pequeño pabellón con dos pórticos con columnas fue excavado en 2006 y 2007, y dos pasillos cortados en la roca, sean *qanats* o caminos, se investigaron en 2005.

El pabellón se localiza en la orilla derecha del río Pulvar, a 6 km. al sur de la tumba de Ciro, al pie de un acantilado y sobre una elevación natural del terreno, de unos 120 X 70 m, y unos 15 m. por encima del río (Atayi & Boucharlat 2009: 6). Ambos canales llevarían el agua del río a la planicie, permitiendo así su cultivo, y el de la izquierda lo llevaría también al pabellón (Atayi & Boucharlat 2009: 24).

[2] El tema de las tomas y traídas de agua es amplio y habría que retrotraerlo a tiempos anteriores y a distintas zonas, también en relación con el actual Irán. Véase, como ejemplo, del Cerro y Córdoba 2012.

El programa franco-iraní de trabajos arqueológicos en Pasargada se llevó a cabo entre 1999 y 2002 para los reconocimientos de superficie (Boucharlat & Benech 2002). La prospección magnética realizada en la zona central muestra el canal en piedra conservado en tres lados, y confirman el canal mediano SO-NE. El canal perpendicular a este, que D. Stronach planteaba siguiendo el eje del palacio P, y creando así el *chahar bagh*, no tiene evidencia ninguna. La alimentación de agua de todos los canales parece provenir del NE, del sector de la colina que lleva a la plataforma de Ciro. Resta por localizar su conexión con el río (Boucharlat & Benech 2002: 16). Siguiendo las líneas y las estructuras que marcan estas prospecciones, la zona de jardín sería más amplia de lo pensado anteriormente, y llegaría hasta la puerta monumental.

La torre llamada Zendan-i Solaiman ha sido también objeto de estudio magnético. La torre, organizada en piezas rectangulares de piedra, tiene a su SE un recinto rectangular con una serie de estructuras con el mismo eje que la torre (Boucharlat & Benech 2002: 24).

Si la torre ya no es una construcción aislada, su función deberá ser reconsiderada. El edificio detrás de la torre, pero aislado de la misma, tendría una forma rectangular de 40 X 30 m. Esta construcción tendría estancias largas en torno a un patio y un jardín en el lado SE, que estaría marcado por pequeños canales que señalarían hileras de plantas. El acceso sería por el SE, a través de un camino, bien visible en la plano magnético, que llegaría al medio del jardín.

En la “otra fortificación”, al norte de Tall-i Takht, la plataforma erigida por Ciro, las prospecciones muestran un interior de piezas cuadrangulares organizadas en bandas de cuatro a ocho unidades (Boucharlat & Benech 2002: 28-29). Podrían ser lugares de habitación que seguirían rompiendo aquella idea de Pasargada como lugar de ocupación temporal.

El “recinto sagrado”, situado sobre una elevación, tendría una continuación con muros o líneas de piedras, que hay que interpretar.

Fig. 2. Pasargada desde la ciudadela.
https://wikimapia.org/2256450/es/Pasargada#/photo/6517092 (J. Steffen).

Fig. 3. Pasargada, Palacio P. La tumba de Ciro se ve al fondo.
https://wikimapia.org/2256450/es/Pasargada#/photo/6517091, by J. Steffen.

A partir de estas estructuras, e interpretándolas como un conjunto, y no como elementos aislados o exteriores a no sabemos qué núcleo, se puede colegir (Boucharlat & Benech 2002: 37-39) que no hay un gran vacío en Pasargada, sino restos de monumentos e infraestructuras todavía hoy visibles, que se extenderían por un territorio amplio, relacionados entre sí, y protegidos por una valla que englobaría 250 ha. La ubicación de estos elementos responde a una planificación clara, de la que restan elementos significativos. La llamada *Otra Fortificación* no tiene por qué ser considerada exterior a la ciudad, y sobre la Tall-i Takht quizá Ciro preveía situar su palacio en un espacio diferenciado por la altura.

El jardín central, fuese o no un *chahar bagh*, estaba rodeado de un parque que ocupaba parte de la villa. Hay una planificación de estos espacios como lugares de prestigio. Todos los trabajos que pretenden su reconstrucción señalan un lugar que seguiría pautas o influencias exteriores, y que es el vestigio más antiguo del que disponemos para conectarlo con los jardines persas posteriores. Este jardín parece ser el núcleo en torno al cual se construye la primera capital aqueménida.

Una de las misiones que han trabajado en Pasargada ha estudiado también la red de presas instaladas en el río Pulvar y en alguno de sus afluentes. Algunos de ellas con importantes estructuras de piedras ensambladas para conducir el agua por medios mecánicos, y que incluían un largo circuito, con seis canales que terminaban en una balsa construida también en piedra. Estas construcciones permitían tanto almacenar agua como controlar episodios de inundaciones (Benech, Boucharlat & Gondet 2012: 6).

Esta balsa, situada al sur del jardín central, tiene dos apartados. Aguas arriba del puente, tiene forma trapezoidal, con dos brazos de 195 y 200 metros cada uno, el borde oriental de 61 m. y 26 al oeste, justo delante del puente. La profundidad sería de 1,5 m. Los dos lados estrechos estarían formados por vanos que formarían así sendos sistemas hidráulicos que

permitirían decidir la capacidad de la balsa (Benech, Boucharlat & Gondet 2012: 13). El agua vendría del Pulvar, en una toma a 2 km. del yacimiento, por un canal que suministraría el agua a todas las estructuras al SW de Tall-e Takht y a la red de canales del jardín central.

Fig. 4. Pasargadae, Conducciones de agua. By Jona Lendering. Licence CC0 1.0 Universal. https://www.livius.org/pictures/iran/pasargadae/pasargadae-water-conduits/.

Entre el Palacio P y el Zendan hubo un antiguo parcelario, seguramente más dedicado a la organización de los jardines que a actividades agrícolas.

Las prospecciones magnéticas señalan distintos lugares de ocupación del territorio, y que partirían de época aqueménida. Pasargada debía tener también población estable que daba soporte a las necesidades primero de la capital y luego de una ciudad administrativamente importante. Los restos más claros de aglomeraciones de casas, que estarían asociados a la residencia real propiamente dicha, serían una serie de construcciones regulares en el interior de las 26 ha. que protege el muro al N de Takht-i Soliman, y lo mismo podemos pensar de otras construcciones, con plantas diferentes, cerca de la puerta R (Benech, Boucharlat & Gondet 2012: 30-31). No tenemos las pruebas arqueológicas que marquen con claridad una villa, pero su existencia es más que probable a partir de todo lo señalado, y a tenor también de la importancia de las infraestructuras agrícolas construidas alrededor.

Si analizamos como un conjunto tanto los distintos elementos localizados en Pasargada, y lo unimos a las construcciones agrícolas y quizá de recreo de los alrededores, que suponen la creación en la misma época aqueménida de las infraestructuras para la traída de agua al jardín y a las plantaciones agrícolas alrededor de la ciudad, aunque falten elementos por investigar, podemos identificar la construcción de la primera capital aqueménida, que funcionaría como tal solo unas décadas, pero que continuó siendo relevante después como ciudad administrativa, y luego ligada para siempre a la simbología de ser el lugar de enterramiento de Ciro.

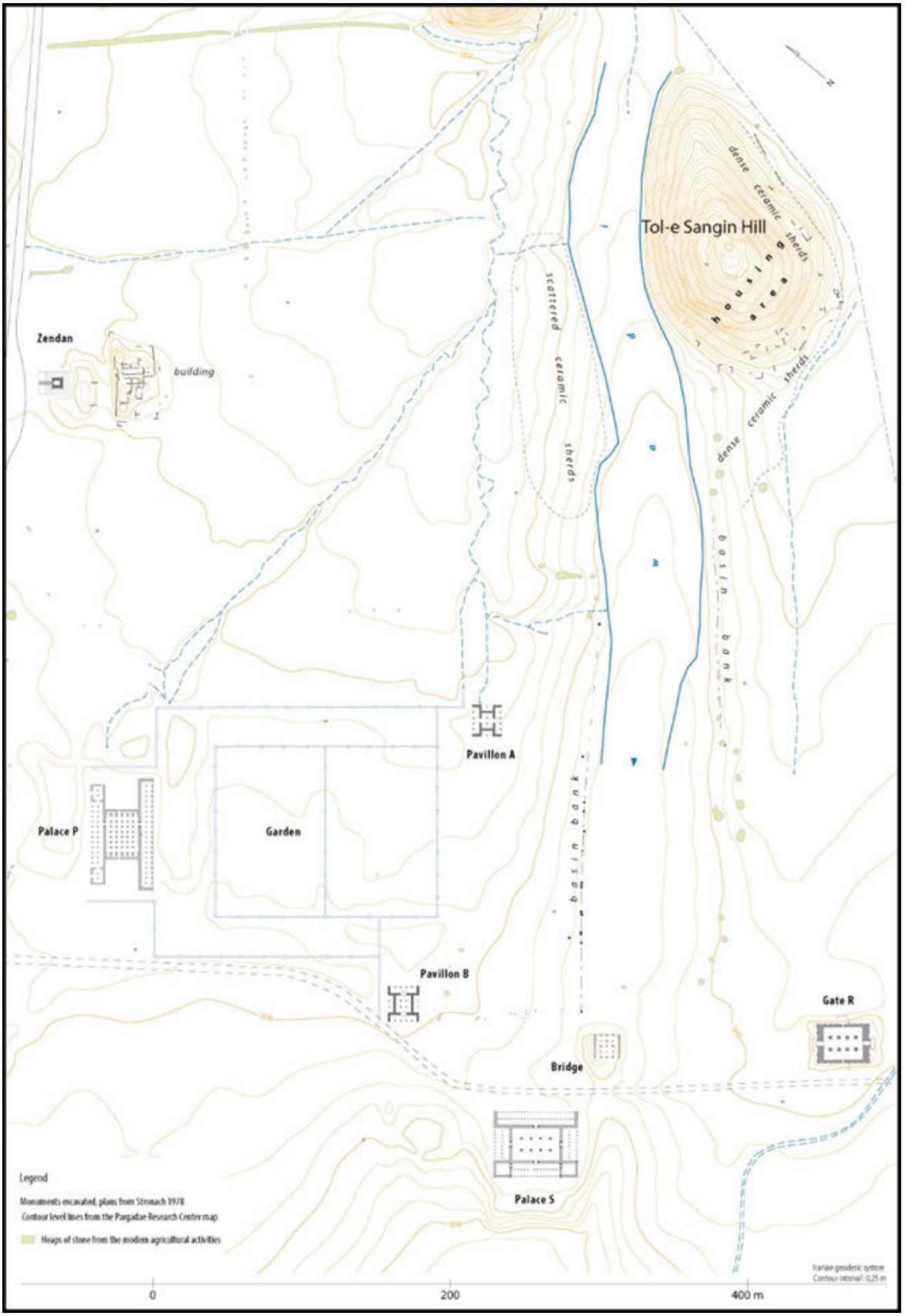

Fig. 5. Extracto del mapa topográfico de 2015 (Gondet, Mohammadkhani *et alli* 2016: 75). Los elementos arqueológicos están dibujados en el mapa topográfico por la oficina de Pasargada (Topographic surveys: D. Laisney).

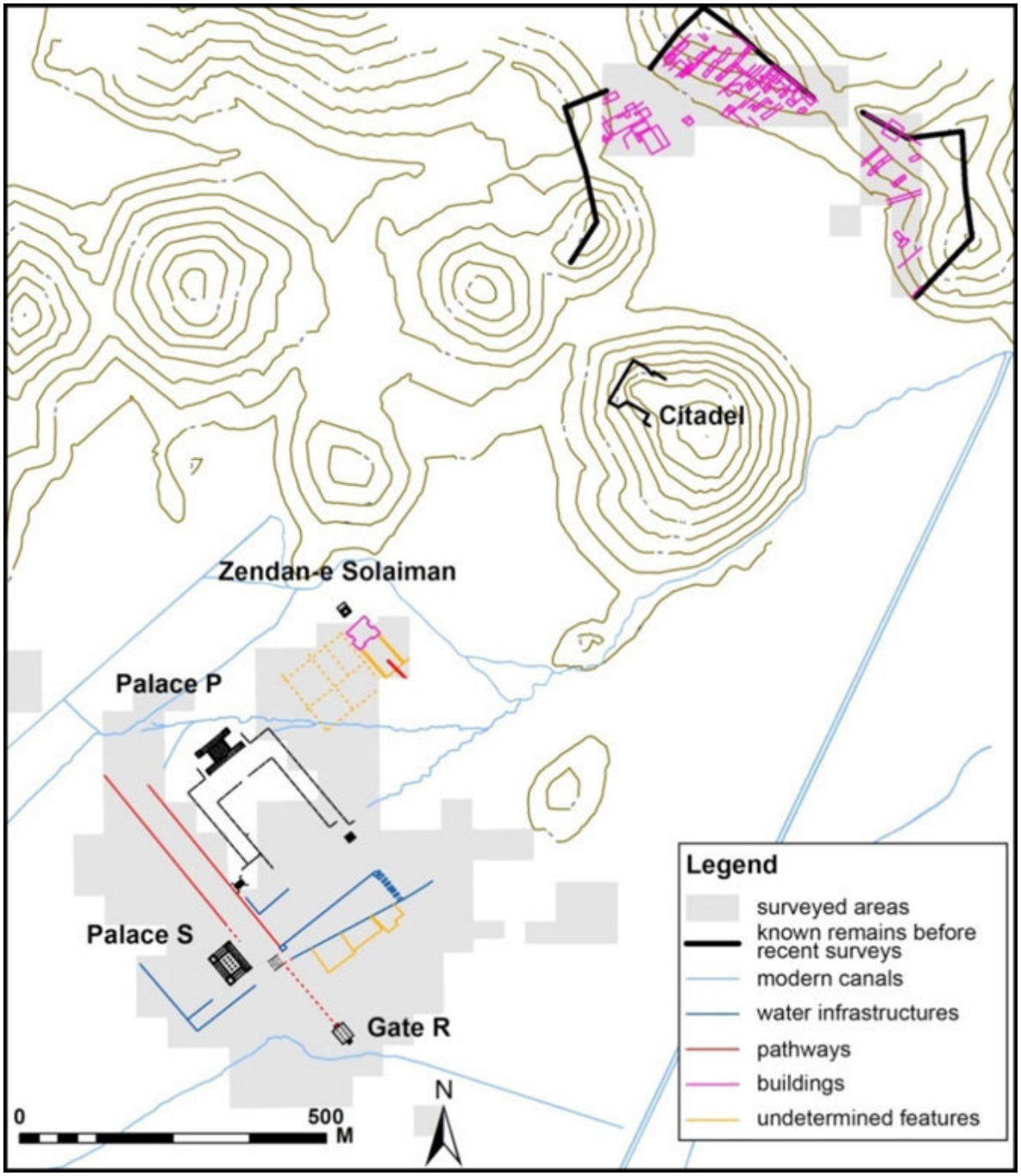

Fig. 6. Mapa interpretativo de los resultados obtenidos en los estudios magnéticos obtenidos en Pasargada entre 1999 y 2009 (adaptado de Benech, Boucharlat, Gondet 2012: 29 y fig. 15).

La constatación de la importancia central del jardín construido enfrente del Palacio P, que incluye otros elementos arquitectónicos en el mismo conjunto, y una serie de infraestructuras que permitirían la llegada y exhibición del agua como elemento esencial de un paisaje creado como una parte esencial del conjunto, abre un precedente a seguir estudiando en otros lugares. Del mismo modo, otros ejemplos de jardines que pudieron servir de referencia a estos desarrollados en Pasargada, deben ser tomados en consideración para entender su funcionamiento y su simbología.

Sea cierto o no lo que cuenta Beroso de que Nabucodonosor II mandó construir los jardines colgantes de Babilonia para su mujer meda Amuhia o Amatis, que provenía de

tierras montañosas, y sea cierta o no la atractiva hipótesis de Stephanie Dalley (2013), según la cual en realidad esta séptima maravilla de la Antigüedad estaba situada en Nínive, estaríamos hablando de una manifestación de prestigio a través de la construcción de un jardín real. Estos vergeles serían una muestra clara de poder en el Oriente Próximo antiguo en la primera mitad del I milenio a.C. (Stronach 1990: 174), y lo ubicamos en tres territorios que en los siglos VII y VI (Babilonia, Asiria y Persia) estuvieron especialmente relacionados.

Algunas de las características que definen la capital Pasargada, una vez tomamos en consideración los últimos trabajos arqueológicos desarrollados en la zona: un jardín marcado por canales de agua construidos en piedra y por los restos del Palacio P y de pabellones que forman parte de una estructura construida y definida a partir de ese vergel, señalan con claridad la importancia de este elemento paisajístico y arquitectónico. Esta estructura se presenta centralizada y organizada geométricamente, al menos en varias de sus elementos. La parte del jardín enfrente del Palacio C podría tener una distribución en cuatro secciones, lo que después se denominaría *chahar bahg* o jardín cuatripartito, una de las características de los jardines persas. A este respecto, cabe la posibilidad de que, inconscientemente, queramos ver en este jardín un precedente de lo que después observamos en estos vergeles persas. Aun así, el que esto se diese, aunque no exista hoy evidencia arqueológica, es una posibilidad no descartable. Y si la tomamos como posible, ¿se podría colegir una representación de "las cuatro partes del mundo"? (Stronach 1990: 176). Si fuese así, esto nos llevaría a Sargón de Acad, en el III milenio a.C., pero Matthiae trae este concepto desde Ebla, lo cual haría el viaje aún más largo (Matthiae 1997: 337) Y de nuevo habría que recordar que estamos planteando hipótesis que se sustentan unas sobre otras.

No existe solo un tipo de jardín persa, y este tendría también diferentes tipos de funciones (Boucharlat 2011: 557). Señalar esto es importante tanto para comprender lo que observamos en Pasargada como para analizar qué es lo que llamamos "jardín persa" en la actualidad. Así, los jardines rodeados de canales de piedra que identificó Stonach (1978), serían el centro de un conjunto rodeado de un gran parque, y del mismo modo, el conjunto situado en el valle Tang-i Bulaghi podría ser otro paraíso que desempeñaba diversas funciones (Boucharlat 2011), tanto de explotación agraria como residencial o de recreo. Si seguimos esta distinción que plantea Boucharlat (2011: 562-563), estaríamos ante un jardín circunscrito al espacio que cierran los canales, y un parque, mucho más amplio (quizá de entre 100 y 150 ha.) que integra este jardín, la tumba de Ciro y la ciudadela, distantes 2 km. una de la otra. En cualquier caso, la importancia del agua, de los canales, de la ordenación de especies de plantas, de muros que lo rodean, a un nivel y a otro, están siempre presentes.

3. Conclusiones

En este artículo se ha pretendido, en una primera fase, definir o caracterizar qué es un jardín persa en la actualidad a partir de estudios y trabajos de arquitectos, ingenieros y paisajistas, fundamentalmente iraníes. Los jardines persas son estudiados con la devoción que se profesa a uno de los componentes importantes de su cultura. Hemos tratado de aproximarnos a una definición y explicación de esta construcción, como modo de entender qué son y qué significan, pero sobre todo comprender qué elementos los componen.

Una vez realizada esta aproximación, este artículo se hace eco de estudios realizados en Pasargada recientemente. Estos trabajos cambian de raíz el modo de entender la capital creada por Ciro, y sitúan en su centro un jardín. Este jardín, que hubo de ser un elemento fundamental, quizá en torno a lo que se desarrolla todo lo demás, es clave también por su simbología, e incluye una parte relevante de los elementos que luego se han entendido constitutivos de los jardines persas. El extrapolar estas coincidencias o elementos que vienen

compartidos, puede ser entendido como un precedente, pero falta mucho para comprender qué líneas de transmisión o caminos de influencia se dieron entre el uno y los otros.

Lo mismo sucede con las simbologías parejas a este tipo de espacios, que también se pueden relacionar con las de los paraísos. Religiones muy diferentes comparten la idea de paraíso, y comparten también elementos y significados. Creo que de nuevo aquí que faltan trabajos de investigación sobre elementos en común y posibles relaciones entre conceptos similares que agrupamos en torno a un término compartido. Si el concepto y los significados son similares, tiene que haber algún tipo de transmisión o sincretismo, pero faltan aún investigaciones que los expliquen y los reconstruyan.

El trabajo por realizar al respecto es todavía ingente, tanto para explicar este tipo de construcciones en otras capitales persas y elamitas, pero también babilonias o asirias. Solo así podríamos establecer una base más amplia para intentar dilucidar qué tipo de transmisión y en base a qué elementos se desarrollaron para su continuidad (o no) en los jardines o paraísos persas.

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LA GESTIÓN DEL AGUA Y LA HABITABILIDAD DEL SUR DE IRÁN DURANTE LA EDAD DEL HIERRO

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RESUMEN

En las poblaciones de la Antigüedad, la gestión del agua es uno de los factores más importantes para determinar cómo fue la habitabilidad de estas comunidades. Esta circunstancia es si cabe más importante cuando los grupos humanos han ocupado regiones áridas y ciertamente hostiles, cuyas características climáticas e hidrológicas han sufrido, incluso, evoluciones paralelas. La región sur de Irán, donde aún queda mucha investigación pendiente, reúne esas características. Además, el uso del qanat *es ciertamente tardío en esta zona, por lo que las poblaciones debieron recurrir a otros métodos para la obtención del agua.*

PALABRAS CLAVE

Hidrología, falaj, qanat*, península de Omán, Golfo, arqueología.*

ABSTRACT

Regarding ancient populations, the management of water resources played a significant role in the determination of the habitability of the different communities. This fact is even more crucial if the mentioned communities inhabited arid, hostile regions, with similar climatic and hydrological developments. This is the case for southern Iran, an area where further research is still necessary. Moreover, the late start of the use of the qanat *must be taken into account, as it forced the populations to resort to alternative techniques of water supply.*

KEYWORDS

Hydrology, falaj, qanat*, Oman Peninsula, Gulf, Archaeology.*

1. Introducción y problemática: estado de la cuestión

A lo largo de la Historia, la habitabilidad de los grupos humanos ha estado condicionada por una serie de aspectos fundamentales, entre los que destaca la gestión del agua. Esto era, si cabe, más importante durante la Antigüedad, además, teniendo en cuenta que el Próximo Oriente antiguo era -y es- una región mayormente árida. Muchas ciudades de Oriente se encontraban cerca de los ríos de la región (o de los canales excavados desde el III milenio), que sin duda supieron aprovechar. Pero, en otros casos, las poblaciones tuvieron que adaptarse a una climatología y a un terreno particularmente árido.

El sur de Irán[1], al igual que en otros casos, es una región condicionada por la aridez y una hidrografía realmente compleja. Las necesidades de agua del sur de Irán eran, por tanto, similares a las del resto de Oriente durante la Antigüedad. Parece claro que el sur de Irán debía solucionar la problemática del agua, igual que el resto de poblaciones de la Antigüedad. Ahora bien, ¿cómo lo solventaron los habitantes del sur de Irán?

Una problemática que nos impide comprender mejor la habitabilidad del sur de Irán durante la Edad del Hierro es la escasez de restos arqueológicos en la región. La lista de

[1] El topónimo "Irán" se consolidó en el siglo III d.C. cuando los primeros reyes sasánidas empezaron a escribir *Ērān* (o *Ērānšahr*, país de los arios/iranios). Con la desaparición del imperio sasánida, la entidad política resultante pasó a llamarse "Persia". Hasta entonces, con Persia se entendía la provincia actual del suroeste de Irán, Fārs (*Pārsa*- en persa antiguo, *Pārs* en persa medio y *Perside* para griegos y romanos). En 1934, la dinastía Palhavi recuperó el antiguo nombre de Irán, que perdura hasta nuestros días con el añadido de "República Islámica" tras la revolución de 1979 (*vid.* Huyse 2005: 10).

 https://doi.org/10.15366/isimu2023.26.004

ISSN: 1575-3492 ISSN Digital: 2659-9090

yacimientos del sur de Irán para este periodo es ciertamente reducida, ya que ésta se limita a Tepe Yahya y sus alrededores. Esta dificultad se extiende, del mismo modo, a los modos de gestión del agua en la región durante este periodo.

Al otro lado del Golfo, en cambio, en la península de Omán, desde principios del I milenio está documentado un sistema de captación del agua de la capa freática (*falaj*[2]) que en Irán también existió (conocido con el nombre de *qanat*). Este sistema pudo haberse desarrollado también en Irán durante este periodo y, de hecho, podría haber sido una solución al problema hidrográfico, pero desde el punto de vista arqueológico los ejemplos más antiguos conocidos datan de época aqueménida (s. V a.C.)[3], es decir, varios siglos después de los primeros casos estudiados en la península de Omán.

En lo que respecta al origen del sistema del *falaj*, J.C. Wilkinson ya sugirió en 1977 que éste nació en Irán[4]. En ese momento comenzó un debate historiográfico acerca del germen de este sistema hidráulico que dura hasta la actualidad. Según la teoría de J.C. Wilkinson, la técnica del *falaj* se difundió por el Oriente antiguo según lo hacía el imperio aqueménida[5], algo aceptado también por S. Cleuziou[6] y, más recientemente, por P.W. English[7] o G.B. Gholikandi[8]. Sin embargo, con el tiempo, la teoría de J.C. Wilkinson fue quedando obsoleta.

Autores como D.T. Potts reflexionaron sobre la introducción del *falaj* en Omán desde el Irán aqueménida, o incluso anteriormente[9]. Pero otros arqueólogos, como W. Y. al Tikriti, se centraron en la problemática desde la perspectiva de los hallazgos arqueológicos en la península de Omán. Igualmente, W.Y. al Tikriti también criticó la teoría del origen iranio del *falaj* bajo la influencia de las fuentes antiguas promulgada por algunos autores previos[10]. Un aspecto importante de la aportación de W.Y. al Tikriti es que señaló un dato de singular relevancia: en Irán no hay rastro de *aflāj* antes del s. V a.C.[11] Según él, es posible que la introducción del sistema en Irán se hiciera efectiva en época sasánida[12].

Asimismo, P. Magee aseguró en 2005 que muchos ejemplos de *qanat* del sureste de Irán (en las cercanías de Tepe Yahya) pueden fecharse durante el I milenio[13]. Parecía claro, según el autor, que la cronología de los *aflāj* omaníes conocidos es ciertamente más antigua que los casos excavados en Irán[14].

El investigador francés R. Boucharlat también ha aportado su visión al debate sobre el origen del sistema del *falaj*. En 2017, R. Boucharlat relacionó esta tecnología con el importante desarrollo demográfico vinculado a los inicios de la Edad del Hierro, tanto en Irán como en la península de Omán, aunque desde el punto de vista arqueológico esta hipótesis no ha podido ser comprobada aún, ya que el primer *falaj* documentado en la región (en Bam) data de época aqueménida, esto es, varios siglos después del inicio del sistema en la península de Omán[15]. Su principal aportación fue, no obstante, considerar que el *falaj* tuvo un origen multicéntrico y no lineal[16]. También en 2017, R. Boucharlat

[2] Pl. *aflāj*.
[3] Al Tikriti 2002: 135.
[4] Wilkinson 1977: 76.
[5] Wilkinson 1977: 76.
[6] Potts 1990: 391.
[7] English 2008: 188-189.
[8] Gholikandi *et alii* 2013: 583-584.
[9] Potts 1990: 391-392.
[10] *Vid.* al Tikriti 2002: 131 y ss.
[11] Al Tikriti 2002: 135.
[12] Al Tikriti 2002: 137.
[13] Magee 2005: 224-226.
[14] Magee 2005: 228.
[15] *Cfr.* Boucharlat 2017a: 139-143.
[16] Boucharlat 2017a: 146.

enfatizó la falta de pruebas arqueológicas que demuestren el uso de la técnica del *falaj* antes de época aqueménida, y resaltó que no está disputada la fecha de invención (sin duda Hierro II) si bien resulta raro que esta técnica no se extendiera a otros puntos del Golfo con características climáticas e hidrológicas similares[17].

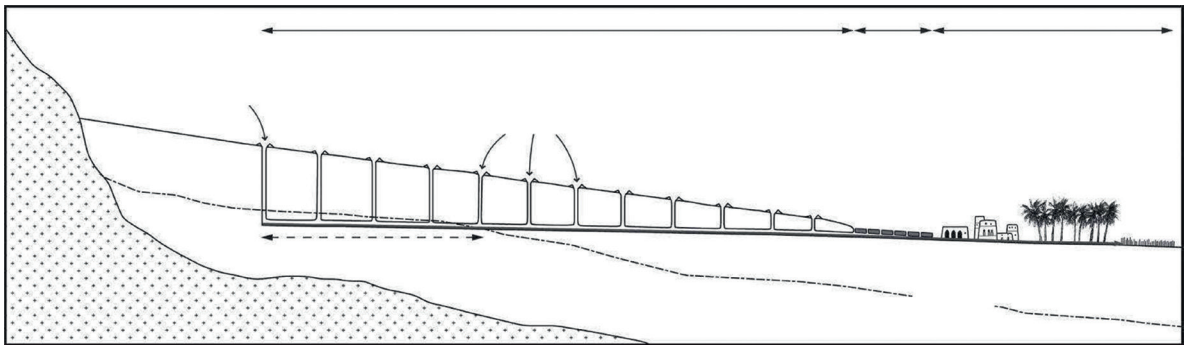

Fig. 1. Esquema de un *falaj* modelo (Boucharlat 2017b: fig. 17.1).

Por último, C. del Cerro y J.Mª. Córdoba proporcionaron una datación mediante curva de calibración marina[18] para la estructura del *falaj* del yacimiento de al Madam (Sharjah, Emiratos Árabes Unidos) entre 1065 y 808, esto es, Hierro II según la cronología omaní[19]. Se trató, sin duda, de un salto cualitativo importante en la comprensión de este sistema y su desarrollo en la península de Omán, ya que es, hasta la fecha, el ejemplo de *falaj* más antiguo conocido.

En este artículo, exploraremos las dificultades de la habitabilidad del sur de Irán en este periodo a partir de los datos arqueológicos disponibles. Nos centramos precisamente en el sur por ser la región con mayor contacto histórico con el Golfo (es decir, adonde primero llegaría la transmisión del conocimiento del sistema del *falaj*) y donde se dan unas condiciones climáticas e hidrológicas muy particulares que, sin duda, condicionaron la habitabilidad de las poblaciones humanas.

Nuestra intención es contextualizar el sur de Irán en su situación climática y medioambiental durante el I milenio para comprender cómo pudo desarrollarse la habitabilidad del sur de Irán durante este periodo, sobre todo, en lo que respecta a la gestión del recurso más importante: el agua.

Sin embargo, en este artículo no nos centraremos en el propio origen del *falaj*, ya que parece claro que ése es un debate distinto. A pesar de ello, consideramos que es conveniente poner sobre la mesa la información arqueológica existente y la cronología asociada. Con esta información, actualmente es imposible afirmar que las poblaciones del sur de Irán se beneficiaran de un sistema hidráulico como el del *falaj* omaní, que por otro lado podría haber sido un factor clave que permitiera una mejor habitabilidad del sur de Irán en este periodo.

2. El clima y el paleoambiente de la región

El territorio que abarca el actual Irán es una región mayormente árida o semiárida (casi ¾ de la totalidad), si bien existen regiones con clima subtropical concentradas a lo largo de la costa del mar Caspio y un porcentaje menor de zona montañosa con clima frío[20]. Irán, en el

[17] *Vid.* Boucharlat 2017b: 287.
[18] "marin09.14c", *vid.* del Cerro y Córdoba 2018: 96.
[19] del Cerro y Córdoba 2018: 96.
[20] Gholikandi *et alii* 2013: 582.

sentido sasánida del término, es una gran meseta[21] de entre 1000 y 2000 m de altitud sobre el nivel del mar, en parte atravesada por altas montañas: por el oeste los montes Zagros, al norte el Cáucaso y los montes Elburz, con las montañas del Khurasán en el noreste y el Hindukush y la cordillera del Pamir en el este[22]. En estas cadenas montañosas existen desfiladeros y gargantas que permiten el paso a ambos lados y, además, proporcionaban acceso a numerosas materias primas: hierro, cobre, plomo argentífero, estaño, alabastro, diorita, lapislázuli o ámbar. Los altos valles conviven con dos desiertos poco hospitalarios que avocaron a las gentes de entonces a adoptar un modo de vida mayormente nómada: Dašt-i Kavīr y Dašt-i Lūt[23].

La costa irania del Golfo tiene algunas particularidades: presenta un aspecto escarpado y accidentado y, además, presenta una orografía fuertemente salpicada de accidentes rocosos[24]. Las precipitaciones son, en cambio, más abundantes que en la costa árabe. Se trata, asimismo, de una región activa desde el punto de vista tectónico[25]. Esta costa seguramente debió de albergar varios puertos con acceso al Golfo, si bien apenas se conoce, aunque se especula que estaba poco poblada a causa de un clima tórrido y una extrema aridez que conlleva la escasez de agua[26].

En Irán se observa un episodio de aridez creciente[27] en registros paleoclimáticos fechados entre 1200 y 900 a.C. que habría causado una caída en las temperaturas anuales de hasta 5ºC y un descenso del 40% en la precipitación, lo que supuso un serio impacto para las gentes que habitaban esta región[28]. El sur de Irán es una región altamente sensible a los efectos de los cambios climáticos que tuvieron lugar en este periodo, por su hidrografía, orografía y condiciones climáticas[29]. Es posible que incremento de la cantidad de lluvias permitiera un modo de asentamiento de tipo disperso, sin un centro urbano visible que aglutinara toda la actividad agrícola y ganadera[30]. Estos asentamientos, de menor tamaño, serían más difíciles de rastrear arqueológicamente al ser menos visibles. Esta teoría descartaría la imagen aparente de abandono en la región. Sin embargo, aún queda mucho trabajo de campo por hacer[31].

En lo que respecta a los niveles de costa en la Antigüedad, en muchas regiones de la costa septentrional y en Makrán faltan todavía mapas precisos y que estimen estos niveles[32]. Parece claro, no obstante, que el nivel de todo el Golfo en la Edad del Hierro era algo superior al actual, si bien la evolución no ha sido igual para todos los territorios[33].

3. Los yacimientos arqueológicos del sur de Irán en la Edad del Hierro

Siendo Irán una región tan enorme es natural que algunos periodos hayan sido menos estudiados. Sin duda, esta circunstancia afecta especialmente a la Edad del Hierro y la fase de transición del Bronce al Hierro[34]. Estas carencias son todavía más evidentes si comparamos

[21] A excepción de dos franjas de tierra: la región de los montes Zagros y las planicies costeras del sur del mar Caspio.
[22] Huyse 2005: 29.
[23] Huyse 2005: 29.
[24] Sanlaville y Dalongeville 2005: 18; Sanlaville 1988: 22.
[25] Esta región de Oriente es el lugar donde chocan las placas africana y euroasiática por medio de la subducción de la primera bajo la segunda, lo que dio lugar a los montes Zagros (Sanlaville 1988: 16).
[26] Huyse 2005: 30.
[27] Magee 2004: 78.
[28] Matthews *et alii* 2022: 396.
[29] Magee 2004: 77; Matthews y Nashli 2022: 453.
[30] Magee 2004: 78.
[31] *Cfr.* Magee 2004: 78.
[32] Sanlaville y Dalongeville 2005: 12.
[33] Sanlaville y Dalongeville 2005: 23.
[34] Maresca 2018: 197.

la información disponible en distintas zonas de Irán para las mismas fases cronológicas. Por supuesto, el norte y oeste de Irán son las regiones mejor conocidas a nivel arqueológico, ya que en ellas se han desarrollado importantes estudios, así como trabajos de campo y periodización cuyos resultados, además, han sido publicados[35].

Esta casuística ha condicionado la interpretación de los patrones de asentamiento en las regiones del sureste y sudoeste de Irán. Los investigadores defienden que la riqueza se concentraba en los asentamientos más relevantes, auspiciada por las autoridades políticas y/o militares, que controlarían también el área de cultivo de los alrededores. No obstante, seguramente el grueso de la población debió de vivir y trabajar dispersa en pequeños núcleos rurales. Sin embargo, es preocupante la falta de información sobre pequeños asentamientos en entornos rurales o núcleos urbanos de tamaño reducido[36]. Además, no debemos olvidar los grupos seminómadas, que sin duda representaron un porcentaje nada desdeñable del total de habitantes del antiguo Irán, y cuyo rastro arqueológico es lamentablemente más difuso. Es posible detectar su cultura material a través de los enterramientos, muchos de ellos ubicados a una prudente distancia de los asentamientos conocidos[37].

En cuanto a las regiones, el suroeste de Irán posee algunos de los grandes yacimientos del I milenio, como Susa y Persépolis. Sin embargo, los niveles preaqueménidas se conocen peor de lo que podríamos imaginar, que deriva de una insuficiente investigación durante las últimas décadas. Para la primera mitad del milenio, los descubrimientos recientes son raros[38]. La documentación de yacimientos como Tall-i Ghazir sugieren una cierta continuidad desde el s. VII hasta época aqueménida, como se observa también en Susa[39]. Reseñable es también Chogha Mish, ocupado durante algún tiempo durante el Hierro III y habitado después en época aqueménida[40].

Por otro lado, el sureste de Irán está muy mal documentado en todo el periodo. En líneas generales, la región se caracteriza por no contar con una definición de cultura material durante este periodo, aunque existen elementos generales a los pocos casos conocidos, como la extraordinaria escasez de objetos de hierro[41]. Como ejemplos concretos podemos señalar Konar Sandal North (en Kermán), cuya gran plataforma excavada se ha datado en la Edad del Hierro (finales del II milenio a mediados del I milenio)[42]. En Sistán, es sorprendente la ausencia absoluta de restos arqueológicos previos a la formación del imperio aqueménida, salvo por los casos de Sorkh Dagh y Sar-o-Tar (sector de Nad-i Ali) que se datan entre 1300 y 750 a.C.[43]

Pero el único yacimiento de esta región con información arqueológica sustancial y bien datada, incluyendo las etapas *Early* y *Late Iron Age*, es Tepe Yahya (en Kermán)[44], cuya relevancia para nuestra investigación nos obliga a estudiarlo con cierto detenimiento para comprender la habitabilidad del sur de Irán. Por desgracia, es el único ejemplo que reúne las características requeridas por ubicación y cronología: por ello es la referencia y a la vez la excepción de asentamiento del sur de Irán.

Tepe Yahya se encuentra entre la ciudad de Kermán y el Estrecho de Ormuz, en pleno valle de Soghun (*vid.* Fig. 1)[45]. Con una altitud de 1200 m sobre el nivel del mar, se trata de un

[35] Maresca 2018: 197.
[36] Danti 2013: 17.
[37] *Cfr.* Dyson 1989: 110.
[38] Boucharlat 1998: 149.
[39] Boucharlat 1998: 150.
[40] Alizadeh 2008: 30.
[41] Magee 2004: 7.
[42] Maresca 2018: 200.
[43] Maresca 2018: 201-202.
[44] Maresca 2018: 199.
[45] Magee 2004: 3.

tepe con aspecto troncocónico que se eleva 20 m sobre el terreno circundante en una superficie de unos 200 m de diámetro[46]. La pluviosidad de esta área marca unos 250 mm al año, por lo que se encuentra al límite para el desarrollo de la agricultura de secano[47]. Además, la disponibilidad de agua en los aledaños de Tepe Yahya es relativamente abundante, algo poco habitual más allá de esta región: el río Kish-e Shūr riega la llanura aluvial vecina y en 1973 los pozos alcanzaban el nivel freático a una profundidad de 6 a 8 m[48].

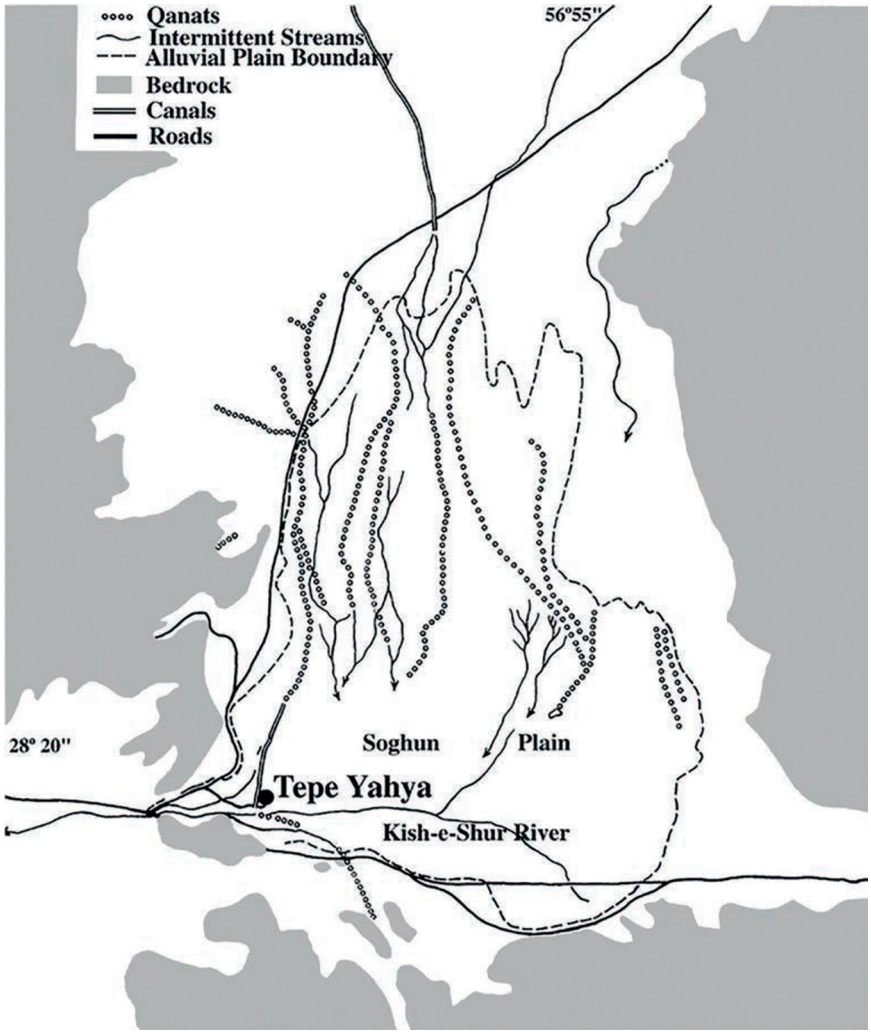

Fig. 2. Posible mapa hidrológico de la Edad del Hierro en el valle del Soghun, en las cercanías de Tepe Yahya (Matthews y Nashli 2022: fig. 11.83).

Tepe Yahya es esencial para comprender la evolución arqueológica del sureste de Irán durante la Edad del Bronce y del Hierro, ya que es prácticamente el único gran asentamiento de la zona bien periodizado y datado[49]. Tras su estudio, de hecho, no se han desarrollado nuevos trabajos de campo en el sureste de Irán[50]. La estratigrafía de Tepe Yahya es una de las más completas de todo Irán; no en vano, las primeras fases de ocupación datan de *ca.* 5000 a.C. y su cronología se extiende de manera casi ininterrumpida hasta época sasánida

[46] Stronach *et alii* 2012: 31.
[47] Magee 2004: 3.
[48] Magee 2004: 3.
[49] Magee 2004: 1.
[50] Magee 2004: 73.

(*ca.* 300 d.C.), con la excepción de breves lapsos temporales (*vid.* Tabla 17)[51]. La cronología aquí presentada fue propuesta por P. Magee aunando las dataciones por radiocarbono y las tipologías de los objetos[52].

Nivel de ocupación	Fase	Cronología
Fase de abandono	Hierro I-II	*ca.* 1400-800
Periodo III	Hierro III	*ca.* 800-600
Periodo de la plataforma	Hierro IV	*ca.* 650-500
Hiatus		*ca.* 500 ± 20
Periodo IIa		*ca.* 500-375
Periodo IIb		*ca.* 375-250

Tabla 1. Fases arqueológicas de Tepe Yahya (Magee 2004: 75).

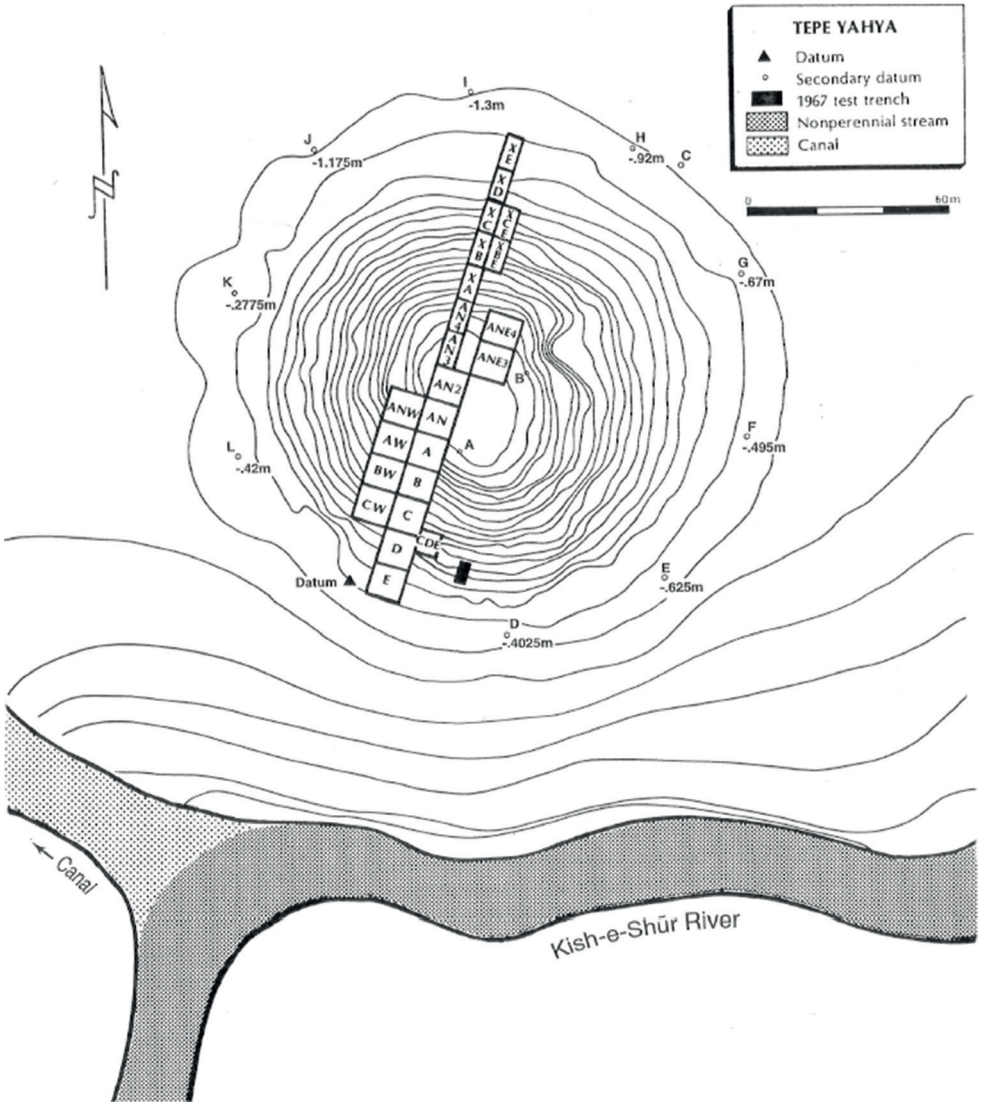

Fig. 3. Plano topográfico de Tepe Yahya (Magee 2004: XIII).

[51] Lamberg-Karlovsky 2004: XII.
[52] Magee 2004: 73-75.

La causa del abandono de Tepe Yahya hacia 1400 (periodo IVa) es todavía incierta, así como el motivo por el que el asentamiento se rehabitó seiscientos años más tarde. Sea como fuere, es evidente que en los primeros siglos del I milenio se dan las condiciones para un incremento de los asentamientos en buena parte de Oriente (Irán, la península de Omán y el Indo)[53]. La secuencia estratigráfica de Tepe Yahya para la Edad del Hierro presenta varias fases arquitectónicas en los distintos sectores del yacimiento[54]. La arquitectura de los edificios del *Early Iron Age* presenta características que varían notablemente con respecto al periodo *Late Iron Age*. En general, resulta realmente difícil precisar qué funciones cumplía cada estructura.

4. Conclusiones

Una vez expuestos estos datos, pretendemos realizar una reflexión general sobre las posibilidades de hábitat en el sur de Irán en este periodo. Las posibilidades son ciertamente limitadas por el condicionante que supone una historia de la investigación limitada en la región. El yacimiento mejor conocido, que es la referencia y a la vez la excepción para la zona, es Tepe Yahya.

Gracias al testimonio del equipo arqueológico que trabajó en Tepe Yahya entre las décadas de 1960 y 1970, sabemos que el agua subterránea era accesible fácilmente a partir de pozos que no superaban los 8 m de profundidad. Es posible, por tanto, que durante la Edad del Hierro también se explotara mediante pozos que captaran el agua del subsuelo a una profundidad similar a la que presentaban las infraestructuras del siglo pasado. Sin embargo, no hemos encontrado constancia de ningún pozo de la Edad del Hierro estudiado arqueológicamente en esta región.

Ahora bien, ¿por qué no conocemos más asentamientos de entidad en la zona? ¿Esto se debe únicamente al condicionante de la historia de la investigación? ¿Acaso Tepe Yahya era lo suficientemente potente como para aglutinar el resto de asentamientos, que a la fuerza debían ser de pequeño tamaño para no alterar el equilibrio regional? Tepe Yahya es sin duda un caso especial, aunque faltan estructuras hidráulicas que nos ayuden a comprender cómo gestionaban el agua como recurso. Pero, además, su ubicación estratégica, inserta en rutas de comunicación esenciales en la región, unida a las condiciones del entorno en cuestión, posiblemente permitió reunir las condiciones para que se desarrollara una comunidad de considerable tamaño, quizá como aglutinador regional de diversos núcleos rurales de población dedicados a la explotación agrícola y/o ganadera.

Es ciertamente plausible considerar que el nivel de abandono de Tepe Yahya (*ca.* 1400-800 a.C.) pudo deberse a un endurecimiento de las condiciones climáticas y a la escasez de agua que acabaría desembocando en cosechas menos abundantes y un posible problema de abastecimiento en la región. Esta circunstancia, sin duda, obligaría a deshabitar temporalmente el asentamiento o, al menos, a reducir la cantidad de población que allí residía (más difícil de rastrear arqueológicamente). Incluso, una parte de sus habitantes pudo haberse trasladado a aldeas cercanas, menos visibles desde nuestra perspectiva arqueológica.

Por ello, entendemos que solo desde algún momento cercano al año 800 a.C. se dieron las condiciones climáticas e hidrográficas para una reocupación del sur de Irán. O, al menos, de parte de él, ya que es difícil establecer conclusiones únicamente a partir de los datos de Tepe Yahya. Falta todavía mucha investigación de campo al respecto que intente ahondar en los problemas hidrográficos de la región y nos permita una mejor comprensión de cómo las antiguas poblaciones de esta región gestionaron el agua del que disponían.

[53] En la península de Omán, este incremento demográfico se relaciona precisamente con el desarrollo del *falaj* y la cultura de los oasis; en el valle del Indo, también se atestiguan asentamientos de dimensiones notables sin que haya hasta la fecha ninguna causa concreta.

[54] Magee 2004: 17.

En definitiva, si bien la región meridional de Irán y la península de Omán presentaban condiciones climáticas e hidrológicas similares durante los primeros siglos del I milenio, el sistema del *falaj* se desarrolló únicamente en la segunda. Dado que se trata de dos regiones que estrecharon relaciones durante ese periodo, resulta cuanto menos curioso que, con el estado actual de la cuestión, los primeros ejemplos de *qanat* en Irán no puedan fecharse hasta el s. V a.C., ya en el periodo aqueménida. Aún queda, no obstante, un largo camino por recorrer en cuanto a la investigación arqueológica se refiere. Quizá, en el futuro, nuestra interpretación pueda ser diferente.

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CRIATURAS HÍBRIDAS DE LA PERSIA PREISLÁMICA. REFLEXIONES Y SIMBOLISMO

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RESUMEN

Cuál es el origen y la funcionalidad de las criaturas hibridas en el Irán preislámico si tradicionalmente se ha considerado el escenario religioso iranio como anicónico. La imaginería del IV y III milenio a.C. responde a un sustrato común que explica la pervivencia de ciertos arquetipos míticos y el proceso cognitivo, permitiendo ciertas analogías entre la Edad del Bronce y el periodo sasánida.

PALABRAS CLAVE

Híbridos, seres compuestos, aniconismo.

ABSTRACT

What is the origin and functionality of hybrid creatures in pre-Islamic Iran if the Iranian religious scene has traditionally been considered aniconic. The imagery of the 4th and 3rd millennium BC responds to a common substratum that explains the survival of certain mythical archetypes and the cognitive process, allowing certain analogies between the Bonze Age and the Sassanid period.

KEYWORDS

Hybrids, composite beings, aniconism.

Las criaturas híbridas son, por definición, seres en cuya anatomía se combinan partes del cuerpo de varias especies, bien sean parcialmente humanas en combinación con rasgos animales o bien la mezcla de varias especies animales, alcanzando así un estatus mitológico. Esta iconografía de formas anatómicas mixtas remite a seres maravillosos y fantásticos, míticos y monstruosos, cuya naturaleza puede ser tanto malvada como benévola. Sin embargo, la existencia de criaturas híbridas es por sí misma una trasgresión del orden natural, por lo que debemos atender al principio cosmogónico del orden zoroastriano como al propio mazdeísmo para poder comprender el proceso que lleva a crear esta imaginería religiosa en el Irán preislámico.

1. Del aniconismo iranio a la composición de figuras híbridas

Dicha comprensión no está exenta de cierta problemática. La representación animal en el arte iranio, especialmente durante el periodo sasánida, ha sido interpretada como la manifestación zoomórfica de deidades avésticas[1]. Sin embargo, aparecen en un contexto mayoritariamente administrativo[2] y no están dotadas de inscripción alguna que lleve a identificarlas efectivamente con divinidades. De hecho, el bestiario sasánida incluye criaturas nocivas, las denominadas *xrafstra-*, representadas en la iconografía glíptica por lo que es muy probable que simplemente se trate de la representación de animales sin vinculación cultual, siendo extraña la aparición de este tipo de animales en un contexto zoroastriano[3].

[1] Comparetti 2009/2010: 36-37, conectados incluso con la vida después de la muerte, como los carneros o los caballos; como hipóstasis de las deidades mazdeas y con carácter apotropaico, pero siendo esta interpretación correlacionada con las representaciones sasánidas, sogdianas y kushanas, dada la escasez de referencias al mazdeísmo en el periodo preislámico.
[2] Poinsot 2023: 1-20.
[3] *Op.cit.*

https://doi.org/10.15366/isimu2023.26.005
ISSN: 1575-3492
ISSN Digital: 2659-9090

Es decir, se pretende identificar a las criaturas fabulosas según la mitología irania, pero ahondar en la teratología iconográfica de época preislámica[4] presenta dos puntos clave. Por un lado, la literatura avéstica sitúa las fuentes canónicas en concordancia con el aparato administrativo en tanto que corpus textual sancionado durante la época sasánida. Por otro lado, convencionalmente se ha establecido que tanto el culto del periodo aqueménida como durante el periodo sasánida -en tanto que adscrito al zoroastrismo- fue anicónico, es decir, sin representaciones antropomórficas o teriomórficas de las deidades, algo que será matizado a continuación. De tal manera que la comprensión de la iconografía de estos seres compuestos no debería quedar limitada a una interpretación exclusivamente zoroastriana.

En dichas fuentes, como es el caso del *Bundahišn*, una compilación pahlavi sobre la creación primordial se instruye acerca de la naturaleza del mundo y las criaturas que lo habitan, así como la actividad destructiva del espíritu maligno Ahriman. El capítulo decimocuarto detalla "las diez razas de hombres, más las quince razas descendientes de Frawāg, que hacen veinticinco razas humanas, todas ellas procedentes de la semilla de Gayōmard: incluyendo hombres terrestres; hombres acuáticos; con orejas y ojos de pecho; hombres de una sola pierna; hombres con alas como murciélagos; habitantes de los bosques con colas y pieles en el cuerpo como animales llamados osos; monos; gente de Māzandarān que son seis veces la altura de un hombre normal; enanos que son un sexto de la altura de un hombre normal; romanos; turcos; chinos; dāyīgān; árabes; sindhis; indios; iraníes; y otros que dicen que habitan en los seis continentes. De cada una de estas razas proceden otras muchas más nuevas"[5].

Aunque no hay ninguna indicación geográfica, se sugiere que estas tres razas monstruosas estaban dispersas junto con otras por la región originaria de la población aria, la conocida como *Xvanirah*, así los seis continentes periféricos[6].

Se observa que esta tipología de seres compuestos no es la que encontramos en la iconografía de los sellos sasánidas, sino que se atribuye al influjo de los autores griegos durante su estancia en la corte aqueménida la aparición de relatos sobre razas semihumanas y monstruosas. Estas tradiciones literarias siguieron circulando durante el periodo parto-sasánida, cuando la canonización del Avesta se produjo en un contexto que incluía también la recopilación de textos de la India y el mundo griego según la tradición zoroástrica tardía[7].

Es decir, la aparición de relatos acerca de criaturas caracterizadas como monstruosas se ve influenciada por la percepción clásica acerca de la India, en cuyos relatos encontramos referencias a Persia y al tratamiento que los autores griegos dan a los animales y a todas las maravillas en los logoi sobre la India. Recordemos como Ctesias de Cnido, médico oriundo de Grecia al servicio de Artajerjes, ubica en Persia el unicornio, los grifos custodios de oro o la mantícora, extraño ser con rostro humano, cuerpo felino y cola de escorpión[8].

También es cierto que, atendiendo a las fuentes textuales, el relato avéstico remite a un mundo poblado por todo tipo de espíritus, genios, entidades demoníacas y seres fabulosos,

[4] Compareti 2009/2010: 27, refiriendo el trabajo de investigación de Scarcia.

[5] Agostini 2019: 809. El autor también señala que listas de personas históricas, razas semihumanas y animales de aspecto humano aparecen también en la tradición maniquea, concretamente en el *Kephalaia* copto, habitando regiones periféricas y denotando influjos procedentes de las deidades indias y búdicas. La presencia de este género de listas también en la tradición maniquea sugiere que la idea de que la humanidad abarcaba tanto a los hombres como a las razas monstruosas era una concepción común en el mundo iranio de la Antigüedad tardía.

[6] Sobre la geografía del Avesta véase Grenet 2005: 29-51.

[7] Agostini 2019: 816.

[8] Wittkower 1942: 161, recordando que Ctesias sigue el relato herodoteo de las hormigas buscadoras de oro (Hdt. III, 102), así como Aristóteles acepta la narración sobre el unicornio (Historia Natural II, 1).

propios de un imaginario prezoroastriano y contenidos en los *yašt*[9], como el mítico pájaro Sīmurg o el mostruoso dragón Aži Dahāka.

Los seres híbridos del Irán preislámico se presentan como una manifestación de la relación de la población irania con el entorno animal y de la progresiva concepción mazdea y zoroastriana del mundo habitado.

Otra dificultad a la hora de afrontar el origen de estos seres híbridos es la supuesta iconoclastia defendida por la ortodoxia sasánida[10]. En este sentido y atendiendo al relato griego, debemos recordar la aproximación herodotea a la religión de los aqueménidas cuando habla de la ausencia de imágenes o altares como elementos o emplazamientos cultuales[11]. Aunque esto no excluye el hecho de que los dioses fueran percibidos dentro de una concepción antropomorfa[12].

De hecho, el arte aqueménida muestra representaciones con formas humanas y teriomorfas profundamente influenciadas por tradiciones artísticas mesopotámicas y elamitas. Shenkar concluye que los ataques contra los "ídolos" y la "idolatría" en la literatura persa deben considerarse en el contexto del discurso contra la idolatría común a las religiones monoteístas y como respuesta a las actividades misioneras cristianas y maniqueas. Esto es, las imágenes de dioses en la cultura sasánida se limitaban a relieves rupestres, monedas y sellos, y parecen haber quedado excluidos del paisaje urbano, los templos y los complejos palaciegos[13].

Es decir, el culto sasánida era anicónico, probablemente siguiendo una tradición mantenida en la región del Irán occidental desde el periodo aqueménida. Sin embargo, la cultura sasánida no era iconoclasta pues es, durante el periodo sasánida, cuando surgen las primeras imágenes plenamente antropomórficas de los dioses iraníes en el Irán occidental.

Por otro lado, la iconografía zoomorfa en el arte iranio imperial debe explicarse a partir de la interacción humana con el mundo salvaje, manifestada a través de la prerrogativa regia de la caza como expresión del poder real, en los paraísos o la forma en que los dioses se manifestaban antes los seres humanos[14]. En este sentido, se detecta una tensión entre la comprensión zoroastriana de las divinidades y el propósito simbólico de los seres híbridos, cuya explicación va más allá de la concepción zoroastriana.

2. Orígenes de las formas híbridas: un proceso cognitivo axial

Dada la ambigüedad semiótica de las formas compuestas, el motivo de estas parece estar imbricado en las relaciones de poder con el mundo animal y en sus aspectos tanto propiciatorios como malévolos. Sugiriendo, ante todo, un complejo escenario religioso donde la reformulación zoroastriana de la religión irania en época sasánida conllevó la desaparición de mitos anteriores a la reforma. Sin implicar la adopción del zoroastrismo, la supresión de ciertas prácticas religiosas dentro del territorio iranio, desde la consolidación del imperio aqueménida y hasta la culminación del dominio sasánida. Hemos de entender un complejo

[9] Boyce 1975a: 85-99, en tanto que suele atribuirse a los *yašt* un estadio prezoroastriano para su composición poético oral.
[10] Boyce 1975b: 93-100; Shenkar 2015: 471-498.
[11] Hdt. I, 131.
[12] Duchesne-Guillemin 2022. También los Aməša Spəntas, aunque abstractos, fueron considerados antropomórficos y así fueron representados en la Sogdiana del siglo VIII d.C. Incluso se dice que Aša tiene manos (44.14).
[13] Shenkar 2014: 183.
[14] Poinsot 2023: 3, refiriendo los trabajos de Gignoux, P., 1983, "La chasse en Iran sassanide" en *Orientali Romana. Essays and Lecture* 5, 101-118 y Gyselen, R., 1997, "Economy. IV. In the Sasanian Period" en *Encyclopaedia Iranica*, 8(1), 104-107.

mundo doctrinal zoroastriano y prezoroastriano, donde tendencias propias del mazdeísmo, zurvanismo y mitraísmo, entre otras, eran capaces de interactuar [15].

La simbología híbrida también podría relacionarse con una motivación totémica. Según Shenkar, los partos introdujeron en la meseta irania elementos de la cultura nómada esteparia, que los sasánidas reprodujeron posteriormente, como los signos *tamga*, adoptados como emblemas de clanes. La conquista del antiguo Imperio kushano y la constante interacción con las sucesivas confederaciones nómadas también contribuyeron a la absorción de elementos culturales característicos de los nómadas euroasiáticos en el Irán sasánida[16].

Una de las teorías más recientes, señalada por Wengrow, indica que los seres monstruosos híbridos proliferaron durante la Edad del Bronce debido a la intensificación de las rutas comerciales y la interacción cultural, provocando cierta ansiedad psicológica. De tal manera, el miedo a lo desconocido se transformó en algo tangible, acogido en la esfera de la mitología[17]. Por dicho motivo se plantea cuál es la motivación psicológica que lleva a la plasmación iconográfica de tal simbología híbrida, perdurando incluso en la Edad del Hierro. En tanto que la combinación de rasgos físicos humanos y animales para crear criaturas sobrenaturales se remonta al V milenio a.C. aproximadamente, según Pittman[18].

El bestiario mítico conformado por estos seres anómalos supone un proceso cognitivo que permite a las poblaciones explorar el ordenamiento del mundo. La creación mitológica de los seres híbridos tiene su explicación en el despertar cognitivo situado cronológicamente en el periodo alto paleolítico, donde responde a una funcionalidad chamánica[19]. No obstante, la transición a las sociedades jerárquicas próximo-orientales implica un cambio en la concepción de los seres híbridos, respondiendo este imaginario a simbologías de carácter mítico.

Durante el IV milenio a.C., coincidiendo con el fenómeno urbano en Mesopotamia, la iconografía híbrida pudo haber expresado la resistencia a las nuevas instituciones de las ciudades[20], cuyas estructuras incipientes se vieron afectadas por la expansión de redes comerciales a larga distancia que alcanzaban las cadenas montañosas del Tauro y de los Zagros. Esta comunicación permitió la expansión de motivos iconográficos en el Mesopotamia y la meseta irania durante el V-IV milenio, con temas como el hombre-íbice con una pareja de serpientes; los compuestos ave-felino o el hombre-pájaro, sugiriendo categorías mentales superpuestas[21].

Durante el III milenio a.C., la iconografía de los cilindro-sellos y su uso administrativo estuvo ampliamente extendida por Mesopotamia y la meseta irania, llegando a mostrar paralelismos temáticos con los ejemplares encontrados en Margiana, como las figuras heroicas o la criatura basada en la mezcla de un león y un ave[22].

[15] De Jong 2015: 85-86.
[16] Shenkar 2014: 177, quien también considera que el bestiario sasánida también podría haber estado influido por la cultura y el arte esteparios e incluso podría haber estado lejanamente relacionado con el famoso "estilo animal" escita, atendiendo a aspectos totémicos y mágicos, propiciadores de la actividad cinegética.
[17] Wengrow 2013.
[18] Pittman 2014: 630.
[19] Según Ivar Lissner 1961, la iconografía híbrida de las pinturas rupestres del Paleolítico Superior no trata de mitos sino de un proceso chamanístico para dotarse de atributos animales de poder.
[20] McMahon 2022: 230.
[21] McMahon 2022: 238.
[22] Resaltando la autora su escasa evidencia, así como la importación desde la meseta irania, como prueba del comercio e interacción a larga distancia y, sobre todo, de la transmisión y adaptación de motivos claramente iranios a partir de la comparativa hecha por la autora con modelos de criaturas compuestas mesopotámicas, en Pittman 2014: 632.

La tradición de la iconografía religiosa antropomorfa en el antiguo Irán se sitúa en el contexto simbólico del Complejo Arqueológico Bactriano-Margiano[23] como en el mesopotámico y elamita, remitiendo a un simbolismo basado en las fuerzas de la naturaleza y el heroísmo traducido en el combate. A su vez, a partir de los teriántropos, el ser humano trasciende la realidad y conjuga las fuerzas atávicas llegando a absorber los atributos animales en un contexto chamánico. Es decir, los compuestos de humanos y animales se han presentado como evidencia de aspectos chamánicos de las creencias religiosas neolíticas en el norte de Mesopotamia y la meseta irania. Destacando una riqueza en figuras híbridas para la Edad del Bronce como humanos combinados con felinos, aves diversas, serpientes, íbices o toros en la meseta irania y que habrían sido exportados a Margiana y Bactria.

En lo que respecta a la interpretación zoroastriana, según Francfort, para el simbolismo iconográfico del Oxus no es relevante la correspondencia avéstica, expresada a través de los ciclos cósmicos reflejando la estacionalidad de las sociedades agrarias o el demonio Azi Dahâka[24]. Aunque es la interpretación chamánica la que explica, según el autor, la iconografía del Oxus: representación de aves, universo multicapa (seres del cielo, la tierra y el inframundo), la metamorfosis recíproca entre el hombre y el animal, la fusión anatómica para formar un ser híbrido compuesto por elementos antropomórficos y zoomórficos o en lugar del hombre[25].

Ahora bien, teniendo en cuenta que la imaginería híbrida del Paleolítico y del Calcolítico ha sido identificada con un sustrato chamánico, trasladándose esta perspectiva también para los compuestos iconográficos mesopotámicos e iranios de la Edad del Bronce, incluso dentro del plano administrativo en el que eran empleados estos últimos, podría plantearse la posibilidad de que esta misma funcionalidad y semiótica se estuvieran repitiendo durante el periodo sasánida.

Esto forma parte de una transformación hacia un zoroastrismo oficializado durante la época sasánida (siglo III d.C.) y está íntimamente ligada al trascendental proceso de la redacción del Avesta, cuya transformación en una colección de textos permitió su canonización.

Es cierto que se trata de una analogía trasladada para un periodo posterior en el tiempo, pero tanto la iconografía del dominio sobre los animales como la experiencia estática reflejada en el sacerdote sasánida Kartīr sugieren la pervivencia del estrato chamánico y la dicotomía provocada por el desarrollo canónico. De ahí la necesidad de atender al contexto sociocultural en el cual se manufacturan dichos sellos sasánidas, del mismo modo que sucedió en un momento de transición como el Neolítico, con el desarrollo de las ciudades-estado y las instituciones.

Las imágenes compuestas reflejarían prácticas rituales reales y habrían actuado como catalizador de la cohesión social durante el crecimiento de la urbanización y la religión formal basada en templos. Según McMahon, esta teoría de la resistencia o la coexistencia es una alternativa a la propuesta de Wengrow de que el ritual institucionalizado fue secuestrado por las élites urbanas como parte de una estrategia para controlar la economía[26]. La interpretación chamánica, dentro de un contexto como el de la transición urbana, permitiría que un individuo

[23] Shenkar 2014: 184.

[24] En el "Hom Yasht" el daēva Aži Dahāka es descrito como una serpiente o dragón destructivo, con tres cabezas. Su naturaleza lo sitúa en oposición al orden correcto de la vida, esto es, al principio de *asha* y, por tanto, en oposición a la creación de Ahura Mazdā.

[25] Francfort 1994: 415, quien refiere asimismo que si este mismo sustrato existió en Mesopotamia desapareció a finales del III milenio a.C. Aunque el chamanismo es relevante para la interpretación de imágenes tempranas de la meseta irania, Porada 1995: 44-47.

[26] McMahon 2023: 246, quien considera que, en el contexto del crecimiento urbano y la formalización de la religión, las figuras compuestas ofrecen una alternativa, celebrando la persistencia del espacio salvaje no habitado y actuando para mantener la conexión entre lo humano y lo salvaje.

que pudiera moverse entre el mundo humano y el animal aportase asombro o consuelo y simbolizar la resistencia a las ciudades y sus restricciones[27].

3. Entre el hibridismo, el aniconismo y el antropomorfismo iranio

El catálogo mitológico mesopotámico muestra una amplia variedad de composiciones de seres monstruosos e híbridos. Pero, a diferencia de los estudios mesopotámicos donde encontramos un estudio preciso y catalogado de este tipo de seres, referidos con el término *Mischwesen*[28], en el campo de la iranología los seres híbridos resultan ambiguos en cuanto a su identificación y procedencia, sustrayéndose su estudio al influjo de la cultura mesopotámica.

La variedad anatómica es considerable y flexible acerca de los híbridos: humanos con cabeza de animal, animales con cabeza humana, figuras aladas, figuras con cuernos y otras combinaciones. Pero la mixantropía, como hemos visto, forma parte de una paleta más amplia de transgresiones de los límites entre animales y humanos.

Es el caso de los paralelismos entre los relieves neoasirios del I milenio y la iconografía aqueménida, destacando el *lamassu* o león con cabeza humana o el *faravahar* o divinidad dotada de las alas de un águila. Es interesante recordar la iconografía del III milenio a.C., en la cual la combinación de cuerpo humano con cabeza de íbice y de pájaro había sido identificada con la figura chamánica, transformándose en un animal concreto o siendo poseído por su espíritu[29], dada la posterior representación aqueménida de figuras aladas[30].

En el arte mesopotámico los seres híbridos, también calificados como monstruosos, se utilizaban generalmente con fines apotropaicos[31]. Existen seres que son mensajeros o un elemento de equilibrio y tienen la tarea de garantizar el "cosmos" divino o el orden contra el "caos" durante el nacimiento y el desarrollo de la existencia híbrida o compuesta. Son guardianes del orden y el equilibrio, incluso guerreros, contra los seres malignos y demoníacos del caos.

Como se puede observar, el estado de la cuestión sobre este tipo de seres remite por tanto a la historiografía mesopotámica y egipcia. Siendo su análisis la referencia para el estudio de los híbridos iranios siempre en relación con el influjo iconográfico como a las redes de contacto a larga distancia. Por tanto, los estudios suelen distinguir entre figuras divinas mesopotámicas y egipcias. Mientras que las deidades mesopotámicas se representan principalmente en forma antropomórfica, en Egipto la mayoría de las divinidades aparecen como seres compuestos con cuerpos humanos y cabezas de animales. Sin embargo, estas distinciones son un tanto arbitrarias y ocultan el hecho de que tanto las deidades como los demonios de cada cultura suelen representarse como seres con cuerpos humanos y cabezas de animales de manera diversa[32].

En la tradición mesopotámica los seres englobados dentro del concepto *Mischwesen* suelen distinguirse de las deidades propiamente dichas, tanto por su postura como por su campo de acción. Por lo tanto, en el caso iranio no debemos considerar la genealogía de los seres híbridos como un linaje exclusivo dentro del concepto de los *daēvas* y asociarlo por ende a la actividad de Ahriman (Aŋra Mainyu, en avéstico)[33]. Es cierto que este espíritu

[27] *Op. Cit.*
[28] El término *Mischwesen* suele utilizarse para describir a seres semidivinos como genios, grifos, esfinges y querubines.
[29] Porada 1995: 31-33.
[30] Ehrenberg 2017.
[31] Wiggermann 1994: 242-243.
[32] Maiden 2018: 168.
[33] El Yasna 32 refiere la oposición entre Ahura Mazda y los *daēvas* y su naturaleza caótica y destructiva. Según De Jong 2015: 163, hay dos clases de demonios: los demonios nombrados en el Avesta, que sobreviven en los textos clásicos con sus nombres, y los demonios que representan defectos humanos malvados.

destructivo es el líder de los *daēvas* y encarna la antítesis de Ahura Mazdā, sin embargo, no está dotado de una existencia *gētīg* y su representación explícita a partir del período sasánida le dota de un aspecto antropomorfo, cuyo cabello tiene forma de serpiente y sus orejas de animal.

Por otro lado, antes de que Zaratustra pronunciara la oración Ahuna Vairya, los demonios vagaban por la tierra, adoptando formas humanas e interactuando con la humanidad[34]. En relación al bestiario animal, siguiendo a De Jong, resulta desconcertante que el Bundahiš, aunque repite la afirmación de que los demonios ya no pueden aparecer bajo forma humana, pueden hacerlo -si lo desean- en forma de asno o de vaca, ambos animales profundamente pertenecientes al reino del bien.

A su vez, Ahura Mazdā fue concebido en los Gāthās, aunque invisible e inmortal, con forma humana. Bajo los sasánidas, Ahura Mazdā así como otras divinidades tales como Mitra o Anāhitā son representadas, desafiando el principio del aniconismo[35]. En definitiva, las divinidades iranias se percibían esencialmente como antropomórficas, dotados de una forma humana en el plano inmaterial (*mēnōg*), pero no siempre fueron representados de esta manera en la dimensión terrenal (*gētīg*) en ciertas regiones y periodos[36].

4. Conclusiones

Las formas híbridas y criaturas compuestas contrastan con la abstracción inherente al zoroastrismo, no tratándose de la veneración a deidades animales sino a atributos de la divinidad, principios morales y aspectos del mundo material. La abstracción radica en las emociones y las actitudes propiciatorias del bien o buenas obras entre los seres humanos[37]. Sin embargo, la expansión del repertorio de formas híbridas en el Antiguo Oriente subraya la necesidad de incluir las figuras compuestas iranias dentro del estudio de un proceso cognitivo común[38]. Así como en la propia relación y experiencia de las poblaciones con el entorno animal, lo cual permite vincular figuras compuestas con el bestiario animal dada la ausencia de interpretación en base a las fuentes textuales.

La clasificación propuesta por Winkelmann permite comprender el rol desempeñado por el mundo animal en las creencias iranias. Animales que actúan como atributos de las divinidades o manifestaciones de aspectos específicos del dios; animales que desempeñan

[34] *Op. Cit.* Reflexiona el autor que esta interactuación precede al capítulo sobre Gushtasp y la revelación de Zaratustra a la humanidad. Después, los demonios parecen desaparecer de la epopeya nacional persa. Estos demonios en el Shâhnameh o bien no tienen nombre, o bien llevan nombres desconocidos por las tradiciones zoroástricas.

[35] Shenkar 2014: 180. Es probable que el hecho de que los iraníes evitaran las divinidades con forma humana estuviera determinado no sólo por una "herencia nómada anicónica", sino también por la incorporación de prácticas e ideas cultuales originarias de la Mesopotamia del primer milenio a.C. Según el autor, "a la luz de estas observaciones, los relieves sasánidas plantean un problema interesante, ya que representan no sólo a reyes, sino también a dignatarios y cortesanos viendo a la divinidad e incluso interactuando con ella. Esto parece indicar, una vez más, que las nociones y conceptos desarrollados por los sacerdotes en los tratados teológicos no eran compartidos universalmente por la sociedad ni tenían una relevancia incuestionable en los asuntos de ideología y propaganda reales, del mismo modo que la propia escena de investidura representada en los relieves es inexistente en la tradición literaria zoroástrica", en Shenkar 2014: 189.

[36] *Op. Cit.*

[37] De Jong 2015: 164. Está presente en los textos pahlavi, como el *Dēnkard,* que pertenecen a la literatura sapiencial zoroástrica, en los que está omnipresente el tema de acoger en el propio cuerpo a los espíritus que representan actitudes buenas, así como el tema de desterrar del cuerpo a los demonios que representan rasgos malignos. Esto tiene una larga historia en el zoroastrismo, en el sentido de que presupone la noción de seres espirituales que representan cualidades, emociones y acciones.

[38] Véanse, Aston 2011 y Maiden 2018: 152-205.

un papel importante en contextos rituales, a menudo vinculados a la narrativa mitológica; animales que desempeñan un papel importante en contextos rituales, a menudo vinculados a una narración mitológica; animales que son esenciales en la formación de seres compuestos[39].

Por tanto, las criaturas híbridas de la idiosincrasia irania, según la autora, se remontan a los sellos de Luristán del IV milenio a.C., el arte de la época de Uruk y el arte proto-elamita del suroeste de Irán y el arte de la cultura Kerman en el sureste de Irán. Los animales que siempre se han representado son felinos, rapaces, serpientes, escorpiones y ungulados y mantienen su continuidad incluyendo el periodo sasánida[40].

Entendidas desde el campo de la monstruosidad, las formas híbridas iranias se vinculan a un plano sobrenatural y a una función mediadora, sin que su aspecto tenga que ser signo de maldad, como se ha indicado anteriormente, cuyo plano semántico entronca en diversas tradiciones. Es muy posible, por tanto, que la composición de figuras híbridas en el contexto iranio responda por tanto a un esquema simbólico que va más allá de términos avésticos y que responde a un sustrato de correspondencias chamánicas empleado en diferentes contextos regionales como mítico-culturales. De acuerdo con Winkelmann, un mito concreto representado mediante alegorías puede ser la base desde la cual remiten criaturas compuestas y se codifican los rituales, con una sorprendente continuidad desde el IV-III milenio a.C. hasta el I milenio a.C.[41]. Por todo ello, debemos entender que el escenario anicónico del Irán preislámico no excluye una comprensión antropomorfa de la divinidad o una representación de formas compuestas trascendentales.

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[40] Winkelmann 2018: 58.
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OBSERVATIONS ON THE ENVIRONMENTAL SETTING OF THE AGRICULTURAL DEVELOPMENT AND OCCUPATIONAL HISTORY OF ACHAEMENID PERSEPOLIS

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ABSTRACT

This article deals with the environmental setting of Persepolis during the Achaemenid period (6th – 4th cent. BC). In addition to its symbolic and administrative functions as a central place, Persepolis was the result of a large-scale development project over at least a dozen square kilometres implemented in successive stages, which left large spaces for farming activities attested in the Fortification Archives. Following a review of the regional geographical setting, data focusing on the properties of soils and hydrography provide a more precise picture of the natural landscape of Persepolis. The hydraulic installations, known thanks to archaeological fieldwork, appear to be adapted to the properties of soils and suitable for developing intensive farming. Studies of hydrographic conditions show that the Pulvar river channel running through the region would have been less incised into its floodplain than in modern times, with consequences for the availability of water at Persepolis and its occupational history.

KEYWORDS

Iran, Fars, Persepolis, Pulvar, palaeoenvironment, soils properties, hydrography, land-use, hydraulic facilities, farming.

RESUMEN

Este artículo trata del entorno medioambiental de Persépolis durante el periodo aqueménida (ss. VI-IV a.C.). Además de sus funciones simbólicas y administrativas como lugar central central, Persépolis fue el resultado de un proyecto de desarrollo a gran escala que abarcó al menos una docena de kilómetros cuadrados y se llevó a cabo en etapas sucesivas, que dejó amplios espacios para las actividades agrícolas, como atestiguan los Archivos de la Fortificación. Tras una revisión del entorno geográfico regional, los datos centrados en las propiedades de los suelos y la hidrografía proporcionan una imagen más precisa del paisaje natural de Persépolis. Las instalaciones hidráulicas, conocidas gracias a los trabajos arqueológicos parecen estar adaptadas a las propiedades de los suelos y adecuadas para el desarrollo de la agricultura intensiva. Los estudios de las condiciones hidrográficas muestran que el cauce del río Pulvar, que atraviesa la region, habría estado menos encajado en la llanura aluvial que en época moderna, con consecuencias para la disponibilidad de agua en Persépolis y en la historia de su ocupación.

PALABRAS CLAVE

Irán, Fars, Persépolis, Pulvar, paleoambiente, propiedades del suelo, hidrografía, uso del suelo, instalaciones hidráulicas, agricultura.

1. Persepolis, a central place and a landscaping project

Discussions of the role of Persepolis have for a long time focused on the monumental terrace founded under the rule of the Great Achaemenid King Darius I in the early part of his reign (520-486 BC). The construction of the Persepolis Terrace in the homeland of the

Persians, and of the 50ha Royal Area surrounding it[1], was a huge and long-term building project which bore manifold symbolic and political meanings[2]. The architectural program of the terrace and its surroundings served at first to symbolize Achaemenid power over imperial space. The discovery of thousands of inscribed clay tablets at the beginning of the 1930s on the terrace, and their still ongoing translation and analysis, have also shed light on the role of Persepolis as an administrative centre[3]. Dated back to the reign of Darius, the Persepolis Fortification Archive record activities of officials in charge of land management within a region corresponding mainly to the present extent of Fars province. Persepolis, or Parsa as it is named in the archives, was a central place and the region's capital "city"[4]. On a more local scale, the archives show that the land surrounding the terrace was cultivated and permanently populated by a variety of inhabitants (members of the aristocracy, agents of the administration, soldiers, craftsmen, farmers, semi-dependant workers…).

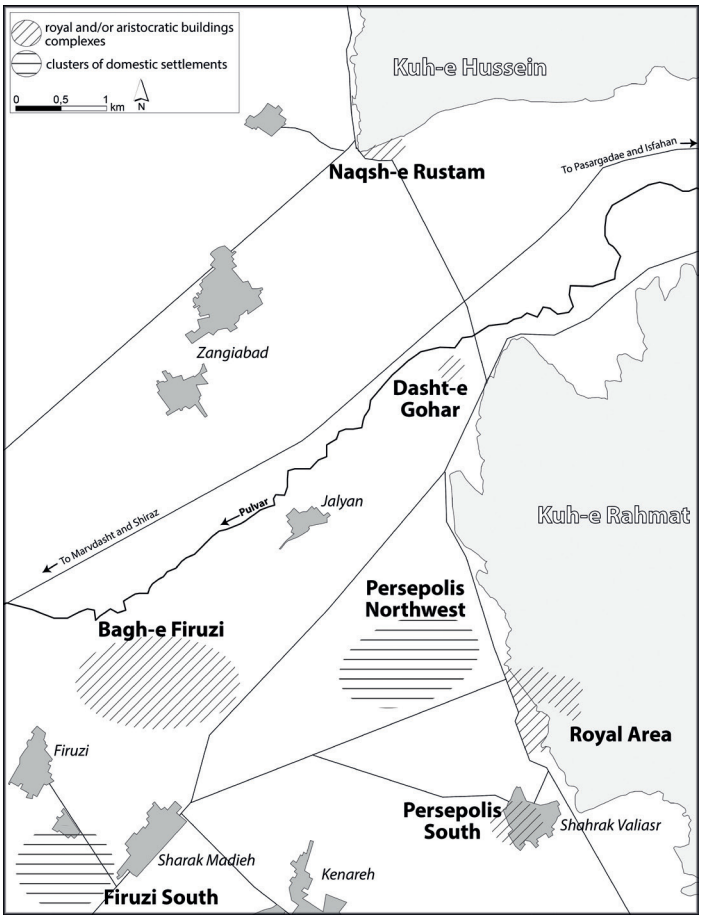

Fig. 1. Simplified map of the Persepolis Settled Zone, showing the distribution of clusters of Achaemenid settlements (adapted from Gondet 2018: 198-Fig. 4, with modifications; CAD S. Gondet).

[1] Mousavi 2012: 10-50 provides a detailed presentation of the results of the successive archaeological campaigns undertaken on the terrace and in its surroundings as from the 1930s.

[2] Among an extensive list of references on this topic, see the following publications: Briant 1996: 99, 183-184; Kuhrt 2007: 469-471: Mousavi 2012: 51-56; Root 2015: 3-11; Canepa 2018: 32-35; Boucharlat 2020; Matthews, Fazeli Nashli 2022: 483-487.

[3] See Henkelman 2017 for a detailed analysis of the Persepolitan institutional landscape reconstructed thanks to the archives; see Henkelman, Kaniuth, Mohammadkhani 2023: 228-229 for a concise overview of the archives' content and of the bibliography related to their current study.

[4] The term "city" linked to "capital" or "centre" is used to characterize Persepolis by Kuhrt 2007: 470; Mousavi 2012: 55-56; Root 2015: 13. See discussions on the use of these terms in *ibid.*: 11-14; Gondet 2018: 186-189; Askari Chaverdi, Callieri 2020: 178; Boucharlat 2020: 59; Callieri 2022.

Given the intricate nature of Persepolis, archaeologists have long tried to reconstruct the physical reality of Achaemenid occupation at Persepolis beyond the Royal Area[5]. The spatial organization of Persepolis needs to be approached at a scale of several square kilometres encompassing the known complexes of Achaemenid monuments or the clusters of settlements known around the terrace[6]. The area, which we have suggested calling the Persepolis Settled Zone[7], is bounded to the south by the Royal Area, by the royal necropolis of Naqsh-e Rustam 6km to the north, and by the modern village of Firuzi 5km to the west (Fig. 1). During the last twenty years, a succession of archaeological projects, implemented in the frame of programs led by the Parsa Research and Conservation Centre, have focused their efforts on the exploration of fields west of the terrace. Despite the destruction of archaeological sites caused by agricultural encroachment, a combination of large-scale mapping works —based on pedestrian surveys and remote sensing techniques (geophysics)— with targeted excavations has revealed parts of the preserved traces of the Achaemenid layout[8]. Fieldwork focused mainly on the Persepolis Northwest and Bagh-e Firuzi areas. In the Persepolis Northwest, the surveys and excavations revealed a mosaic of built-up spaces and others left unbuilt, distributed within a rectangular grid system of ditches mapped over more than 120ha (Fig. 2). In the Bagh-e Firuzi, at least eleven Achaemenid sites —nine displaying remains of monumental architectural features— are distributed across a surface of at least 150ha, spaces between them appearing as unbuilt and cut through by ditches. It appears that Persepolis is the result of a large-scale and certainly long-term development project following a peculiar layout that can be characterized as diffused[9]. Spaces around the Royal Area presented an open landscape characterized by multi-centred clusters with low density of buildings, the setting for daily-life activities of the permanently settled population, and by the prevalence of green areas[10]. The settled areas were criss-crossed by drainage facilities, dating back to the Achaemenid period[11], demonstrating that they were carefully landscaped over dozens of hectares.

The morphology of Persepolis raises manifold challenges and questions. One can hardly define and analyse occupation around Persepolis by following the standard approaches of studies in urbanism. The archaeological data revealed that the Persepolis micro-region was subjected to a large-scale landscape development project rather than the construction of a densely built-up city within well-defined boundaries. Consequently,

[5] In an article presenting his excavation program at Persepolis, Herzfeld 1929 provides an early attempt to describe the remains of the city around the terrace. Sixty years later, Sumner 1986 published a review of the archaeological data on the Achaemenid settlement in the plain and on the "city or town" (*ibid.*: 9) around the terrace.

[6] See the comments of Boucharlat 2003: 264-265 published before the recent resumption of archaeological work at Persepolis and based on a revaluation of the data published by Sumner 1986. See also Kuhrt 2007: 470 connecting Naqsh-e Rustam to the city.

[7] Boucharlat, De Schacht, Gondet 2012; Gondet 2018; Boucharlat 2020; Askari Chaverdi, Callieri 2020; Matthews, Fazeli Nashli 2022: 480. Alternatively, the area is called "Territory of Parsa" in Talebian 2008: 182-Fig. 10; "Greater Persepolis" in Root 2015: 12-13; "Persepolis region" in Henkelman, Stolper 2021: 173 and in Henkelman 2021: 142.

[8] Talebian 2008; Boucharlat, De Schacht, Gondet 2012; Askari Chaverdi, Callieri 2012; Askari Chaverdi, Callieri, Matin 2014; 2017; Askari Chaverdi, Callieri (eds.) 2017; Gondet, Mohammadkhani, Askari Chaverdi 2018. See review of the results in Gondet 2018: 197-201; Boucharlat 2020: 59-65; Askari Chaverdi, Callieri 2020; Callieri 2022; Matthews, Fazeli Nashli 2022: 480-483.

[9] Root 2005: 13; Canepa: 2018: 25-26; Gondet 2018: 205; Askari Chaverdi, Callieri 2020: 185; Callieri 2022: 133.

[10] Boucharlat 2020 attempts to provide a comprehensive reconstruction of the landscape of Persepolis as it appeared to the eyes of visitors.

[11] Askari Chaverdi, Callieri 2012: 236-237, 2020: 183; Callieri 2022: 128.

Persepolis must also be studied by considering its natural landscape, how the latter was managed and transformed. Recent results coming from textual, palaeoenvironmental, and archaeological sources provide insights on two topics that the present article examines in that perspective. The first is the nature of unbuilt spaces, so far vaguely described as green areas, while recent publications have demonstrated intensive agrarian activities —especially tree cultivation— in the Persepolis area. The second topic concerns the chronology of the development of Persepolis, on which archaeological work in the Bagh-e Firuzi area provides new hypotheses. After a presentation of these results and their outcomes, the article deals with the general environmental setting and focuses on the questions of soil fertility and hydrographic conditions during the Achaemenid period. In some respects, the cross-analysis of various data on these two factors could enlighten aspects of agrarian development at Persepolis and its occupational history.

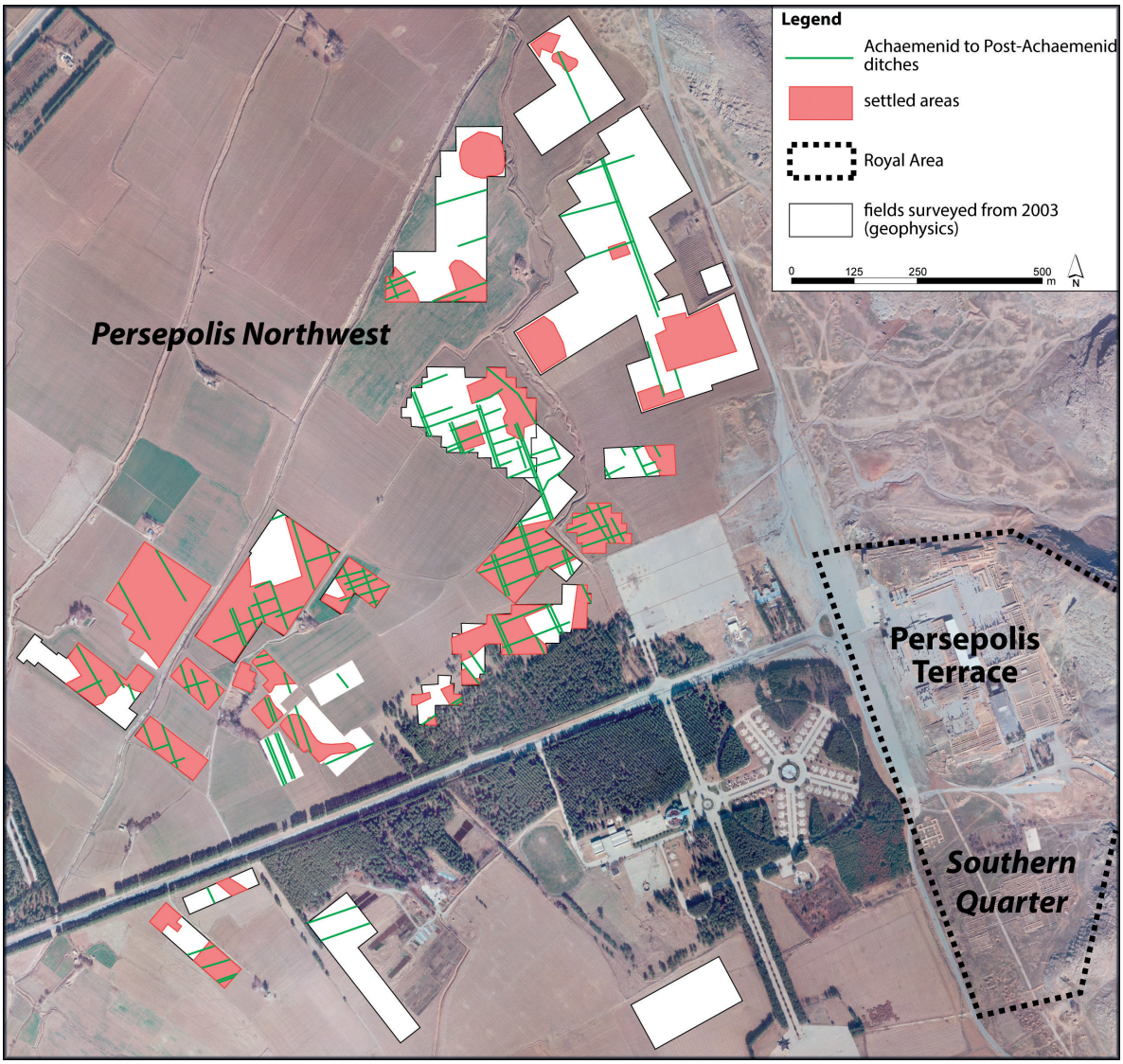

Fig. 2. Layout of Achaemenid to Post-Achaemenid remains in the Persepolis Northwest area west of the Persepolis Terrace, reconstructed thanks to the results of the Iranian-French (2005-2008) and Iranian-Italian (2008-present) archaeological projects (adapted from Gondet, Mohammadkhani, Askari Chaverdi 2018: 3-Fig. 1, with modifications; CAD S. Gondet).

2. Data on Persepolis seen as an agrarian area and on its development chronology

Data published in the last decades from textual and archaeological sources prove that the lands around the terrace of Persepolis were fertile and intensively cultivated during the Achaemenid period[12]. Recent articles based mainly on the analysis of two tablets from the administrative archives of Persepolis[13] provide insights into the nature of agricultural development around the Royal Area. They show that thousands of fruit trees, of various species, were planted in the Persepolis region during the reign of Darius[14]. They also demonstrate that the trees were cultivated and the harvested fruit was stored in plantations located close to Persepolis[15]. Data from the archives allow one to be more precise about the nature of some of the lands left unbuilt within the Persepolis Settled Zone, an area that among other crops included large orchards. When looking at the number of trees recorded and considering the large quantity of fruits possibly produced, the archives reveal a deliberate strategy of the administration to build and maintain significant farming facilities at Persepolis[16]. As discussed extensively in the above-mentioned publications, the development of arboriculture in the Persepolis region echoes palaeobotanical analyses of pollen trapped in the sediment archives of Lake Maharlu located in the south part of the Shiraz sedimentary basin (Fig. 3a). A first analysis hypothesized a peak of pollens of cultivated trees during the 1st millennium BC[17]. A recent revision of the chronology of the sediment deposits in lake Maharlu[18] dates the peak to the late Sasanian/Early Islamic period[19]. The results nevertheless show that cultivation of various species of trees and the grapevine in the region began as early as the Pre-Achaemenid/Achaemenid period[20]. The data should also be interpreted in the light of the peculiar environmental condition in the Shiraz basin[21] where little is known so far on Achaemenid settlements[22]. However, the combination of textual and environmental data demonstrates a regional development of tree cultivation as from Achaemenid times. In addition to the manifold functions of the site, Persepolis may be seen as an area of intensive farming development that would have called for specific environmental conditions and land management schemes.

Regarding the area's occupational history, the study of written sources has long demonstrated that Persepolis was not an *ex-nihilo* new foundation of Darius. The Persepolis Settled Zone was at that time already populated —and probably cultivated— and the seat of an important town[23]. The Iranian-Italian archaeological work in Bagh-e Firuzi undertaken during the last decade have provided crucial contributions to this topic. The excavation of a monumental gate at Tol-e Ajori revealed the remains of a building whose plan and decorated wall faces of glazed bricks are similar to those of the Neo-Babylonian Ishtar Gate at Babylon[24].

[12] Root 2015: 13; Boucharlat 2020: 65. Review of textual evidence on efforts related to cultivation in the Persepolis region, see Henkelman 2021: 133-136.

[13] Henkelman, Stolper 2021; Henkelman 2021; Stolper 2021; Henkelman, Kaniuth, Mohammadkhani 2023: 234-235.

[14] Henkelman, Stolper 2021: 169: Henkelman 2021: 142.

[15] Henkelman, Stolper 2021: 173: Henkelman 2021: 145-146.

[16] Henkelman, Stolper 2021: 177.

[17] Djamali *et al.* 2009; 2010.

[18] Brisset *et al.* 2019.

[19] Saeidi Ghavi Andam *et al.* 2021: 605.

[20] *ibid.*: 604-607; Djamali, Saeidi Ghavi Andam, Poschlod 2021.

[21] On the variety of climatic conditions across the Fars province, see Ricci *et al.* 2023: 85.

[22] Askari Chaverdi 2023 provides data concerning Achaemenid occupation at a site located north of Shiraz.

[23] Briant 1996: 99. Detailed review of all the available data on this topic in Askari Chaverdi, Callieri 2020: 196-198. Concerning archaeology, see comments of Sumner 1986: 28 and a review of the data on the Firuzi area available before the launching of the Iranian-Italian project in Boucharlat, De Schacht, Gondet 2012: 264-267.

[24] The team has regularly reported on the results of archaeological campaigns at and around Tol-e Ajori in Askari Chaverdi, Callieri, Gondet 2013; Askari Chaverdi, Callieri, Matin 2014; 2017. Summary in Askari Chaverdi, Callieri 2020: 186-196.

Surveys undertaken and trenches excavated at and between surrounding sites demonstrated that the gate was part of larger monumental complex that followed an open layout akin to that defined at Pasargadae[25]. The spaces between buildings, located several hundreds of meters from one another, are crossed by parallel ditches sharing the same orientation as the constructed features. As at Persepolis Northwest, the Bagh-e Firuzi area was equipped with drainage facilities. Based on the gathering of chronological evidence, both relative and absolute, the foundation of the Bagh-e Firuzi complex is dated to the Early Achaemenid period, therefore predating the terrace's construction[26]. Moreover, the orientations of buildings and drainage facilities between Bagh-e Firuzi and Persepolis Northwest/Royal Ara are different. They result certainly from two distinct phases of land development[27]. In Early Achaemenid times, a first nucleus associating town and monumental complex may have existed in the Firuzi area[28], and during the reign of Darius, the core of the Persepolis Settled Zone was shifted 3km to the east. This displacement represents a deep change in the occupational history of the micro-region during the Achaemenid period, a change with obvious political and historical meanings, which could also be read in terms of environmental factors.

3. Environment setting of Persepolis: overview

One of the intermontane basins along the Zagros chain in Southwestern Iran, which are favourable regions for settlement and farming[29], the Persepolis plain shows some of the best potential for agricultural development[30]. Surrounded by limestone ranges, the plain is a northwest–southeast oriented sedimentary basin more than 100km long and 30km wide (Fig. 3a)[31]. Consequently, the region was able to supply a large number of fields for crops. The mean altitude of the plain is above 1600m —1610m at the foot of the Persepolis Terrace — and its slope gradient is low (less than 0.06%)[32]. The climate of the Persepolis region is semi-arid and defined as continental Mediterranean with a strong influence of altitude[33]. It is characterized by high inter-seasonal variability with cold and humid winters and long dry seasons lasting up to 8 months, marked by hot summers. Records of rainfall demonstrate a climatic gradient across the plain, annual mean precipitation value being 448mm at Dorudzan in the northwest and 199mm at Neyriz in the southeast (Fig. 3b)[34]. At Marvdasht, not far from the Persepolis

[25] Gondet 2018: 201; Boucharlat 2020: 41, 65; Askari Chaverdi, Callieri 2020: 199. On the morphology and the layout of Pasargadae, based on archaeological work carried out as from the late 1990s, see Benech, Boucharlat, Gondet 2012; Boucharlat 2014; Gondet 2018: 193-197; Gondet *et al.* 2019; 2021.

[26] Askari Chaverdi, Callieri 2020: 196-200.

[27] Boucharlat, De Schacht, Gondet 2012: 267; Gondet 2018: 201; Askari Chaverdi, Callieri 2020: 196; Callieri: 2022: 131-132.

[28] The existence of another early nucleus at Dasht-e Gohar (Fig. 1) is also presumed. In the absence of firm new evidence on the chronology and the nature of the occupation in this area, Dasht-e Gohar has not been integrated into the present development scenario of the Persepolis Settled Zone. See Boucharlat, De Schacht, Gondet 2012: 258 on the difficulties in interpreting results of surveys carried out at this location. For reviews on the data available for the Dasht-e Gohar complex, see: Bessac, Boucharlat 2010: 30-36; Askari Chaverdi, Callieri 2020: 199.

[29] Planhol 2000; Kehl, Rafiei-Alavi, Alizadeh Ketek Lahijani 2023: 22; Ricci *et al.* 2023: 85.

[30] Kortum 1976: 257; Moameni 1999: 73; Hartnell 2014: 183-185; Caiserman, Amiraslani, Dumas 2021: 1.

[31] Overview of the physical and environmental setting of the plain in: Kortum 1976: 31-68; Moameni 1999: 5-16; Kehl, Frechen, Skowronek 2009: 58-61; Djamali *et al.* 2018: 1159-1161. See also Gondet 2011: 31-88 which, updated with recent publications, provides part of the material used in this article.

[32] Kehl, Frechen, Skowronek 2009: 58; Djamali *et al.* 2018: 1159.

[33] Rigot 2010: 62-63; Djamali *et al.* 2018: 1159; Caiserman, Amiraslani, Dumas 2021: 2; Rigot *et al.* 2022: 85.

[34] Until the early 2010s, the data for the Dorudzan and the Neyriz stations were available on the website of the Iranian Meteorological Organization for the period 1961-2000 (http://www.irimo.ir). The website is no longer accessible. The data for the years 1990-2017 published by Caiserman, Amiraslani, Dumas 2021: 2 provide almost the same values.

Terrace, mean annual rainfall is about 330mm[35]. The Kur river is the mainstem draining the plain from northwest to southeast, from the Dorudzan area upstream towards the playa complex of lakes Tashk and Bakhtegan downstream. The Pulvar river[36] is its main tributary, flowing from the northeast and the Pasargadae region, crosses the Persepolis Settled Zone, and joins the Kur southwest of the modern city of Marvdasht. The value of the Kur's annual discharge is much higher than the Pulvar's[37], defining from afar the Kur as the principal stream draining and watering the Persepolis plain. Karstic springs are also a major component of the regional hydrosystem; at least 148 springs are recorded on the 1:25000 topographic maps of the region, and among them 14 main springs or complexes of springs have been detected[38].

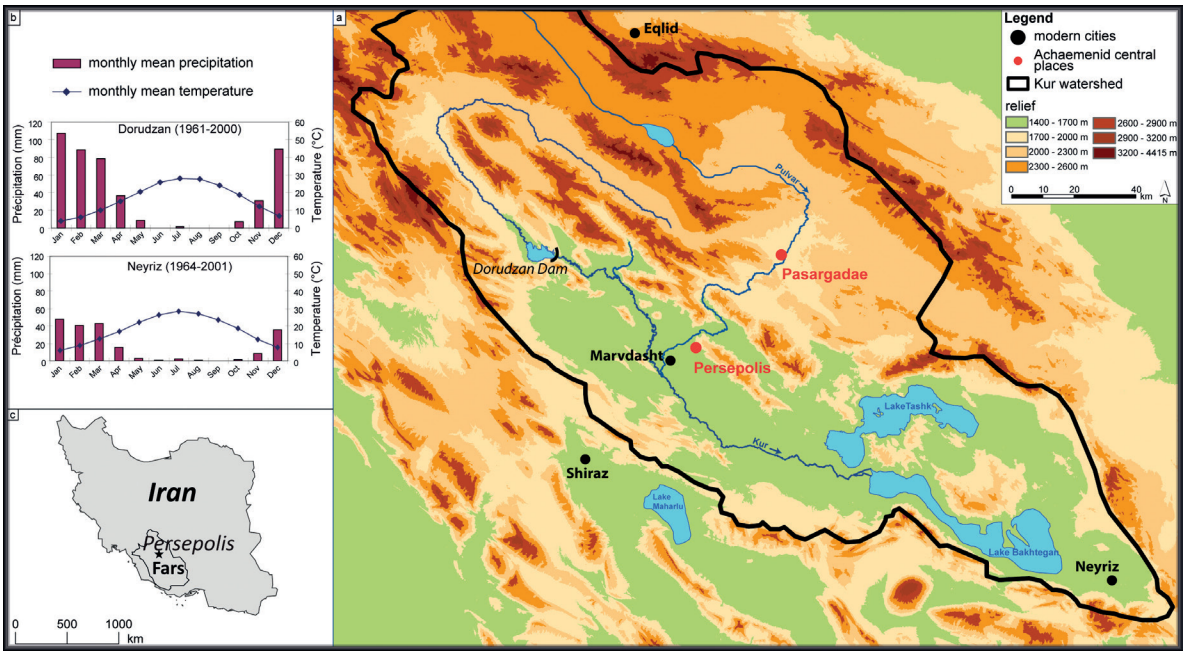

Fig. 3. Environmental setting of the Persepolis plain. (a) Physical map and hydrography; (b) Ombrothermic diagrams for the north (above) and south sectors (below) of the plain; (c) Location of the studied area (ASTER STRM for the terrain basemap; IRIMO for climatic data; CAD S. Gondet).

We shall take a closer look at the Persepolis Settled Zone and the palaeoenvironment of the plain during the Achaemenid period. From a geographical point of view, its position is strategic, since it is located at the outlet of the Pulvar river in the Persepolis Plain and at the intersection of two natural circulation highways, i.e. the northwest/southeast Kur basin and the southwest/northeast Pulvar valley. The natural landscape of the area contributed various resources to Persepolis. Surrounding by mountain ranges, providing construction materials like stone[39] and wood, as well as extensive pastures[40], the Persepolis Settled Zone includes wide spaces of flat lands available for agricultural activities. The plain's present environmental and climatic conditions, as detailed above, are suitable for the development of agriculture,

[35] Moameni 1999: 8.

[36] According to vernacular toponymy, it is alternatively called the Sivand when it reaches the valley upstream of the Persepolis plain. See Duva 2018 for a review of the names given to the rivers of the region according to various historical sources.

[37] 30 times higher in Kortum 1976: 50-51; 15 times higher in Moameni 1999: 14.

[38] Djamali *et al.* 2018: 1161-1163.

[39] Gondet 2015.

[40] Saeidi Ghavi Andam *et al.* 2021: 601-603 on proxy data from the Maharlu sedimentary archives relating to intensification of pastoral activities and deforestation as from the 1st millennium BC.

but subject to several constraints. The main one relates to water availability. Although present mean annual rainfall values allow dry agriculture, precipitations are unevenly distributed over the year. According to recent paleoclimatic reconstructions, seasonal variability affected Southwestern Iran during the entire Holocene and consequently in the Achaemenid period[41]. Yet during the Holocene, climatic changes occurred in the amount and yearly distribution of precipitations. Their reconstruction may vary according to the nature and location of studied palaeoenvironmental archives[42]. In the Central Fars area, the Achaemenid period would have been a long phase of lower aridity and fairly stable hydro-climatic conditions[43]. While probably carried out in more favourable conditions, farming activities during the Achaemenid period required irrigation, especially in the spring and the summer seasons. This is illustrated by archaeological data gathered in the Pasargadae and Persepolis regions, which attest the development on a regional scale of large hydraulic infrastructure during the Achaemenid period to tap water from the various local resources[44]. In addition to water, agrarian development also needs suitable croplands to cultivate and harvest desired species. In the following sections of this article, a closer look at soil fertility will permit a better definition of the agrarian potential in the Persepolis Settled Zone and explanations on how it was managed during the Achaemenid period. This is combined with a review of data recently obtained on the Pulvar river's morphology in the past, with consequences for the hydrographic context of agricultural activities in the Persepolis area, and possibly for its occupational history.

4. Regional soil conditions, consequences for land improvement and land-use at Persepolis

Since the Persepolis Plain was a strategic region for agricultural production in Fars, it was subjected to large land development programs and farming intensification, mainly linked to the construction in the early 1970s of a reservoir dam across the river Kur, upstream from the plain at Dorudzan (Fig. 3a). As from that date, pre-existing land-use patterns have deeply changed, and the present state of the agrarian landscape differs almost entirely from the pre-existing traditional one[45]. This project of development was preceded by precise surveys of the plain's agricultural potential and, among other features, the soil's properties[46]. The soil map drawn on this occasion (Fig. 4) provides an overview of potential cropland quality over a surface of about 100,000ha in the northwestern part of the Persepolis plain. This document is an inventory of soil conditions prior to agricultural intensification in the last decades. Its analysis is of great utility for the reconstruction of large-scale land-use patterns in the past and for defining agrarian potential in the Persepolis Settled Zone. While at present appearing

[41] Rigot *et al.* 2022: 98.

[42] Kehl, Rafiei-Alavi, Alizadeh Ketek Lahijani 2023: 26-29.

[43] Saeidi Ghavi Andam *et al.* 2021: 601; Rigot *et al.* 2022: 99; Ricci *et al.* 2023: 86. See Matthews, Fazeli Nashli 2022: 396-398, 497-498 assessing suitable climatic conditions in the Iron Age, based on an overview of the palaeoenvironmental data available for the large Southwest Asia region. This general view is, however, counterbalanced by the occurrence of a possible episode of drier climate around 550 BC, recorded in the archives of the Maharlu lake, see Ricci *et al.* 2023: 88. This result clearly demonstrates the rapid and localized climate changes that may have occurred during the Late Holocene, as discussed by Kehl, Rafiei-Alavi, Alizadeh Ketek Lahijani 2023.

[44] Boucharlat, De Schacht, Gondet 2012; De Schacht *et al.* 2012; De Schacht 2018; Shobairi 2018; Chambrade *et al.* 2020.

[45] Kortum 1976: 237-250; Moameni 1999: 75-84. On modern changes in the landscape and their consequences on the archaeology, see Boucharlat, De Schacht, Gondet 2012: 254-257.

[46] Justin, Courtney 1966 provides a comprehensive report which has been extensively used by Kortum 1976; Moameni 1999. Kehl, Frechen, Skowronek 2009: 59-Fig. 2 published another version of a soil map of the area based on survey of the early 1970s.

as a large fertile region entirely covered by croplands, the Persepolis plain has to cope with several constraints for agriculture. They are mainly linked to the low slope gradient and slow permeability of soils, which imply a shallow groundwater table, the presence of large swamps and extensive problems of salinization[47].

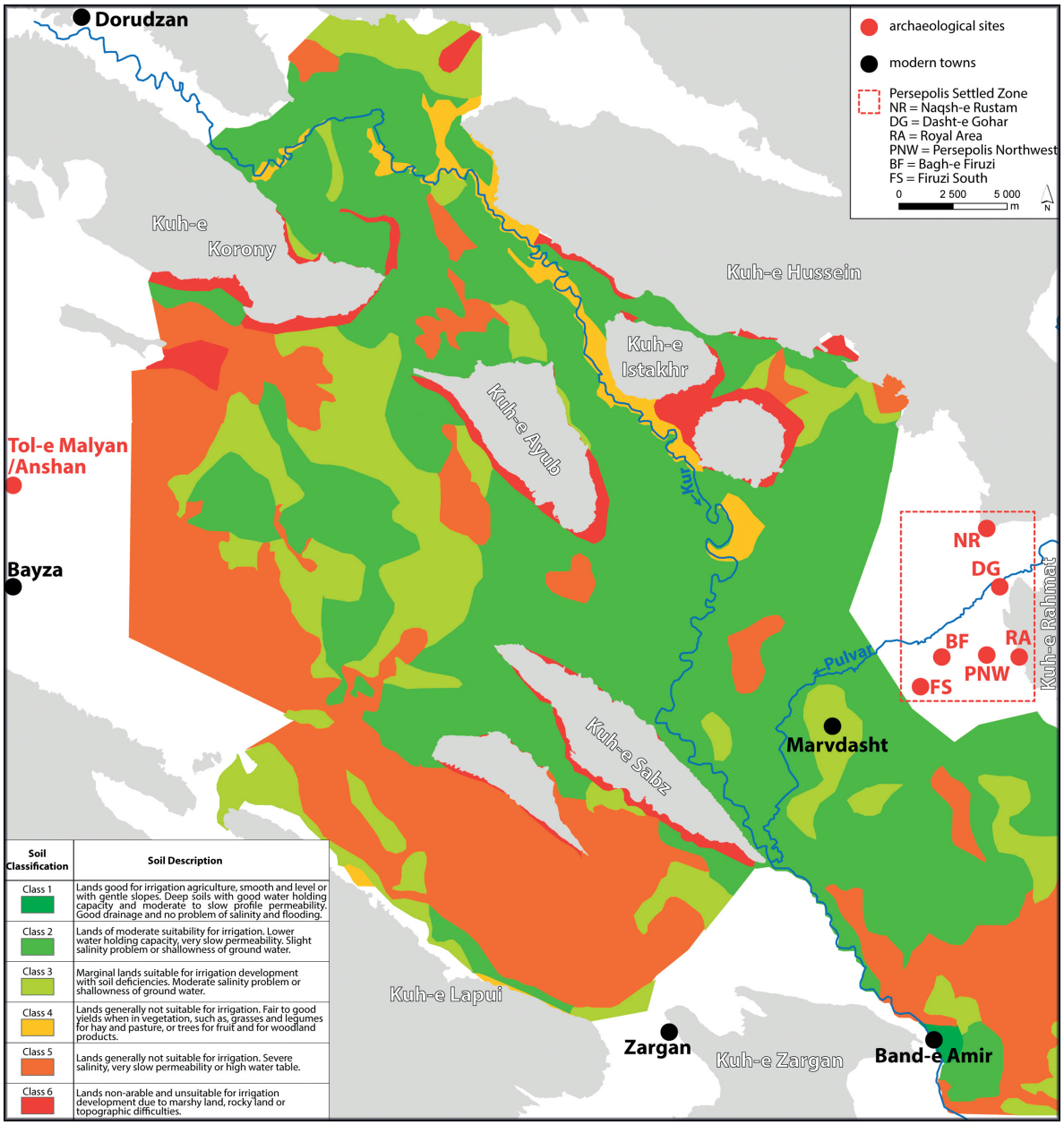

Fig. 4. Soil map and description in the northwestern part of the Persepolis plain (adapted from Justin & Courtney 1966, with modifications; CAD S. Gondet).

West and south of Persepolis, large areas of lands are described as non-arable because of slow permeability, salinization, and waterlogging issues (Class 5 on Fig. 4)[48]. These regions correspond for the most part to large swampy areas, which were dominant elements of the landscape before the modern campaigns of extensive drainage, linked to the new irrigation scheme designed following the Dorudzan dam's construction. In the region of the modern town of Bayza northwest of the Persepolis plain, the landscape was dominated

[47] Kortum 1976: 33; Moameni 1999: 11-12; Kehl, Frechen, Skowronek 2009; Djamali *et al.* 2018.
[48] Justin, Courtney 1996: D-17.

by swamps, which are a result of the combination of shallow groundwater and clusters of karstic springs[49]. The wetlands, which extended over several square kilometres[50], have poor agricultural potential but may have been of economic interest, as demonstrated by studies on Anshan, the Bronze Age Elamite capital of the Iranian highlands. Whether the Bronze Age city's economy was mainly based on farming, datasets have shown the growing interest of its inhabitants in resources of the surrounding wetlands —i.e. aquatic plants and waterfowls— as well as in water supplied by the numerous springs (given that the site is located far from the main rivers)[51]. The southeastern part of the plain has been environmentally speaking less studied than the northwest, because it is considered as less fertile. It comprises large areas of salty and swampy lands surrounding the complex of shallow and semi-permanent saline lakes of Tashk and Bakhtegan (Fig. 3a). This general statement should be balanced by archaeological data, which show for instance that several Late Bronze Age settlements were distributed along the Kuh-e Rahmat range southeast of Persepolis[52]. The western part of the southeastern plain has also been subjected to agricultural development since at least the Sasanid/Early-Islamic era, as seen in the construction of a diversion dam across the Kur river at Band-e Amir; this dam supplies networks of canals located downstream[53]. In the vicinity of Band-e Amir, several Achaemenid sites were recorded in the past but have certainly been destroyed[54]. It is still true nonetheless that large amounts of land located southeast of the plain have poor soil quality, due to the combined effects of lower slope gradient, shallow water tables, flow of spring water with high saline content[55], resulting in a process of extensive salinization of soils. These instances of apparently barren lands dominating the plain's south-eastern part may have rather been suitable for extensive pastoralism, but not for intensive farming activities in the absence of considerable drainage and irrigation projects[56].

When compared to Bronze Age Anshan, the foundation of Persepolis in the central part of the plain reflects a change in regional occupational history. The Persepolis Settled Zone was part of a large area of lands suitable for irrigation and crop production (Class 2 soil around the Persepolis Settled Zone on Fig. 4). The micro-region is also crossed by the river Pulvar, which provides large and perennial amounts of water. Located in the most fertile part of the plain, between the extensive wetlands in the northwest and the salty lands in the southeast, the Persepolis Settled Zone's natural landscape provides good conditions for an intensive and extensive development of agriculture (Fig. 5). Farming activities in the area face several difficulties, however. The soil survey has characterized the land surrounding the area as having slow permeability, a shallow water table, and a slight salinity problem[57]. Intensive agricultural production hence demands irrigation and well-developed drainage facilities. Considering soil conditions in the Persepolis Settled Zone, the network of ditches recorded at Persepolis Northwest and Bagh-e Firuzi (Fig. 2 and Fig. 6) seems essential to improve farming productivity. It provided water for people and irrigation and, above all, drained excess water and the shallow ground water whose stagnancy

[49] Djamali *et al.* 2018.
[50] Cornwallis 1968 provides an inventory of the wetlands in the region and p. 154-155 assesses the swampy lands along the southwestern Kuh-e Lapui range to be to 120 km² in area. Kortum 1976: 32 gives almost the same estimation for this large wetland.
[51] Djamali *et al.* 2018: 1168-1169.
[52] Sumner 1994.
[53] Hartnell 2014: 196-199; Duva 2018: 107-108.
[54] Sumner 1986: 9-10. See also Djamali *et al.* 2018: 1169-1170 on the remains of a supposed Achaemenid reservoir dam near the north-western shore of Lake Tashk.
[55] *ibid.*: 1169.
[56] Kortum 1976: 33-34.
[57] Justin, Courtney 1966: D-16. Moameni 1999: 148 underlines that more than 50% of the lands in the plain's northwestern part are affected by salinization.

could increase salinization[58]. In addition, the crop evapotranspiration during spring and summer could also play a significant role into the salinization process, as well as on having an influence on the balance between water availability and consumption[59]. Taking into account present climatic regional conditions, it has been demonstrated that orchards are the most suitable crop to reduce the effects of the evaporation[60]. This result is echoed by the focus on arboriculture during the Achaemenid period documented by textual and palaeoenvironmental studies, since orchard cultivation appears as cropland particularly well-adapted to the environmental conditions of the Persepolis region.

Fig. 5. View, from the Kuh-e Rahmat slope southwest of the Persepolis terrace, of the surrounding cultivated plain (S. Gondet, fall of 2005).

5. Hydrographic conditions at Persepolis during the Achaemenid period: consequences on water availability and occupational history

The Persepolis Settled Zone includes various hydraulic installations[61]. In the Royal Area, drainage networks protected the constructions from washout and diverted the water to cisterns and tanks[62]. These hydraulic facilities are related to a local use for people living in the Royal Area and for the gardens that probably surrounded the monuments. Further away, the

[58] Boucharlat, De Schacht, Gondet 2012: 256, 278-279 have already suggested dual functions for the networks of ditches. See also the general remarks in Matthews, Fazeli Nashli 2022: 398 on the impact of intensive agricultural production on soil salinity during the early imperial period.
[59] Caiserman, Amiraslani, Dumas 2021.
[60] *ibid.*: 9.
[61] Boucharlat, De Schacht, Gondet 2012: 276-279.
[62] See Mousavi 2012 for a description and related bibliography concerning the drainage systems on the terrace, on the Kuh-e Rahmat slope, and in the Southern Quarter. Asadi 2018 has published a report on the recent excavation of the drainage system in the south part of the terrace.

water used for the settlements and the croplands were certainly supplied through the networks of ditches mapped at Persepolis Northwest and Bagh-e Firuzi. The origin of the water and the channels through which it was drained towards the networks of ditches is currently under discussion. Recent results on the reconstruction of the Pulvar river's dynamics during the Holocene provide a new frame to look deeper into this topic. Today the Pulvar river flows in the Persepolis region at some 11m under the level of the plain floor at Bagh-e Firuzi and at about 15m under near Istakhr (Fig. 6). Study of the thick alluvial deposits in the Pasargadae region, upstream from Persepolis, has demonstrated that the Pulvar riverbed was certainly less incised in the floor of the sedimentary basins during the Achaemenid period than it is today[63]. The absolute luminescence dating obtained on several Pulvar sedimentary sequences leads to the suggestion that the main phase of river incision began at the turn of the 1st millennium BC.[64]. Regarding the data obtained in the Pasargadae region, it is likely that the flow level of the Pulvar in the Persepolis plain was also higher during the Achaemenid period. Although this hypothesis needs to be confirmed by precise analysis of the Pulvar deposits in the Persepolis plain[65], it should be taken into consideration when considering water availability in the Persepolis Settled Zone. It could also provide elements of context relevant to discussion of the region's occupational history.

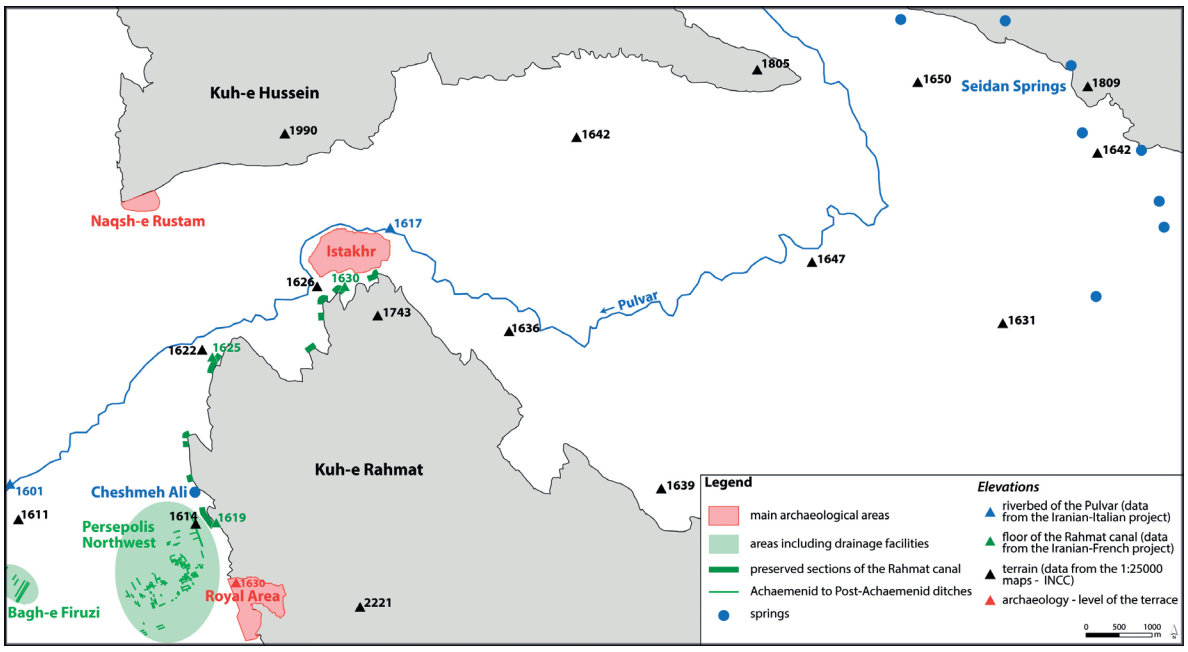

Fig. 6. Map of water resources and hydraulic installations in the Persepolis Settled Zone, with elevations of the terrain and some features related to the waterscape; CAD (S. Gondet).

It has been suggested that the drainage network in the Persepolis Northwest area was supplied with water via the open-air canal of which preserved sections, mainly rock-cut, are

[63] Rigot *et al.* 2022. This result allows one to refine previous geomorphological studies, suggesting that the Pulvar was already deeply incised during the Achaemenid period, cf. Kehl, Frechen, Skowronek 2009; Rigot 2010; De Schacht *et al.* 2012; Boucharlat, De Schacht, Gondet 2012: 277; Boucharlat 2020: 66-67. The hypothesis was also based also on the historic account of Quintus Curtius Rufus, *Alex*, 5.4.7 on the geography of Fars describing the Pulvar as "[…] sunk deep in the soil […]". But, as Duva 2018: 110 emphasizes, the river which he describes may probably not be the Pulvar.

[64] Rigot *et al.* 2022: 97.

[65] See the discussion in *ibid.*: 97-98 on the differences in results and hypotheses between earlier and most recent studies on changes in the Pulvar river during the Holocene. They could be linked to differences in river dynamics from one sedimentary basin to another.

known to run along the Kuh-e Rahmat foothills, from the site of Istakhr towards the terrace (Fig. 7)[66]. The geophysical survey carried out in the fields along the foothill and north of the terrace has not revealed a connection between the network of ditches and the canal. The construction of an asphalted road and the digging of *qanats* —wells and related underground aqueducts— probably of later date than the Achaemenid period, have certainly destroyed the remains of earlier hydraulic infrastructures[67]. The canal's relative dating can be surmised when considering the fact that upstream, next to the site of Istakhr, it is associated with an enigmatic construction made of finely cut ashlars probably dating to the Achaemenid period. As a matter of fact, the location and the route taken by the canal constitute the most robust evidence for its use in supplying the drainage facilities in the Persepolis Northwest area. It ran along and above the fields sprawling along the Kuh-e Rahmat foothills, and was thus suitable for providing water for irrigating them. The question of the water's origin (i.e. the canal's intake) must consider the canal's topographical location on the foothills, between 4m and 7m higher than level of the plain (Fig. 7). If one looks at the Pulvar's present morphology, one notices it is incised more than 10m deeper under the mean valley floor level, and it would seem unlikely that the canal was connected to the Pulvar. The analysis of old satellite imagery has led our team to suggest, therefore, that the water for the canal was drained from the complex of karstic springs complex, located 10km east of Istakhr near the modern village of Seidan (Fig. 6)[68].

Fig. 7. View from the west of a rock-cut section of the Kuh-e Rahmat canal located southwest of Istakhr. Note its bottom, lying several meters higher than the plain on the left (S. Gondet, spring 2005).

[66] Boucharlat, De Schacht, Gondet 2012: 276-279. Based on the analysis of maps published in the 19th century, Shobairi 2018: 153 and Boucharlat 2020: 65-67 suggest that the water would have been supplied by a canal connected to the Pulvar and running across the flat lands along the Kuh-e Rahmat. The canal, which has vanished today, diverted the water from the river, whose bed was incised, and raised it to the level of the floor of the plain. The canal corresponds to an irrigation scheme adapted to the hydrographic conditions of the 19th century. According to the data obtained on the changes in the Pulvar, the conditions would have been different during the Achaemenid period. The higher flow level would have permitted to build canals at higher topographic level. See discussion on modern irrigation scheme versus morphology of the Achaemenid networks in the plain of Pasargadae in Rigot *et al.* 2022: 91-92.

[67] Gondet, Mohammadkhani 2017: 21-22.

[68] Boucharlat, De Schacht, Gondet 2012: 277-278. Moradi-Jalal *et al.* 2010 make the same assumption.

Since the Pulvar was probably less incised in the Achaemenid period, the hypothesis of a canal intake site in the riverbed should nevertheless be reconsidered under the proviso that a diversion dam was erected across the river upstream from the Kuh-e Rahmat[69]. However, the role of the karstic springs for the Persepolis Settled Zone's water supply, from the Seidan area or closer to the terrace from Cheshmeh Ali (Fig. 6)[70], deserves our continued attention. A recent study on the karstic springs undertaken at a regional scale has demonstrated that they were an important source of fresh water during the entire Holocene[71]. The origin of the water for irrigating croplands in the Persepolis Settled Zone remains an open question, and the choice to use hydrological resources from the river or from the karstic springs would have depended on the quality and the amount of water available, as well as on its suitability as regards the soil conditions. The use of water with less mineral content would be more suitable for preventing the process of salinization. Further analysis of present-day water quality and of the sedimentary archives next to the springs could be useful for a more objective approach to these matters.

When compared to the Persepolis Northwest and Royal areas, Bagh-e Firuzi is closer to the Pulvar and to perennial water resources[72]. Water was certainly directly supplied to the area from the streambed, quite easily in fact since it would have been less incised. Further survey over the fields located between Bagh-e Firuzi and the Pulvar may provide data on the connection of the old drainage network with the river. The higher level of the Pulvar flow would also put the Firuzi area at a higher risk of frequent flooding[73]. The choice of the Kuh-e Rahmat foothills for a monumental new complex placed at a higher elevation and further away from the Pulvar might have also been aimed at protecting constructions from the river's overflow. Bagh-e Firuzi would have been regularly exposed to natural hazards[74] that could partly explain the shift of the main monumental core of Persepolis 3km to the east. Further studies of the Pulvar alluvial sequence in the Persepolis Settled Zone, particularly at Bagh-e Firuzi, could provide data on the frequency of flooding episodes in the region. Taking the environmental setting into consideration could contribute to the definition of the Persepolis' occupational history, i.e. the issues of the abandonment of Bagh-e Firuzi or the coexistence of two monumental complexes during the Achaemenid period.

6. Advantages and constraints of the setting of Persepolis: remarks and perspectives for future research

An overview of the Persepolis region's environmental setting shows that choice of location of the Achaemenid centre was probably partly driven by the project to develop intensive farming in the vicinity. The agrarian function of much of the lands of Parsa —alternately the Persepolis Settled Zone or the Persepolis region— is proven by the administrative archives dealing with arboriculture and by the archaeology revealing a loosely built-up landscape around the terrace complex, with large areas left available for croplands.

[69] Malekzadeh 2007 publishes evidence of several dams along the Pulvar valley, but they are not precisely located.

[70] On the possible role of Cheshmeh Ali in the water supply, see observations of Shobairi 2018: 153-154 and Boucharlat 2020: 65-66. The geophysical survey undertaken in the area has shown evidence of hydraulic installations connected to the spring, but these are certainly later than the Achaemenid period, cf. Gondet, Mohammadkhani 2017: 21-22.

[71] Djamali *et al.* 2018. See also Moradi-Jalal *et al.* 2010: 92-94 for estimation of the present outflow of springs near Seidan.

[72] Boucharlat 2020: 61.

[73] Saeidi Ghavi Andam *et al.* 2021: 601 record frequent floods during the Mid- to Late Elamite periods in the Shiraz basin.

[74] Along with possible flooding, Askari Chaverdi, Callieri, Matin 2017: 227-228 have published evidence of an earthquake event, which occurred in the earliest occupational phases of the building excavated at Tol-e Ajori.

The area of the Persepolis Settled Zone includes the region's most fertile lands, as well as various water resources. Paleoenvironmental studies have shown that during the Achaemenid period, the climate was rather favourable to the development of agriculture, and that water was more easily accessible than today since the flow level in streams was probably higher. This setting was also subject to many constraints. Soil properties, combined to semi-arid climatic conditions, warranted careful management of irrigation and efficient drainage, in order to secure crop yields and prevent the onset of salinization. The networks of ditches, revealed in the Persepolis Settled Zone or the Bagh-e Firuzi area, were suitable drainage facilities for optimal land-use during the Achaemenid period. The suitability of the Achaemenid land-use pattern is also demonstrated by its resilience, as it would have been maintained long after the fall of the empire[75]. Moreover, the Pulvar's hypothetical lower incision would have resulted in more frequent episodes of flooding, which could have affected the Early Achaemenid Bagh-e Firuzi cluster of monumental constructions located next to the riverbed. At the time of Darius, the choice to create the new terrace complex several kilometres further east, at an elevated position and at the edge of the floodplain, may have been partly driven by hydrographic conditions during the Achaemenid period.

The large-scale development project of Persepolis deserves to be analysed by considering its environmental setting. Soil conditions, water availability and quality, hydrography and past land-use patterns are all topics that would require further combined investigations of sedimentary archives and archaeological remains[76]. Judging from the variability of the environmental conditions at the scale of the Persepolis basin and, more broadly, from one sedimentary basin to another across the Fars, further pluridisciplinary studies should focus on the micro-regional scale of the Persepolis Settled Zone to gather data relevant on setting and impact of its development[77].

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[75] There is evidence of Post-Achaemenid occupation and continuity in land-use pattern in the Persepolis Settled Zone; see a review in Callieri, Askari Chaverdi 2013: 700-705. Recent data on the Post-Achaemenid occupation and land-use of the area are available in Askari Chaverdi, Callieri (eds.) 2017 and summarised in Gondet, Mohammadkhani, Askari Chaverdi 2018: 25-29; Askari Chaverdi, Callieri 2020: 182-183; Matthews, Fazeli Nashli 2022: 480. See also Henkelman 2021: 148 and Henkelman, Kaniuth, Mohammadkhani 2023: 242 on the resilience of the Persepolitan economy based on agricultural production. Palaeobotanical data in the Shiraz basin, published by Saeidi Ghavi Andam *et al.* 2021 place the Achaemenid period within a longer era of increasing farming activities extending from the Elamite to the Islamic period.

[76] "[…] we are only at the beginning of our understanding of the city of Pārsa […]" as observed by Askari Chaverdi, Callieri 2020: 199. See the presentation and the objectives goals of a recently launched project focusing on the Firuzi area in Colliva, Matin 2023.

[77] See discussions of Djamali *et al.* 2018: 1171; Rigot *et al.* 2022: 101; Kehl, Rafiei-Alavi, Alizadeh Ketek Lahijani 2023: 27 on the needs of further paleoenvironmental studies in Fars focusing on the local scale.

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THE VINEYARDS OF PARTHIAN ARSACID NISA (151–15 BCE): RENT FARMING AND CASH CROP AGRICULTURE FROM THE PERSPECTIVE OF THE OSTRACA

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ABSTRACT

This paper demonstrates that primarily private rent farmers oversaw wine production at Arsacid Old Nisa. The royal administration protected the frontier, resourced labor for irrigation, and collected the king's tribute from privately managed estates. Minimal interference in production, along with the introduction of a silver tax, compelled farmers to prioritize grapevines as cash crops. They engaged in commerce to fulfill their tax obligations. An unprecedented surge in productive activities reshaped the landscape of the Kopet-Dag mountain range. The primary evidence under examination is the Parthian ostraca from the royal storehouses in Old Nisa.

KEYWORDS

Ostraca, Cash crop, Storehouses, Arsacid Empire, Old Nisa, Turkmenistan.

RESUMEN

Este artículo demuestra que la producción de vino en la residencia real parta Arsácida en la antigua Nisa (la actual Asjabad, Turkmenistán) estaba supervisada principalmente por arrendatarios privados. La administración real protegía la frontera, proporcionaba mano de obra para la irrigación y recolectaba el tributo del rey de las fincas gestionadas de forma privada. La mínima interferencia en la producción, junto con la introducción de un impuesto en plata, obligaba a los agricultores a priorizar las vides como cultivos comerciales y a participar en el comercio para cumplir con sus obligaciones fiscales. Un aumento sin precedentes en las actividades productivas transformó el paisaje de la cordillera de Kopet-Dag. La principal evidencia bajo examen son los documentos en ostraca partos descubiertos en los almacenes reales de la antigua Nisa.

PALABRAS CLAVE

Ostraca, Cultivo comercial, Almacenes, Imperio Arsácida, Antigua Nisa, Turkmenistán.

1. Introduction

The Arsacid period sites, Old and New Nisa, are adjacent mounds in the Bagyr neighborhood of Ashgabat, western Turkmenistan, approximately 20 kilometers east of the Iranian border and Northern Khorasan province. This paper focuses on Old Nisa, as archaeological excavations there yielded most of the economic ostraca[1]. The transliteration of the Parthian terms in the ostraca are included in parentheses[2].

Archaeological and literary evidence, particularly the ostraca, shows that private rent farmers were the primary force in agricultural production, particularly of wine, that transformed the Nisa valley landscape. The Arsacid royal administration had minimal

[1] An ostracon (Greek: ὄστρακον) is a ceramic fragment bearing inscribed or inked writing. Interpreting the content hinges on discerning if it was applied before or after the vessel›s breakage, each situation serving distinct purposes. When writing was on a whole vessel, it often labeled its contents. Yet, on a broken potsherd, it served different purposes like receipts, lists of deposits, lexical exercises, letter communication, omens, and medical prescriptions.

[2] I would like to warmly thank my mentor, Dr. Mahnaz Moazami (Associate Research Scholar at Columbia University's Ehsan Yarshater Center for Iranian Studies), for reviewing the transliteration of the Parthian words.

involvement in production, and concentrated instead on establishing stable political, legal, and infrastructural frameworks to support and streamline production. An effective tribute system was designed to collect the king's share from privately managed vineyards (*raz*).

The Arsacid Empire's political framework maintained a single dynasty that ensured territorial integrity over most of its 400-year rule across western Central Asia, Iranian Plateau, and Mesopotamia (247 BCE–224 CE)[3]. The legal framework encompassed the role of the King of Kings as the supreme judge, settling local disputes and conflicts, and safeguarding contractual agreements. The infrastructural framework involved the administration's direct or indirect role in sourcing labor for irrigation. The kings incentivized local rulers and satraps through rewarding such productive endeavors.

The king's order to collect tribute in silver compelled farmers to participate in trade (see Part 4.2). Increased mobility and the expansion of irrigation canals into arable lands attracted a growing population and a large number of new settlements in the Kopet-Dag region.

Apart from archaeological evidence[4], the primary proof of an Arsacid administration at Old Nisa comes from the ostraca. In the archaeological excavation of the wine storage area in Old Nisa's Northern Complex, over 2700 ostraca were unearthed, containing 2758 texts in Parthian[5]. A smaller set of ostraca was also found in the Central Temple and Palace Complex, along with seven ostraca from New Nisa[6].

The wine storage rooms in Old Nisa had holes in the floor for large ceramic vessels locally called *khum*[7]. Most ostraca are labels for these jars, detailing their contents. A smaller collection of inscribed potsherds includes lists of deposits, primarily wine but not exclusively, lexical exercises by scribal apprentices[8], and even a loan document (see Part 5.3).

This paper begins by presenting the geographic characteristics of the Kopet-Dag mountain range (Part 2). Then, it discusses the cultural and political significance of Parthia and Arsacid Nisa (Part 3). The core of the paper centers on the administration of tribute (Part 4) and the management of wine production (Part 5).

2. Geography of Parthia and the Nisa Valley

> He [Arsaces I, 247–211 BCE] founded a city also, called Dara, in Mount Zapaortenon, of which the situation is such, that no place can be more secure or more pleasant; for it is so encircled with steep rocks, that the strength of its position needs no defenders; and such is the fertility of the adjacent soil, that it is stored with its own produce. Such too is the plenty of springs and wood, that it is amply supplied with streams of water, and abounds with all the pleasures of the chace (Justin, Book XLI. 5).

The passage above by the Roman author Justin (c. second century CE) about a city between Old Nisa and Merv vividly describes the biodiversity of the Kopet-Dag mountain

[3] The notion of a continuous and widespread civil war known as the "Parthian Dark Age" lacks support from archaeological and numismatic evidence (see Hauser 2005; Sinisi 2018).

[4] Archaeological excavations at Old Nisa began in the 1930s with A. Marushchenko. The 1950s saw major excavations at both New and Old Nisa, led by M. E. Masson's YuTAKE` team. Subsequent excavations mainly focused on Old Nisa (Invernizzi 2000). In the late 20th and early 21st centuries, collaborative Italian-Turkmen excavations were conducted. For a detailed overview, refer to the Parthia website operated by Chris Hopkins (https://www.parthia.com/nisa/default.htm).

[5] Diakonoff and Livshits 1976–2001. All the ostraca discussed in this paper are from this reference.

[6] Pilipko and Livshits 2004.

[7] In the local language, these rooms were known as *khumkhana*, meaning "house of khums" (Lippolis and Manassero 2015: 116).

[8] The exercises were to train scribes for record-keeping at the king's storehouses. One says that "Our lord has demanded x of wine, the keeper" (Diakonoff and Livshits 1976–2001, no. 2644a).

range. Old Nisa is situated in the eastern foothills of the Kopet-Dag. Instead of being seen as a barrier between regions, this range forms an interconnected ecoregion encompassing a vast territory with distinctive fauna and flora[9].

Nevertheless, settlements in the Kopet-Dag range, positioned on the western side of the Karakum Desert, were significantly influenced by water insecurity. In much of this area, conditions for rain-fed or dry farming were unsuitable, emphasizing the necessity of irrigation to sustain agriculture beyond a small scale[10].

During the Iron Age (tenth–sixth centuries BCE) and Achaemenid period (550–330 BCE), new settlements arose in the Kopet-Dag range, thanks to increased irrigation canals, wells, and the introduction of qanats[11]. By the Arsacid period, irrigation systems in this region were highly advanced. Polybius (ca. 200–118 BCE) notes that shortly after the Arsacid kingdom's establishment in Parthia and its initial westward expansion into central Iran in the mid-third century BCE, Arsaces II (211–191 BCE) was defeated by the Seleucid King Antiochus III (223–187 BCE) near the new Arsacid capital, Hecatompylos (near modern Damghan). Fleeing east to Hyrcania and then Parthia, Arsaces tried to deter the pursuing Seleucid army by destroying "underground channels." These qanats had been extensively developed due to an earlier Achaemenid policy that granted land for five generations to those who reclaimed it through irrigation[12].

The account of Arsaces II's qanat destruction does not depict the entirety of the Arsacid period, especially after the empire's formation in the mid-second century BCE. While a few sites were established under Alexander and the Seleucids, archaeological evidence reveal a significant surge in settlements and irrigation activities under the Arsacids, during the late second to early first centuries BCE, in western Central Asia (see below), the Iranian Plateau[13], and Mesopotamia[14].

During archaeological fieldwork in southwestern Turkmenistan in the 1980s and 1990s, more than 220 sites dating from the late third century BCE onwards were uncovered. These sites developed into fully-developed settlements with irrigation and cultivation by the end of the first century BCE, persisting continuously until the Sasanian period (224–651 CE)[15]. This timeframe aligns with the establishment of firm Arsacid rule in the region[16].

[9] The Kopet-Dag woodlands and forest steppe exhibit remarkable biodiversity across altitudes, from semi-arid, low hills at 300 meters (980 ft.) to rocky peaks of 2,800 meters (9,200 ft.). Habitats encompass juniper-covered slopes, montane grasslands, and fertile plains and oases along rivers (https://www.oneearth.org/ecoregions/kopet-dag-woodlands-and-forest-steppe/).

[10] The need for extensive irrigation management increased as the region transitioned from the Bronze Age to the Iron Age and the historical period. This was due to both encroaching aeolian sand and changes in river courses, resulting in reduced water availability and a consequent decrease in arable land (Lhuillier and Mashkour 2017).

[11] Wu *et al.* 2015: 107.

[12] Plb. 10.28.

[13] For Khorasan and Gorgan plain in northeast Iran, see Rante 2015, Mirzaye et al. 2020. For Sistan in the east, see Josi and Mehr Afarin 2014. For northern and central Iran, see Miles 1938, Bivar 1982. For the Susiana plain in the southwest, see Wenke 1981, Alizadeh 1985, Potts 2016: 348-406.

[14] See Keall 1975, Kawami 1982, Reade 1998, Potts 2011, Dirven 2013, Campbell *et al.* 2019.

[15] Gaibov *et al.* 1995: 273.

[16] Besides Nisa, other fortified settlements with administrative and religious functions emerged in western Turkmenistan and northeastern Iran dated to the Arsacid period. Notably, Gobekli-depe in the Merv oasis (Koshelenko and Nikitin 1991: 108-121), Viranshahr in North Khorasan province of Iran ("Archaeologists hail find of Parthian administrative center in northeast Iran," *Tehran Times*), Mansur-depe, located 5 km west of Old Nisa (Gaibov and Koshelenko 2012: 161-164), Ak-depe, about 100 km east of Old Nisa and 20 km west of the Dargaz plain in Iranian Khorasan (Gaibov and Koshelenko 2012: 164-166), and Mele Hairam south of Merv in the Serakhs oasis (Kaim 2004). Noteworthy evidence of heightened irrigation activities during this period can be observed in Merv (Loginov and Nikitin 1996), Serakhs (Kaim 2008: 134), Tedjen oases, and in the Akhal region surrounding Old Nisa and the Dargaz plain in Iran. For a comprehensive survey of settlement expansion

3. Significance of Parthia and Nisa to the Arsacid Dynasty

The historical and cultural significance of Parthia in the Achaemenid period is evident in the Behistun inscription of Darius I (522–486 BCE)[17], and Arian's *Anabasis*[18]. The precise geographical extent of Parthia is not entirely clear, as its boundaries shifted over time. However, there is consensus that the core of Parthia, prior to its westward expansion with the Arsacids, encompassed Iranian Khorasan and the foothill plains of the Kopet-Dag in western Turkmenistan, north of the Merv oases (ancient Margiana) and west of the Karakum Desert[19].

The Parthian language is closely related to Persian, and these two Middle Iranian languages are mutually intelligible. Parthian was primarily spoken in the area stretching from northwest to northeast Iran and southwestern Turkmenistan, while Persian was spoken in southern Iran, specifically around Pars (province of Fars in modern Iran). The ostraca documents found at Old and New Nisa are in Parthian, given Nisa's role as an administrative and religious center of the Parthian Arsacid dynasty[20].

Parthia was significant as both the sacred homeland of the Arsacid dynasty and a vital border and commercial region with substantial agricultural and craft production. Nisa's strategic importance in Parthia, on the northeastern frontier of the Arsacid empire, is evident through the presence of a royal *marzpān* —a military commander responsible for border provinces[21]—.

Mithradatkirt[22], also known as Nisa and Parthaunisa[23], was not the location of Arsaces I's coronation and the establishment of his dynasty[24]. Its prominence emerged a century later during the reign of Mithradates I (171–138 BCE)[25]. This period, in the mid-second century BCE, marked the solidification of the dynasty's position and its transformation into an empire.

during this period in western Turkmenistan and northeast Iran, see Olbrycht 2021: 257-293.

[17] In the beginning of Darius I's reign, widespread rebellions were severely oppressed. At the time, his father Hystaspes ruled over Parthia and Hyrcania when the rebellion broke out, which was quashed after Darius sent troops to his aid (DB 2.92-8).

[18] In numerous cases, Arrian mentions Phrataphernes, the former commander of Darius III's cavalry and the viceroy of Hyrcania and Parthia, who switched allegiance to Alexander and played a crucial role in his success in Media and Parthia. He and his sons formed military units on par with Macedonian regiments in Alexander's army (Arr. An. 3.8, 4.6, 6.27).

[19] Sherwin-White and Kuhrt 1993, 84–85. The significant rise in trade between northeast Iran and western Turkmenistan at the beginning of the Arsacid period is well-documented through ceramic analyses of both regions (see Hansman and Stronach 1970: 58; Puschnigg et al. 2019: 37-38).

[20] Few Classical references have ignited a heated scholarly debate on the origins of Arsaces (see Hauser 2005 for opposing views). This paper contends that the biodiversity within the Kopet Dag range accommodated both mobile and settled populations, fostering interactions beyond Parthia and Margiana in Central Asia. Whether Arsaces hailed from a sedentary or nomadic background, or spoke a western Iranian language (Parthian or Persian) or an eastern Iranian language (Scythian, Bactrian, or Sogdian), claiming an Achaemenid or Iranian heritage was available to him. However, noteworthy is that all Arsacid kings bore western Iranian names, and the dynasty maintained a close connection with Parthia and the Parthian language (Skjærvø 2006). The importance of the Parthian language endured beyond the Arsacids, notably in the northern regions of the Iranian plateau, spanning from Khorasan to Kurdistan. An inscription on a rock relief from the early Sasanian period in southern Khorasan (near Birjand) references a satrap in Parthian (Henning 1953: 133). Additionally, the Paikuli inscription by Sasanian King Narseh (293–303 CE) in Iraqi Kurdistan is in both Middle Persian and Parthian (Cereti and Terribili 2014).

[21] Nos. 1624; 1787; 2301; 2303.

[22] According to Nisa ostraca (nos. 681; 1693; 2624).

[23] According to Isidore of Charax (see next footnote).

[24] Isidore of Charax's "Parthian Stations", dated to the first century BCE, records that at a city called Asaac in the west of Nisa (modern Iranian Khorasan), "Arsaces was first proclaimed king, and an everlasting fire is guarded there" (Parthian Stations, 11-12).

[25] The fortified site of New Nisa was flourishing for some time before Mithradates I founded or re-founded Old Nisa before the middle of the second century BCE (Lippolis 2014: 2).

Old Nisa served as an early royal residence and administrative center for the Arsacid dynasty, with its significance lasting until abandonment in the second century CE, a few decades before the fall of the Arsacids[26].

In the king's frequent absence, the fortress was under the control of the royal satrap responsible for representing the king's interests, especially in collecting tribute. Evidence of Old Nisa's political and economic importance in Parthia is found in numerous mentions of satraps (*ẖštrp, xšahrap*), who oversaw tribute collection and transport to royal storehouses. Among these recorded satraps, Kōfīzāt stands out. This name appears more frequently than any other satraps in the Nisa ostraca, but within a relatively short period. He is mentioned in 18 ostraca dated to years between 85 and 80 BCE, and four undated ones, all from the reign of Gotarzes I (91–80 BCE)[27]. He is noted for supervising wine tribute collection and occasionally personally delivering wine to the Nisa storehouse.

At Behistun in western Iran is an inscription accompanying a rock relief depicting Mithradates II (124-91 BCE) in profile, with a raised hand, standing alone and facing left towards four other profiled figures, likely his chosen satraps. In the inscription, Mithradates is titled as the "Great King", and his son and heir, Gotarzes, holds the unique title of "satrap of satraps". Among the listed satraps alongside Gotarzes, one is named Kophasates[28].

It is likely that the satrap named Kōfīzāt in the Nisa ostraca is the same individual referred to as Kophasates in the Behistun inscription[29]. This official continued to serve as a satrap under Gotarzes I. He was assigned to Nisa to represent Gotarzes' interests, as the king often resided in Media and Babylonia, on the opposite side of the empire. Historical records from the Achaemenid period show that a satrap's influence could extend beyond his designated territory, and his jurisdiction might change during the course of his career[30].

4. Administration of Royal Tribute at Nisa

Old Nisa has the layout of a fortified citadel with both palaces and temples, which also functioned as political and administrative hub[31]. Several storage rooms in the northern and central portions of the citadel served to hold the collected tribute. Most of the Nisa ostraca were discovered in the Northern Complex[32].

Some ostraca lack dates. On others, the dates have become illegible over time. The earliest dated text is from 151 BCE during Mithradates I's reign, while the latest is from 15 BCE during Phraates IV's reign (38–2 BCE)[33]. Despite chronological gaps in the documents, a trend becomes evident in the phrasing of records dated to 90 BCE onwards. These documents show a notable increase in information, often including the Arsacid era date, collecting agents' details, wine measured by the *mari* capacity measure, the land category for taxation, and the vineyard or estate's name. Occasionally, the ostraca record wine quality and its designated

[26] Old and New Nisa remained abandoned until between 8th and 15th century when the Kopet Dag mountain range. There may have been a Sasanian occupation at New Nisa in the 5th century, but new massive defense walls were built around New Nisa in the Islamic era between 8th and 9th centuries (Lippolis and Messina 2015: 39).

[27] Nos. 996; 997; 998; 999; 1000; 1002; 1003; 1004; 1005; 1006; 1007; 1023; 1038; 1039; 1040; 1041; 1042; 1050; 1051; 1052; 1053; 2584.

[28] For the relief, see Kawami 1987: 35-37. For the inscription, see Herzfeld 1920: 35-40.

[29] Hackl et al. 2010: 507.

[30] For the career of Satrap Arshama, see Tuplin and Ma 2020. For the career of Satrap Mazaeus, see Heckel 2006.

[31] The architecture of Old Nisa exhibits a fusion of diverse styles, echoing the varied cultural influences permeating the region. Within the citadel, the royal palaces were elaborate constructs made of mud-bricks, embellished with intricate wall paintings, gems, and stucco decorations (see Lippolis 2009).

[32] Lippolis and Manassero 2015: 116.

[33] No. 451.

purpose, and in rare cases, the tribute payer's name. This standardized formula remained consistent for at least seventy years.

The ostraca reveal that the Arsacid kings owned the collected tribute at Nisa, not a local king or satrap. All documents are dated according to the Arsacid era[34]. There are mentions to the temple or shrine of King Phraates I (176–171 BCE) or Phraates II (138–127 BCE)[35], the accession of three Arsacid kings[36], and various administrative and military roles closely linked to royal administration tasked with collecting tribute (see below).

The only unit of measure found on the ostraca is the *mari*[37], and the dimensions of the jars show a remarkable degree of consistency[38]. These factors show the presence of a central authority responsible for establishing and guarding this weight standard and jar capacity to ensure accurate cording of tribute.

A well-preserved jar, found in the excavation of room No. 1, is evidence of the Arsacid King as the authority presiding over units of measure. This jar was found on the south of the wine-storage area within the Northern Complex. It was buried deeper than others and had undergone multiple repairs over time; reinforced with lead staples.

The jar bears an engraved Parthian inscription, unlike the inked texts on other ostraca. The inscription consists of a single word, *Aršak* (Arsaces), the throne name of the Arsacid kings. Igor Diakonoff and Vladimir Livshits proposed that this "Royal jar" served as a standard for verifying the capacities of other vessels. They also suggest that the original inscription on the jar may have been **'rsk MLK* (King Arsaces)[39]. However, *Aršak* alone may have constituted the complete inscription, because this title was exclusively used for the Arsacid Kings. The jar served as the king's official standard, and the collected tribute belonged to him.

The collection and transportation of wine tribute likely followed a standardized procedure. Wine porters (*mdwbry, mad(u)bar*) were responsible for gathering tribute at agricultural estates and delivering it to the royal storehouse at Old Nisa. The ostraca frequently note that the wine was brought "under the authority of"[40] various officials, mainly the satrap, occasionally the fortress commanders (*dyzpty, dizpat*)[41], and rarely military commanders overseeing the border (*mrzwpn, marzpān*)[42]. This formula likely indicates the official in charge of the citadel at the time of a particular tribute deposit. Military unit commanders

[34] Unlike the Achaemenids, Sasanians, and Roman emperors who practiced regnal calendars, the Seleucids first and then the Arsacids adopted the system of continuous year numbering. Seleucid era began with coronation of Seleucus I (312/11–281 BCE), and Arsacid era with the coronation of Arsaces I (247–211 BCE). For the Seleucid era, see Strootman 2015. For the Arsacid era and its centennial, the era of the Saka King Azes I (c. 48/47 BCE – 25 BCE), see Falk and Bennett 2009: 209-211.

[35] "*MN 'yzny prhtk(n)*, from the temple Frahātakān" (No. 1640). This undated text is on the internal surface of an ostracon. Another text is on the external surface (No. 2571) which is dated to 95 BCE. The term āyazan is regularly translated as temple and used for other temples on site, including the temple of Nana (No. 1636-1639).

[36] Gotarzes I (No. 2638, 91 BCE), Sinacrutes (No. 2639, 78 BCE), and Phraates III (No. 2640, 68 BCE).

[37] Both the Elamite *marriš*, and Greek *maris*, are probably loanwords from Old Persian, but the original Iranian world remains unidentified (Hallock 1969: 2). 1 *mari* at Nisa was equal to about 10 liters (Diakonoff and Livshits 1976–2001: 197).

[38] In general, the average capacity of these large, pear-shaped containers, which would frequently measure 120-130 cm in height and up to 80 cm in diameter, could be as much as 280-300 litters (Lippolis and Manassero 2015: 129-130).

[39] Diakonoff and Livshits 1976–2001: 181.

[40] *LYD*. Diakonoff and Livshits translated this Aramaic term as "which came through". On the other hand, Christopher Brunner, by relaying on the use of the term in the Aramaic ritual tablets found at Achaemenid Persepolis, argues that this term should be translated as "under the authority of" in the Parthian language (Brunner 1978: 133).

[41] For instance, no. 2573.

[42] For instance, no. 1624.

(*tgmdr, tagmadār*), and cavalry officers (*'sppty, asppat*) are also mentioned, but they donated wine personally from their own lands and were not in charge of the fortress (see Part 5.2)[43].

A consistent figure in these records, apart from the satrap, is the wine porter, also referred to as wine-factor[44], wine-bearer[45], and wine merchant[46]. Within the Arsacid administration, the rank of the wine porter was likely similar to or slightly higher than that of a scribe or sealer[47], possibly akin to a tax collector.

The records often mention the residences of these wine porters, which were typically villages. It appears that they did not collect taxes from the estates they lived on, which suggests the existence of an administrative regulation related to tax districts[48]. An undated ostracon lists over nine wine porters who answered to the satrap and fortress commanders and who were assigned to more than nine different vineyards in five different estates[49]. Wine porters may also have had a role in trading surplus wine for silver (see Part 5.3).

The evidence on sealing practices indicates that the process of securing the jars was simple and straightforward[50], but the ostraca reveal that the storage and categorization of goods were rather complex tasks, involving multiple functionaries. These functionaries included sealing masters (*mwdrwrt, muhrwart*), treasurers (*gnzbr, ganzbar*), storehouse chiefs (*ḥwrybr, xwarībar*), head scribes (*dpyrpty, dipīrpat*), accountants (*'ḥmrkr, ahmārkar*), and keepers (*'wpdyt, updēt*). The ostraca also occasionally provide indications of the quality of the stored wine[51].

The storehouse staff maintained transparency by conducting regular inspections and addressing initial oversights[52]. In certain instances, a single ostracon bears two labels, often in palimpsest, indicating the reuse of the jar for two different sets of wine or two simultaneous deliveries in the same jar[53]. Additionally, empty jars were labeled so as to indicate their former contents. Some held inferior quality wine, while others were labeled as "surplus." Furthermore, when a storage room collapsed or was destroyed, retrieved jars were labeled "retrieved from a collapsed building."

There has been some disagreement over the translation of the term *xwarībar*, which appears almost exclusively in plurals in the phrase *'phršt hwrybrn* in the Nisa ostraca. Diakonoff and Livshits translate *xwarībar* as "cupbearer," and the phrase as "left by the cupbearers", but do not provide an explanation of the office's responsibilities[54]. Andrei Bader accepts this translation and suggests that the primary role of this office was to check the quality

[43] For fortress commanders, see no. 2580. For cavalry officers, see no. 1653.
[44] Diakonoff and Livshits 1976–2001.
[45] Brunner 1978: 134.
[46] Hackl et al. 2010: 520.
[47] This is indicated by instances where the latter officials occasionally carried out deliveries on behalf of the wine porter (nos. 14, 166, 209, 258, 455, 604, 810, 812-13, 858).
[48] Brunner 1978: 134.
[49] No. 2625.
[50] Besides sealing the jars, the practice of sealing doors is well known in the Square House and in general is obvious for the most important rooms of a storehouse or treasury at Nisa (Lippolis 2010: 40).
[51] There are references to "old wine", "new wine", wine turned vinegary ("gone sour"), wine "newly fit to drink", "inferior" wine, "fortified wine", and "colorless" wine (white or rosé?) (Lippolis and Manassero 2015: 130).
[52] Two jar labels, one dated 78 BCE (no. 2314) and the other undated (no. 2324), note the wine's weight and quality, mentioning that these jars "had not been previously taken into account". This practice was consistent regardless of the stored goods' value; the first text refers to quality wine "dispatched by the store-house chiefs", while the second jar contained vinegar.
[53] For instance, nos. 1541; 1542.
[54] Diakonoff and Livshits 1976–2001. This term is also accepted by Lippolis and Manassero (2015: 130).

of the wine and bring it to the royal table[55]. This translation suggests that a portion of the wine tribute was used in royal banquets or ritual celebrations, and the *xwarībar* played a role in ensuring its quality. This interpretation may explain why this office appears infrequently on the labels, typically authenticating wine reserved for these official events.

On the other hand, it is possible that the term and the office have a much broader meaning. In Middle Iranian languages (Middle Persian and Parthian), the word *xwar* means food, drink, or provisions more broadly[56]. Christopher Brunner translates the term *xwarībar* as "chief of storehouse" or "steward", and the phrase as "dispatched by the stewards". He explains that the chiefs of storehouses would oversee the delivery, weighing, and labeling of the wine tribute, as well as ensuring its quality for presentation to the royal table[57].

This part of the article demonstrates that all the offices attested in the Nisa ostraca were involved in the collection and management of the king's tribute, but not in the production of wine and other goods in the region. Subsequent sections of this article detail the categories of tribute and the functions of storehouses at Old Nisa. This part helps explain the influence of the royal administration in agricultural production, even though these activities were primarily managed by private rent farmers.

4.1. Types of Storehouses and Categories of Tribute

Tribute collection was the main domain in which the King depended on his satrap and military officers. These ostraca, along with archaeological excavations in the Northern and Central Complexes, reveal multiple storerooms in various buildings. An undated ostracon mentions that in "the fortress of Mithradatkirt", there were "wine-stores" called "new" and "Second", housing jars of wine and vinegar[58].

The annual stored goods calculation may have been done separately for each storeroom. One ostracon from 72 BCE notes that the total "old wine" at a single wine-store that year was 6,351 *mari*, roughly 22 jars based on Nisa's wine jar capacity. A single Nisa storeroom could hold about this number of jars[59], although the ostracon might only account for "old wine" at that specific store, not all of its contents.

The ostraca reveal that wine storehouses held various items beyond wine and vinegar, including raisins, sesame seeds, flax seeds, oil, flour, barley, and wheat. These goods were primarily stored in separate storerooms but occasionally placed in the wine storerooms for specific reasons[60].

The Nisa ostraca mention four types of wine tribute: *patbāžīk (ptbzyk)*, *uzbari ('wzbry)*, *pt(y)syk,* and *sygpr(y)*. *Patbāžīk*, from Old Persian *bāži-*, encompasses various tribute types in Parthian, including goods and precious metals for the king. *Uzbari*, most frequently mentioned, is a wine tribute collected from vineyards as rent share. Diakonoff and Livshits translate *pt(y)syk* and *sygpr(y)* as "dues", likely referring to specific land tax categories or taxes collected in wine for conversion[61].

While Diakonoff and Livshits do not provide a translation for the word *Uzbari*, Brunner suggests it should be translated as "share-rented". He cites *uz-bāra ('zb'r)* in 7-8th century

[55] Bader 1996: 267.
[56] MacKenzie 1971: 95.
[57] Brunner 1978: 134.
[58] No. 2624.
[59] For instance, storage room 33 in the South-Western Building could fit about 23 jars (see Lippolis and Manassero 2015, fig. 14).
[60] For instance, an ostracon (no. 2595) from 84 BCE provides a list of flour deposits that were "accounted for at the wine-store".
[61] Over thirty texts refer to wine being collected "as dues". For instance, nos. 1554; 606.

Sogdian Mount Mug documents (Tajikistan) as "produce-payment" for royal-owned land farmed by private individuals[62]. Share renting is discussed in detail in Part 5.2.

4.2. Silver Tax at Nisa

Jar labels were not the sole means of record-keeping at Nisa. Parchments (writing material made from animal skin), though none survived, were likely used, especially for recording valuable items. The Square House adjacent to the wine storehouses, potentially served as a treasury[63]. It is also possible that there were multiple treasuries on-site. Regardless, the ostraca show these treasuries did not exclusively hold precious items.

An undated ostracon provides crucial evidence about silver tax collection at Nisa. The label states the jar held wine "on account of silver tax"[64] brought by Frahāk the keeper[65]. In other ostraca, keepers are often mentioned in relation to wine owed by the fortress commanders[66]. Whether the military officers owed the silver tax remains uncertain, but the keeper's role is tied to the importance of a specific tribute.

Why is there no other mention of silver tax on Nisa ostraca, when, at earlier Idumaean sites of late Achaemenid and early Hellenistic date in the southern Levant[67], and at Greco-Bactrian Ai Khanoum in northern Afghanistan[68], silver was frequently collected in ceramic jars, and labeled like other goods? Does the single reference to silver tax on a Nisa ostracon imply less frequent collection of this tribute at this site?

The language of the ostracon above suggests that the silver tax and the payment of wine in lieu of silver tax were common. Keeping archaeological and numismatic evidence in mind, silver was more prevalent in this region during the Arsacid period than in earlier periods[69]. The near absence of mentions of silver tax on the ostraca suggests that the collection of silver tribute at Nisa was handled separately from the collection of tribute in kind. Silver tribute was not stored in jars.

Even after the silver tax was instituted by the Arsacid administration, the collection of tribute in kind was more common. Due to the difficulty of acquiring silver outside of large urban centers, vineyard owners and rent farmers sometimes offered wine instead of the silver tax, which the royal treasury accepted.

The label of silver tax substitute possibly reminded the treasurer or chief of the wine storehouse to convert the wine jar into silver for the king. There are 22 texts that mention wine deliveries "to the royal treasury" (*'L GNZ' MLK'*)[70]. Possibly, the treasury accepted wine as a silver tax substitute. An ostracon dated to 72 BCE notes that the total "new wine" delivered to a royal treasury that year was 2,933 *mari*[71], roughly 10 jars.

[62] Brunner 1978: 133. *Uzbāra* has also been translated as "crown land" (Pirngruber 2017: 48). The Georgian *zvari*, "large vineyard, wine-growing estate" is a direct loan from Sasanian Parthian **(i)zβar,* going back to Arsacid Parthian *uzbari* (Bielmeier 2008: 295).

[63] Over thirty silver coins of Seleucid, Bactrian, Arsacid, Sogdian, and Pontic (the coinage of Amisos) origins were found in the Square Building, along with fragments of silver vessels, objects fashioned of cloth-of-gold, small pieces of sculpture, marble sculpture of Greek origin, and richly carved ivory rhytons (Pilipko 1994: 103).

[64] *HLP KSP 'psyky*. Diakonoff and Livhits translate KSP (*asēm*) as "money in cash" (Diakonoff and Livshits 1977-2001: 178), while Oktor Skjærvø translates it as "silver", particularly in the case of objects (Skjærvø 1997: 94).

[65] No. 2682.

[66] For instance, no. 1514.

[67] Porten and Yardeni 2020: 157-163.

[68] Rapin and Grenet 1983.

[69] Sinisi 2018.

[70] Nos. 1526-1540.

[71] No. 2576.

The ostracon linking wine to the silver tax suggests categorization of storehouses, each with a specialized administrator. The importance of enforcing the silver tax, its financial implications, its association with the surplus mentioned on some ostraca, and the potential role of wine porters as trade intermediaries will be discussed in Part 5.3.

5. Agricultural Production: State or Private Management?

This part aims to demonstrate that, in addition to taxation, the royal administration played a role in resourcing and managing labor for irrigation. The system of private tenure rent farming in agricultural estates entailed little administrative costs for the king. A focus on grapevines as cash crops may have been the farmers' choice. The desirability of wine enabled easier conversion into silver in order to fulfill the silver tax obligation to the king. Additionally, the royal staff and private farmers generated profits selling surplus wine in the market.

5.1. Irrigation

In addition to archaeological evidence of increased irrigation[72], Nisa ostraca frequently mention collection of wine tribute from "newly cultivated lands"; some explicitly note an irrigation canal named "trans-montane"[73]. The construction of this canal, which substantially altered the landscape of the region, required a large labor force and regular upkeep under strict control. This was crucial for sustaining the newly established towns and villages. Existing evidence suggests the potential involvement of the imperial administration. The goal of managing irrigation was to stimulate agricultural output in the region to secure a reliable income for the king and his staff.

Apart from the existence of an irrigation canal and newly cultivated lands near Nisa, the current evidence does not definitively determine whether the royal administration managed irrigation in this region. However, examining other parts of the Arsacid empire, Susiana in southwest Iran and Babylonia in central Mesopotamia, although conjectural, may be revealing. This examination shows that while private entrepreneurial families and local customs may have led inhabitants to voluntarily participate in building and repairing the irrigation systems, the King and his agents acted as enforcers who compelled people to engage in this arduous labor.

Concurrently with the final phase of ostraca documents at Old Nisa, significant events unfolded in the Susiana plain of southwest Iran (Elam or Gr: Elymais). The local Kamnaskirid dynasty, who had served as Arsacid satraps since the reign of Mithradates I[74], were ousted from Susiana by Phraates IV (37–2 BCE)[75]. His army occupied Susa and briefly renamed the city and its Greek *Polis* Seleucia on the Eulaeus[76], to Phraata[77]. Geoarchaeological evidence indicates that the canal system that irrigated the entire Susiana fluvial plain was fully established at this time. It remained largely unaltered throughout the Arsacid and subsequent Sasanian periods[78].

[72] In recent years the question of the water supply connected to the presence –inside Old Nisa– of the sub-circular depressions to the east of the central complex (water reservoirs?) has been reconsidered by the Italian expedition (Lippolis 2010: p3, f. 1).
[73] No. 1621.
[74] For Babylonian and Numismatic evidence, see Dąbrowa 2006: 39.
[75] The Kamnaskirid dynasty continued to operate at Seleucia on the Hedyphon (Behbehan) before being fully dissolved in a branch of the Arsacid house that came to rule over Susa later (Sarbisheh *et al.* 2022: 56).
[76] The letter of Artabanus II to Seleucia on the Eulaeus dated to 21 CE shows that *Polis* continued to exist after Phraates IV (Welles 1979).
[77] Le Rider 1965: 253.
[78] Soroush 2020: 76-77.

The satrapal system continued in Susiana, but Phraates chose a Parthian named Tiridates (Tīridāt), not an Elymaean, to assume the position. Toward the end of Phraates' reign, two Greek inscriptions were commissioned at Susa, one dated to 9 BCE and one after his death in 1 CE, describing irrigation projects in the region. The inscriptions mention that the royal court honored local leaders who revitalized a Susiana river or artificial stream named Gondeisos. In the inscription dated 9 BCE, Phraates IV commends a "noble" named Zamaspes (Zāmāsp), chosen by Strategos (satrap) Tiridates, for his role in excavating streams and clearing blockages from the dried-up river[79].

The 1 CE inscription, a decade later, is another commemorative that names King Phraates IV. The inscription mentions that it was attached to a bronze statue of Zamaspes in Susa. It reports that Zamaspes was promoted to satrap for his noteworthy irrigation projects. His promotion was not solely because he was a "reputable companion" of the king, but more importantly, due to his popularity among Susa's people for his services. The inscription explicitly acknowledges that the statue, which honored Zamaspes, was constructed and erected by Susa's "inhabitants and guardians"[80].

The Zamaspes case in Susa exemplifies the intricate relationship between satrapal and royal engagement in infrastructural development during in the Arsacid Empire. Initiative, planning, and execution were predominantly local. While the imperial court did not directly fund these endeavors, the incentives from the royal administration in appointing and promoting worthy officials played a pivotal role in the success of these local initiatives.

Evidence from Babylonia, where Seleucia-Ctesiphon served as the seat of the Arsacid kings, shows a direct royal role in enforcing irrigation labor. While hired laborers and slaves were available[81], the king regularly imposed *corvée* duties on Babylonian inhabitants, especially for canal maintenance. An entry from the Astronomical Diaries dated to 94 BCE, under Gotarzes I, reports of "a heavy obligation" where the king's order did not exclude pregnant women from digging a canal above Seleucia on the Euphrates (Zeguma). The text specifies that such orders had been issued before and were recurrent affairs[82].

Babylonian temple officials, appointed by the king, played a vital role in enforcing these duties. The same entry from the Diaries notes that the names of the Babylonians assigned to irrigation labor were read from a parchment letter from the king at the House of Council by the head administrator of the major temple in Babylon, Esagila[83].

5.2. Private Agriculture: Rent Farming at Nisa

From the king's perspective, he was the landlord of all properties, by the right of conquest, and had preemption over all resources, by the right of first refusal[84]. Then, all his subjects owed him rent or tribute for his protection. Royal agents were tasked with collecting tribute and managing canal systems, but overseeing the cultivation of farmlands

[79] Potts 1989: 328.

[80] Potts 1989: 329.

[81] In the Rahimesu archives, there are mentions of "hired laborers" who were paid in shekels of silver (CT 49, 152 (22.VI.218 = 20.IX.94 BC). Three child slaves consecration, dated to the reign of Phraates II (138–127 BCE), were donated to the temple of Uruk to participate "in the clay works of the temples of the gods of Uruk" (MLC 2153; A 3689; A 3690).

[82] No. -93A: Rev' 11-13; 22-27.

[83] No. -93A: Rev' 11-13; 22-27.

[84] This should not be a surprise, as in contemporary times, the US government is given priority access to resources, and if a particular piece of land were to be reclaimed, the private owner must comply in all instances, as per US law (*Environment and Natural Resources Division | History of the Federal Use of Eminent Domain [justice.gov]*).

was not their responsibility. While the king's demand for tribute from his property stimulated agricultural production, particularly in winemaking, this production was primarily managed by private families.

More than 48 villages, estates, and vineyards mentioned in the ostraca were likely situated in the Nisa valley and immediate surroundings, potentially beneath the modern city of Ashgabad. A curious instance is the recurring mention of "Sakān", found in at least 38 texts, which had numerous vineyards that paid wine tribute. Wine porters from Sakān transported wine not just from there but more frequently from other places. While it is unclear if Sakān specifically denotes the kingdom (or satrapy) of Sakastan, which is over 500 km to the south, a more plausible interpretation is that it refers to an agricultural estate in the Nisa valley. Similarly, the vineyard of Hindūkān probably does not refer to India or Bactria[85].

Some agricultural estates might have been granted to soldiers who then sublet them to entrepreneurial families[86]. These powerful families also played a significant role in sourcing labor from their communities for the construction of secondary canals to existing ones. While some of the lands were directly rented out by palace officials, others were possibly owned by these families. The use of the phrase *MN NPŠH* "out of his own estate/house" in some of the ostraca indicates that the land tax designated as *uzabri* was owed by various persons with no official status[87].

Landowners commonly rented out their vineyards through long-term, and even inter-generational contracts, following a tenure system found in other parts of the empire. The Avroman parchments, which consist of three vineyard contracts, were discovered in northwest Iran (ancient Media), adjacent to Mesopotamia. The first two documents date contemporaneously to the Nisa ostraca. Documents I and II, written in Greek and dated to 88/87 BCE and 22/21 BCE respectively, are rental agreements between private individuals. In these contracts, the renters secured the right to cultivate the vineyard by paying an advance in coined silver[88]. However, they remained obligated to the original owner by providing a portion of the annual harvest. Document III, written in Parthian and dated to 53 CE, records the outright sale of half a vineyard between two partners or brothers[89].

An ostracon from Nisa dated to 84 BCE provides insight into the private management of cultivated lands[90]. It registers flour deposits in the wine-store from individuals named Barzēn, Mihrdāt, and Patwēšīk for two brothers or partners named Mihršahr and Spanddātič. In this record, where official titles are absent, it is likely that the initial trio were rent farmers who cultivated the land owned by latter two who were actually responsible for paying the tribute.

In the ostraca's standard formula, the king's agents, including the satrap, scribes, wine porters, and military commanders, are consistently identified by their titles, even when their personal names are omitted. Some of those who were liable for paying tribute are named, but they usually lack official titles and are identified by their personal names, and the names of their villages, districts, or estates. In some cases, the term *razpān* (wine-grower) appears[91], interpreted as the owner of the vineyard[92].

[85] Nos. И-I; И-III.
[86] In the Hellenistic period, it was common for the king to pay his soldiers in land allotment, commonly termed a "cleruchy". For Seleucid cleruchies, see Briant 2015.
[87] No. 1646.
[88] Minns 1915.
[89] Hackl et al. 2010: 566-7.
[90] No. 2595.
[91] In more than 20 texts, wine is directly collected from wine-growers (e.g. no. 1670).
[92] Lippolis and Manassero 2015: 130.

The ostraca frequently specify if land was managed by a royal official or if those officials paid tribute. In certain texts, the word "personally" is added, referring to individuals with or without official titles. Cavalry officer Tīridāt, accompanied by a few treasurers, "personally" provided wine, later conveyed by wine porters[93]. In a 70 BCE record, treasurer Warhragn "personally" supplied wine from the Kōzar estate, delivered by wine-porter Sāsān[94]. Another text from 50 BCE cites two treasurers who delivered wine, ending with a repetition of the phrase "personally from treasurers"[95].

5.3. Factors Driving Commerce: Silver Tax and Cash Cropping in Nisa

Besides consumption in royal banquets and ritual functions[96], a portion of wine tribute was consumed by the local staff under the satrap's authority[97]. However, not only the storage staff and the fortress commanders, but also the private vineyard owners needed to dispose of their surplus wine by converting them into more durable goods. The main object in this final section of the paper concerns the evidence of commerce at Nisa.

The Nisa valley's reliance on commerce is evidenced by: (1) the selection of grapevines as cash crops for maximum yield in a dry region with limited water access; (2) mention of wine "surplus" in various ostraca; (3) the existence of the silver tax, which caused farmers to sell at least some of their wine for silver; (4) the presence of wine porters, who were intermediaries or traders given their mobility and road knowledge; and (5) wine used for loans to reputable figures.

The Nisa documents from Parthia, the Avroman parchment contracts from Media, and parchment documents from Arsacid Dura in the Middle Euphrates all show that wine production was central to agriculture across the Arsacid Empire, echoing indications from Classical sources[98].

The ancient Iranian nobility and elites had a profound affinity for wine in rituals and lavish banquets following royal hunts —a core component of Iranian royal practice—. This demand for quality wine, from local lords to the King of Kings, drove enterprising farmers to prioritize large-scale wine production. This process underscores the influence of cultural practices, social preferences, technological advancements, and economic motivations on the environment and landscape.

Wine, growable in arid regions with the help of irrigation, functioned as a cash crop. Cash cropping entails specializing in a single crop to generate surplus for local markets or export. This practice spurred agricultural growth, expanded the amount of cultivated land, and increased production, which led to population growth and greater reliance on trade. Cash cropping played a significant role in cultural exchanges by integrating international and interregional commerce into daily life. Cash cropping may have concentrated extensive land under the control of few families who thereby gained sizable wealth and social standing, helping to foster alliances with the ruling elite, who often rented their land on tenure[99].

[93] No. 1646.
[94] No. 1659.
[95] No. 1664.
[96] Some of the wine tribute served temple rituals. Three ostraca indicate Zoroastrian priests at Nisa. One, from 91 BCE (no. 2675) and another from 72 BCE (no. 2577) mention a magus (*MGWŠH, mog*). Another undated ostracon (no. 2580) refers to a fire priest (*ʾtwršpty, āturšpat*).
[97] One ostracon dated to 60 BCE (no. 1514) mentions that wine was reserved for a fortress commander in charge of a different fort called Mihr.
[98] Pliny mentions that abundant vineyards can be found in Margiana and Carmania (VI.27). Strabo reports the same for Aria, Marginana, Carmania, Susiana, and Babylonia (XI.10; XV.3).
[99] For the Rahimesu family in Babylonia, see van der Spek 1998.

Large-scale agriculture and trade in Arsacid Mesopotamia and Iran were not solely driven by profit-seeking farmers. Many preferred small-scale exchanges within villages based on the immediate needs of their family. The law mandating silver taxation was a driving force, which compelled those obliged to pay tribute to trade in order to meet their obligations.

Despite increased coin minting, silver remained scarce and difficult to obtain. Royal wine porters, familiar with village needs, effectively matched parties in transactions, acting as intermediaries. Their role in tribute collection prepared them for a mercantile function. They converted surplus royal wine in silver and sourced silver and goods for specialized vineyard farmers.

Already in the Achaemenid period, a process termed "silverization" had begun, which accelerated in the Seleucid and Arsacid periods[100]. The Arsacid period witnessed the culmination of this process, which resulted in substantial urbanization and agricultural growth. This process coincided with a surge in standardized low-value silver and bronze coins, which were more useful than the heavy Seleucid tetradrachms for facilitating worker payments, land sales, and marketplace transactions[101].

Crucial evidence for the flourishing of commerce is the presence of credit institutions. For millennia, the Babylonian temples and palace treasuries served as the main creditors, providing short-term loans at no interest to needy farmers before the time of harvest and, more significantly, loans with interest to wealthy individuals for trade consignments.

An ostracon from Nisa presents a palimpsest with an old and new text concerning the resolution of a wine debt. The texts indicate that wine was "removed from the *naxwadār*" and transported by Srōšdāt, the wine porter from the village of Kāmuk[102].

The term *naxwadār*, an official under the satrap, functioned like a mayor or governor. It is improbable that this high-ranking official sought a loan from the royal storeroom purely to satisfy his subsistence needs; rather, the motive was almost certainly investment for trade and profit. His strong ties to the administration instilled trust in his ability to repay the loan.

The text above shows that the wine storeroom staff were not solely involved in categorization and storage but also utilized surplus for credit, who capitalized on collected tribute for the king's benefit. The wine porter who collected the debt may have also acted as intermediaries, who assisted the *naxwadār* in his trade venture.

6. Conclusion: The Problem of "Feudalism" as an Antithesis to Private Production

The basis of this study is on the fundamental questions in historical analysis: To what extent did ancient states align with the welfare of their subjects? And did they prioritize antagonism or diplomacy as the principle for their interactions on the international stage?

The governance methods in the Greco-Roman Mediterranean reflect a recognition that promoting cooperation and social cohesion would lead to comfort and efficiency. Despite conflicts among diverse people, an inclination towards cooperation emerged, nurturing dynamic societies and economic ventures that capitalized on the Mediterranean Sea's interconnectivity. Fragmented Greek city-states forged political and commercial leagues, especially during times of imminent danger like the Achaemenid invasion. These leagues centralized and standardized communication methods, focusing on weight measures and currencies[103].

[100] Tamerus 2016.

[101] See Sinisi 2018. The Sylloge Nummorum Parthicorum (SNP) will document the collections of Parthian coins in the cabinets of Berlin, London, New York, Paris, Tehran and Vienna in a nine-volume catalogue, as well as those from important private collections. Two volumes have been published so far (Sinisi 2012; Curtis *et al*. 2020).

[102] No. 1687.

[103] Bresson 2016: 260-286.

Social cohesion in the ancient Mediterranean can be attributed to the notion that non-elite individuals had personal agency and made life decisions independently from ruling powers. While the Roman Republic and Principate experienced regular unrest and civil conflicts, these were not indicative of societal norms. Commerce, ritual observations, tax collection, and other affairs continued unaffected, even as emperors were assassinated on the Palatine Hill or killed in campaigns[104].

In contrast, when examining ancient West and Central Asian societies, especially in the context of the Parthian Arsacid Empire, many academic publications depict a narrative of self-destructive antagonism and exploitative governance. This view portrays ancient Iranian empires as brief phases of stability followed by extended periods of decline and conflict[105].

The assumption that these dynasties exhibited predatory behavior contributes to the perception of perpetual conflict across a vast region. Regardless of their strength, it is believed that the default framework was one of total control over production, resources, and labor. While conflicts were equally prevalent in the Roman Empire, it is assumed that within the Arsacid territories, these conflicts more strongly shaped societal norms and resulted in an extreme version of feudalism that controlled the production of all its subjects who were the king's serfs[106].

The question of how a declining political system established a fully redistributive economy remains unanswered. The only possibility is that the general population lacked agency and legal means to voice demands against oppressive rulers. Private exchange was inconceivable within such an unstable and despotic system.

Looking at the systematic tribute collection in wine, the abundance of vineyards, and the silver tax implication, private vineyard owners, and the military/administrative staff receiving wine payments had to rely on exchanges for tax obligations and selling wine for other goods, especially grains.

The Nisa ostraca shows that the creation of a large wine surplus relied on extensive irrigation activities and the stability ensured by the presence of the Arsacid royal administration. Comparing Arsacid Mithradatkert with Achaemenid Persepolis would help understand the influence of royal presence on the economic landscape. A network of villages and vineyards orbited Old Nisa, not only as the result of the king's demand for wine tribute. Entrepreneurial families relied on the stability and found an opportunity to benefit from the lucrative trade in wine.

[104] The most recently accepted analysis of Roman coinage indicates that, despite claims by Classical authors, Nero's reign was a period of economic reform attributed to the stabilization of the currency system. This development persisted during the "civil war" following Nero's suicide. Furthermore, there has been questioning whether the "Crisis of the Third century" was truly a crisis, as it might have been another period of monetary and social reforms (Butcher and Ponting 2015: 201-265).

[105] It has been suggested that during the Achaemenid period, economic developments and political stability under Darius I (522–486 BCE) did not endure after his death, leading to a period of decline and stagnation lasting over 150 years until Alexander's conquests in 330 BCE (Briant 2009). Regarding the Arsacid period, the term "Parthian Dark Age", initially attributed by numismatists to the span between 90 BCE and 55 BCE, gradually came to encompass the entire 500-year era. David Sellwood noted that "when compared to our understanding of contemporary Greece and Rome, the entirety of Parthian history might be aptly termed a 'Dark Age'" (Sellwood 1976: 2). Also see Boillet 2016.

[106] David Engels attributes the root of this presumably everlasting instability to an overarching phenomenon known as "Middle Eastern Feudalism". He suggests that this system was established during the Achaemenid period, interrupted by Alexander and the Seleucids with a brief period of urban growth, but later reinstated in a more pronounced form under the Arsacids. In fact, the author attributes the main cause of instability within the Seleucid Empire to this cultural phenomenon originating from their eastern territories, not to the Seleucid policies (Engels 2011: 19).

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AN OVERVIEW OF THE POTTERY FROM SISTAN IN THE LATE IRON AGE/ACHAEMENID PERIOD

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ABSTRACT

The paper analyses some archaeological issues related to pottery production in Sistan —between south-eastern Iran and south-western Afghanistan— in the Late Iron Age/Achaemenid period. Hallmarks of cultural development at the local level and interactions with neighbouring areas are overviewed in the light of published pottery assemblages from the region.

KEYWORDS

Sistan, Late Iron Age/Achaemenid period, Pottery.

RESUMEN

En este artículo se analizan algunas cuestiones arqueológicas relacionadas con la producción de cerámica en Sistán —entre el sureste de Irán y el suroeste de Afganistán— en Edad del Hierro Reciente/periodo Aqueménida. A la luz de los conjuntos cerámicos publicados de la región, se examinan los rasgos distintivos del desarrollo cultural a escala local y las interacciones con las zonas vecinas.

PABLABRAS CLAVE

Sistán, Edad del Hierro Reciente/periodo Aqueménida, cerámica.

1. Geographical and historical context

The large region of Sistan is located between south-eastern Iran and south-western Afghanistan[1]. In terms of physical geography, the Iranian portion of Sistan represents the westernmost sector —encompassed within the political boundaries of the Islamic Republic of Iran— of the wetlands surrounding Lake Hamun[2], whose eastern portion mainly falls within the limits of the Nimruz Province of Afghanistan. The Hamun lacustrine basin, in turn, constitutes the terminal part of a wider endorheic hydrographic system (Fig. 1), named Sistan Basin or Hilmand Basin (after its main tributary river)[3] and stretching for

[1] I would like to express my sincere thanks to the Editorial Board of the *ISIMU* Journal for their kind invitation to participate in this 26th monographic volume with a contribution dealing with aspects of my research activities on ancient Iran. The present paper relies on some earlier scientific articles dealing with the pottery from the area of Sistan in the Late Iron Age/Achaemenid period (Maresca 2010; 2019a; 2019b), which I wrote after I obtained my PhD at L'Orientale University of Naples (2008) and as a post-doctoral Research Fellow at that same University (2016-2020). At that time I was a member of a research programme (coordinated by Bruno Genito) aimed at publishing data from the 1960s and 1970s Italian archaeological activities at Dahane-ye Gholaman. Although my involvement in the latter publication project came to a halt in June 2020, research on the archaeology of pottery production in ancient Sistan still represents one of my current scientific interests as Assistant Professor of Iranian Archaeology at Sapienza University of Rome. A preliminary version of this paper was read at the international "Achaemenid Pottery Workshop" held on December 2021 in Istanbul in the frame of the Priority programme of the German Research Foundation "The Iranian highlands: resiliencies and integration in pre-modern societies" (DFG-SPP 2176). Feedbacks and comments kindly received from the participants in the latter workshop stimulated several further thoughts, which are here expressed.

[2] Toponyms, hydronyms and oronyms are reported according to the variants more commonly used in the international scientific jargon.

[3] Scholarly literature on the physical geography of Sistan and the lower Helmand Basin is remarkably vast; the scientific contributions by Jux and Kempf (1983) and Whithney (2006) can be mentioned among the most relevant ones in that respect.

roughly 400×200 kilometres from south-western Afghanistan to south-eastern Iran (Jux and Kempf 1983: 7)[4].

The basin is delimited by a series of remarkable mountain chains —the Hindu Kush at north, the Suleiman Range at east, the Baluchestan and the Makran mountain ranges at south, the East Iranian Ranges at west (Jux and Kempf 1983: 7 and fig.1; Whitney 2006: 5)— while its lowest area (around 463 metres AMSL) is the *playa* of Gaud-i Zirreh in Afghanistan (Whitney 2006: 6).

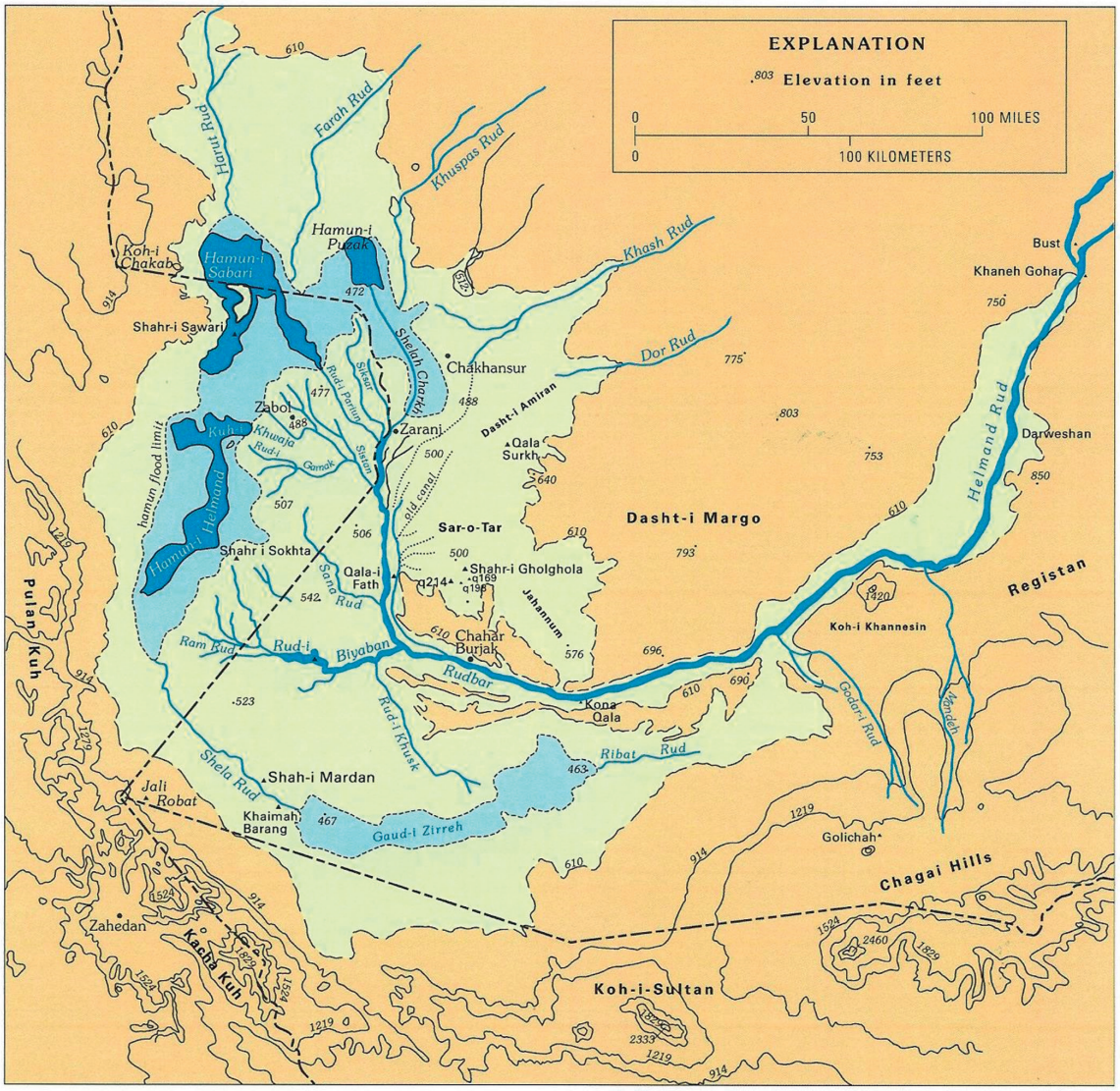

Fig. 1. Map showing the geographical features in the area of Sistan and the lower Helmand Valley (after Whitney 2006: fig. 2).

[4] The "*depression containing the large delta of the Helmand River and a series of shallow, semiconnected playas at the western edge of the basin*" (Whithney 2006: 2) is commonly considered as "Sistan" proper, while the south-eastern sandy region on the Sistan/Hilmand Basin is instead known as Registan (Whithney 2006: fig. 1; Jux and Kempf 1983: fig. 1); the two regions "[…] *are fairly well divided by the course of the Hilmand River. Seemingly endless and impassable dune fields rise from 750 m. to more than 1200 m. a.s.l. in Registān. Whereas in Sistān gravel plains imperceptibly slope downwards from north to south to a depth of 500 m. a.s.l., where lakes occur at the foot of high escarpments*" (Jux and Kempf 1983: 7).

The fragile ecological balance of the aforesaid inland basin mostly depends on the hydrology of the Hilmand River, acting as "*the 'life-line' of the Seistan Basin*" (Fairservis 1961: 13)[5]. Besides the Helmand, further three main rivers discharge their water into the lacustrine system, i.e. the Khash Rud, the Farah Rud and the Harut Rud (Fig. 1), all receiving their water from spring precipitation and snowmelt on the Hindu Kush (Jux and Kempf 1983: 9-10). Therefore, mid/late spring is usually the period when the most relevant amount of water reaches the terminal sector of the Sistan Basin, feeding Lake Hamun at its largest extent —approximately 3000 square kilometres (Ehlers 2003: 646)— and even overflowing southwards, through the Shelagh River, into the Gaud-i Zirreh. Conversely, in the dry season, the surface of Lake Hamun dramatically shrinks and three smaller and separate bodies of water can be differentiated: Hamun-e Helmand, Hamun-e Saberi and Hamun-e Puzak (Jux and Kempf 1983: 10; Fig. 1).

During the course of history, the geographical peculiarities of Sistan and its fragile environment deeply influenced cultural phenomena in the area[6].

Territories around Lake Hamun and the lower course of the Helmand River entered written history when they were mentioned in the Bisotun inscription of King Darius I. In the Old Persian version of the latter inscription (DB/OP I, 16), the name of that country and its inhabitants was reported in a form to be read as "*Zranka*", a *dahyu-* always mentioned in all the "list of countries/people" subjected to the authority of the Achaemenid kings (Maresca 2019a: 123-128). Relying on the toponyms attested in Greek and Latin sources to indicate the region named as *Zranka* in the Old Persian inscriptions (Schmitt 1996: 535), the territory at the issue is scholarly termed as "Drangiana" as far as the periods of Achaemenid, Macedonian and Seleucid rules are concerned. It is not an easy task to establish with a good degree of certainty the overall extent of such a territorial, administrative and cultural unit; however, at the time of the Achaemenid Persian empire, *Zranka*/Drangiana possibly stretched northwards as far as Farah, in Afghanistan (Maresca 2019a: 127), and was bordered by Aria on the north, Arachosia on the east, Gedrosia on the south and Carmania on the west (Schmitt 1996: 536).

2. Pottery from Afghan Sistan in the Late Iron Age/Achaemenid period

In an earlier paper, I briefly discussed the limited pottery evidence from archaeological activities carried out in territories likely pertaining to *Zranka* in Afghanistan (Maresca 2019a: 128-135). The archaeological evidence from the Afghan portion of Sistan and the lower Hilmand Basin in the Late Iron Age/Achaemenid period[7] was also synthesised in a recent and comprehensive monograph on the archaeology of that Country (Ball et al. 2019: 276-278)[8].

[5] With a total length of approximately 1300 kilometres, the Helmand River has its headwaters in the Koh-i Baba Range west of Kabul; it then flows south-westwards through the Hazarajat mountainous region (Whithney 2006: 5) and the Afghan provinces of Wardak, Oruzgan, Helmand, Nimruz (therefore draining the entire south-western portion of Afghanistan) before it eventually empties into Lake Hamun, mostly located in Iranian territory (Hanifi 2004: 170). For a recent attempt to reconstruct the chronology of the Helmand channel alterations in Sistan see Karvigh 2022.

[6] On the recent environmental, hydrological and, consequently, socio-economic crisis in the area, see especially UNEP 2006; Dehgan et al. 2014; Akbari *et al.* 2022.

[7] Following the remarks by Boucharlat (2005: 270-271), who warned against the generic utilisation of the term "Achaemenid" in archaeology and suggested to limit its use "*non seulement aux documents assurément datable entre 559 et 300 mais à ceux qui dénotent un réel impact du pouvoir royal, c'est-à-dire qui ressortissent à des productions impériales et sont identifiables comme tels*", the alternative expressions "Late Iron Age" or "Late Iron Age/Achaemenid period" are adopted in the present paper.

[8] For a recent and comprehensive overview on the history of archaeological research in Afghan Sistan see also Trousdale and Allen 2022: 19-26.

At the present stage of our knowledge about the Late Iron Age pottery from Afghan Sistan, the Sorkh Dagh mound at the site of Nad-i Ali seems to represent our main source for information, despite its debated chronology (Maresca 2019a: 128-133). Located at about 6 kilometres north of modern Zaranj, in the Nimruz Province (Fig. 2), the Sorkh Dagh ("Red Mound") at Nad-i Ali was investigated by the *Délégation Archéologique Française en Afghanistan* in 1936, when Roman Ghirshman excavated a test trench on the western side of the mound. Several structures were brought to light and ascribed to two chronological horizons: *Période I*, the most recent phase, was dated to the Late Iron Age/Achaemenid period, while *Période II* —with its structures built atop a huge mud-brick terraced platform— was assigned to an earlier date, around the 8th century BCE (Ghirshman 1939).

In the early 1950s, large-scale survey activities carried out in Afghan Sistan by the Anthropology Department of the American Museum in New York substantially confirmed the chronology of the Sorkh Dagh previously suggested by Ghirshman (Fairservis 1961: 45-46). In 1968, conversely, further excavations at the same site by a team from the University of Pennsylvania established a somewhat different chronology, ranging from the 8th-7th century BCE to the Hellenistic-Parthian period (Dales 1977). In the mid-1990s, however, the chronology of the Sorkh Dagh was radically questioned by Roland Besenval and Henri-Paul Francfort (1994). Relying on observations about the pottery assemblage from the site and its architectural features —especially the size of the bricks and the overall dimensions of the platform— the two French scholars concluded that the massive mud-brick platform at the Sorkh Dagh was apparently "*constructed before or during the period from 2300-1700, in connection with the Bactro-Margiana Bronze Age or Oxus Civilization*" (Besenval and Francfort 1994: 5).

Nonetheless, several pottery fragments from excavation or survey activities at the Sorkh Dagh of Nad-i Ali display evident morpho-typological analogies (see e.g. Dales 1977: 93-101) with pottery vessels from the Late Iron Age site of Dahane-ye Gholaman, in Iranian Sistan[9]. Moreover, parallels for a peculiar geometric motif incised on two potsherds from Girshman's *Période II* (Ghirshman 1939: pl. IV, N.A. 55 and N.A. 70) are only known from the latter site (see below).

Evidence of Late Iron Age pottery in Afghan Sistan, however, is not limited to the assemblage from the Sorkh Dagh at Nad-i Ali. In 1966, a British archaeological mission surveyed the middle and lower Helmand valley —from the site of Qala-i Bust, south of Lashkargah, near the confluence of the Helmand and Arghandab rivers, to Bandar-i Kamal Khan, around Chahar Borjak (Hammond 1970: fig. 1)— and recovered twenty-two Late Iron Age pottery fragments from the surface of eight sites in the area (Hammond 1970: figs. 2 and 4), unfortunately without providing any photographs or drawings of those materials[10]. Only two of the aforementioned eight sites were located in the Nimruz Province (Fig. 2): the name of the first one was reported as Zango/Sangar (Hammond 1970: 450 no. 25)[11], while the second un-named mound (Hammond 1970: 450 no. 29) was later identified as Baghak/Pusht-i Gau (Ball 2019: no. 77), on the left bank of the Helmand, at 5.5 kilometres from Rudbar. The remaining six sites were instead located more upstream, in the Helmand Province (Fig. 2): Zindan (Hammond 1970: 449 no. 6)[12], Gurgak (Hammond 1970: 449 no. 9)[13], Khwaja Hasan

[9] See also the additional remarks by Vogelsang (1992: 264-266) and Ball et al. (2019: 277).

[10] The fragments at the issue were simply described as follows: "[…] *oxidized in firing to a hard red. The fabric contains small white mineral inclusions and averages 4.5 mm. in thickness. Some sherds have a red slip slightly deeper in colour than the fabric, and some have dark parallel burnished lines. The only vessel types present are small bowls and perhaps a small flask*" (Hammond 1970: 451).

[11] See also Ball 2019: no. 1252.

[12] See also Ball 2019: no. 1260.

[13] See also Ball 2019: no. 396.

(Hammond 1970: 449 no. 14)[14] and Darwish Anrar Khan Qal'a (Hammond 1970: 449 no. 18)[15]; two un-named mounds in the same area (Hammond 1970: 450 nos. 37 and 38) were later identified as Banadir Jum'a Khan (Ball 2019: no. 101) and Malakhana (Ball 2019: no. 701) respectively.

The recent publication of a monograph about the sites surveyed and excavated in the frame of the "Helmand-Sistan Project" —a long-term archaeological project on Afghan Sistan and the lower Helmand Valley sponsored by the Smithsonian Institution and active on the field in the 1970s, under the scientific direction of William B. Trousdale— has remarkably increased our archaeological knowledge of that region (Trousdale and Allen 2022). While waiting for the publication of the second volume of that book for an in-depth and specific discussion about the large assemblage of pottery finds from those archaeological activities (Trousdale and Allen 2022: 9), it is noteworthy that "*Achaemenid wares*"[16] are reported from ten sites in the researched area (Fig. 2)[17].

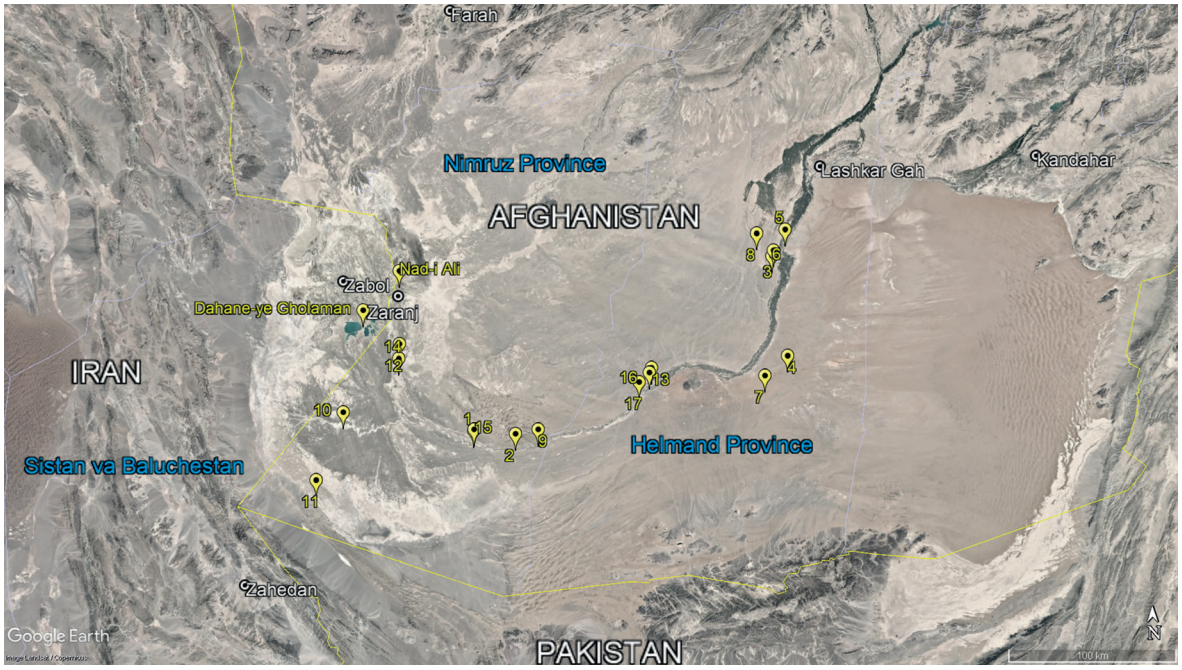

Fig. 2. Map showing the location of the main modern cities and archaeological sites mentioned in the text. Key: no. 1: Zango/Sangar; no. 2: Baghak/Pusht-i Gau; no. 3: Zindan; no. 4: Gurgak; no. 5: Khwaja Hasan; no. 6: Darwish Anrar Khan Qal'a; no. 7: Banadir Jum'a Khan; no. 8: Malakhana; no. 9: Lat Qala; no. 10: Gina Kuhna; no. 11: Gudar-i Shah; no. 12: Jui Nau; no. 13: Malakhan Plain VI; no. 14: Qala-i Fath; no. 15: Qala-i Madar-i Padshah III; no. 16: Qala-i Sirak; no. 17: Tepe Daishu II. Satellite view after Google Earth™.

[14] See also Ball 2019: no. 595.

[15] See also Ball 2019: no. 253.

[16] These are preliminary described as being characterised by "*buff wares and light colored slips*" and mainly represented by "*sharply carinated tulip bowls*" and "*ridged basins and jars*" (Trousdale and Allen 2022: 43).

[17] W. B. Trousdale and M. Allen had already provided some preliminary information in a paper entitled "Afghan Sistan in the Achaemenid and Hellenistic Periods", read on 10th December 2020 at the International Virtual Event of Archaeology, organised at the University of Sistan and Baluchestan in Zahedan, Iran (https://seminars.usb.ac.ir/asrc/en-us/Page3314/; accessed July 2023). A poster on the same subject was also presented by the aforesaid scholars at the ASOR - American Society of Overseas Research 2020 Virtual Annual Meeting (https://www.asor.org/wp-content/uploads/2020/11/2020-Poster-Abstract-Book_updated-11-2-20.pdf; accessed July 2023).

Indeed, pottery fragments possibly pertaining to the Late Iron Age/Achaemenid period were brought to light during excavations at Lat Qala (Trousdale and Allen 2022: 433-449)[18] and were also collected at Gina Kuhna (Trousdale and Allen 2022: 335)[19], Gudar-i Shah/Godar-i Shah (Trousdale and Allen 2022: 336-341)[20], Jui Nau (Trousdale and Allen 2022: 239-241)[21], Khwaja Hasan (Trousdale and Allen 2022: 245-246)[22], Malakhan Plain VI (Trousdale and Allen 2022: 260)[23], Qala-i Fath (Trousdale and Allen 2022: 275-279)[24], Qala-i Madar-i Padshah III (Trousdale and Allen 2022: 284-285)[25], Qala-i Sirak (Trousdale and Allen 2022: 287-313)[26] and Tepe Daishu II (Trousdale and Allen 2022: 325)[27]. Conversely, possibly Late Iron Age potsherds were not encountered at the site of Bagak/Pusht-i Gao (Trousdale and Allen 2022: 223-224), where the British survey of the mid-1960s had previously documented pottery evidence of that period (Hammond 1970: 450 no. 29; Ball 2019: no. 77).

The reappraisal of the data from the 1970s Helmand-Sistan Project also led to the remarkable publication of a distinctive —and previously unknown— class of Early Iron Age painted pottery in the Sar-o-Tar area of the Nimruz Province (Fig. 1), frequently found in association with platform-based settlements along large canals (Allen and Trousdale 2019)[28].

3. Pottery from Iranian Sistan in the Late Iron Age/Achaemenid Period

The archaeological site of Dahane-ye Gholaman (Fig. 2), located at about 30 kilometres south-east of Zabul, in the vicinity of the village of Qal'a-ye Now, surely represent the most important source of information about the pottery from Iranian Sistan in the Late Iron Age/Achaemenid period. The site was discovered in 1960 by Umberto Scerrato during Italian archaeological activities sponsored by the IsMEO (Istituto per il Medio ed Estremo Oriente) and was soon considered as a complex of buildings of the Late Iron Age/Achaemenid period (Scerrato 1962). Between 1962-1965 and 1975, IsMEO excavations brought to light (completely or partially) seven buildings —QN2, QN3, QN4, QN5, QN6, QN7 and QN16— among the twenty-eight ones detected at the site, interpreted as the capital city of ancient *Zranka*/Drangiana[29].

[18] See also Ball 2019: no. 687.

[19] See also Ball 2019: no. 376.

[20] See also Ball 2019: no. 383.

[21] See also Ball 2019: no. 479.

[22] See also Ball 2019: no. 595. Hammond had apparently collected some Late Iron Age pottery fragments at the same site (Hammond 1970: 449 no. 14). Late Iron Age potsherds were not observed, instead, when the site was surveyed in 2011 (Central Helmand Archaeological Study/CHAS no. 14), in the frame of archaeological activities supported by the Government of the Islamic Republic of Afghanistan and the International Security Assistance Force (ISAF) with the aim to assess site looting and damages to the archaeological heritage in the area between Lashkar Gah and Khan Neshin (Abramiuk 2017; 2019).

[23] See also Ball 2019: no. 700.

[24] See also Ball 2019: no. 842.

[25] See also Ball 2019: no. 863. The British archaeological mission had surveyed the site in 1966, without reporting the presence of pottery fragments possibly pertaining to the Late Iron Age/Achaemenid period (Hammond 1970: no. 20).

[26] See also Ball 2019: no. 881.

[27] See also Ball 2019: no. 224. With the exception of Khwaja Hasan, Malakhan Plain VI, Qala-i Sirak and Tepe Daishu II (all located in the Hilmand Province), the remaining six archaeological sites are located in the Nimruz Province of Afghanistan (Trousdale and Allen 2022: Appendix Figure 1.4).

[28] Conversely, a wide archaeological "gap" is attested for the Early Iron Age in Iranian Sistan. The latter circumstance could be related to radical climatic changes at the end of the Bronze Age, which may have significantly affected cultural dynamics in the area and shifted the Early Iron Age settlement model to less tangible non-urbanised schemes. It could also be related to hydrological and geo-morphological processes that may have obliterated every archaeological trace from the centuries between the Late Bronze Age and the beginning of the Late Iron Age (Mortazavi 2007; Mortazavi et al. 2015; Maresca 2018: fn. 45).

[29] Among the several scientific contributions about the Italian archaeological activities at the site see especially Scerrato 1966a; 1966b; 1970; 1979; Genito 1986; *forthcoming*.

Preliminary information about the pottery from Dahane-ye Gholaman was given on the basis of the potsherds collected during the 1960 and 1961 surveys (Scerrato 1962: 188-189, figs. 13-16), while a more in-depth study was based on the assemblage from the first excavations carried out in 1962 and 1963 (Scerrato 1966b: 29-30, figs. 52-61). Further information about the pottery from the excavated buildings QN2 and QN4 was provided by Genito, who discussed some of the most frequent types of vessels at the site (Genito 1990; Fig. 3)[30].

A new season of excavations at Dahane-ye Gholaman was inaugurated on October 2000, under the direction of Seyyed Mansur Seyyed Sajjadi, on behalf of the Iranian Cultural Heritage Organization (ICHO)/Iranian Cultural Heritage and Tourism Organization (ICHTO)[31]. Several potsherds and entire vessels were published in the preliminary reports of those archaeological activities, mainly involving building QN15, but also concerning buildings QN1, QN17, QN21, QN22 and QN23 (Sajjadi 1380/2001: 53-73; Sajjadi and Saber Moghaddam 2004: fig. 5; Sajjadi 2007: figs. 11 and 12; Sajjadi and Zehbari 2018: figs. 5 and 6).

More recently, between 2008 and 2012, Kourosh Mohammadkhani (2012; 2014; 2018) carried out geophysical prospections and field walking surveys at the site by, on behalf of the Iranian Cultural Heritage, Handicrafts and Tourism Organization (ICHHTO). Pottery fragments were collected and counted within each surveyed square at the site on that occasion (Mohammadkhani 2014: fig. 5-3, tabs. 50 and 51).

A remarkable number of scholarly publications devoted to the pottery from the excavations carried out at Dahane-ye Gholaman was published in the last lustres, independently from new field activities at the site[32].

In the frame of my past research activities at "L'Orientale" University of Naples under the scientific supervision of Bruno Genito, I had the opportunity to analyse an assemblage of over three-thousands pottery fragments from Dahane-ye Gholaman, transferred to Italy at the time of the 1960s-1970s excavations, in the light of agreements between the IsMEO and Iranian Authorities. Eleven different pottery fabrics were singled out in that assemblage and a preliminary classification of the main vessel types associated with each fabric was given (Maresca 2010; 2019b: 255-259). The degree of morphological and functional specialization of the eleven aforementioned fabrics turned out to be quite low —with the exception of fabric DG2, exclusively associated with cooking pots (Maresca 2010: 427, fig. 4; 2019b: 257, fig. 7a)— pointing to a remarkable level of standardization in the pottery manufacturing processes.

Roughly in the same period, a team of Iranian archaeologists focused on the pottery assemblage from the Iranian excavations at Dahane-ye Gholaman as well as on the pottery fragments from the IsMEO excavations at the site still stored in Iran (Mehrafarin et al. 1392/2013; Zehbari and Mehrafarin 1393/2014; Zehbari et al. 1393/2014; 2015; 1393/2015). Their most significant contribution is probably represented by an article on the "*structural characteristics*" of the pottery from the site, accompanied by a remarkable catalogue of 152 significant ceramic fragments (classified into eight groups according to the colour of their external surfaces and on the basis of morphological criteria), listing an extremely rich series of proposed morpho-typological parallels (Zehbari et al. 2015).

[30] Listed as "*cylindrical-conical beakers*", "*carinated cups*", "*truncated conical cups*", "*oblique-sided cups*", "*dishes*", "*basins*", "*jars with bulging body*", "*jars with cylindrical body*", "*ovoid jars*" and "*small jars*" (Genito 1990: 590-598).

[31] Among the several scientific contributions about the Iranian archaeological activities at the site see especially Sajjadi 1380/2001; Sajjadi and Saber Moghaddam 2004; Sajjadi 2007; Sajjadi and Zehbari 2018.

[32] Although excavations at Dahane-ye Gholaman came to a halt in 2006, the site, its archaeological and its architectural features still remain at the centre of a lively scientific debate, as demonstrated by some recently published papers (Genito 2018; Arab and Khaledian 2019; Davlatab *et al.* 2021; Mehrafarin 2021).

Very recently, moreover, studies on the pottery from Dahane-ye Gholaman were reviewed in the frame of an interesting paper about the pottery from the Iron IV Period in Eastern Iran (Cardini 2022: 578-580).

Relying on all the aforementioned works, it is possible to maintain that cylindro-conical beakers (Fig. 3a) can surely be considered among the most distinctive and frequently attested pottery vessels at the site. They were reported among the assemblage collected by Umberto Scerrato in 1960 and 1961 (Scerrato 1962: fig. 14 no. 23, fig. 15 nos. 7-10 and 13, fig. 16 no. 3) and were considered as the typical vessels of the site in the preliminary report about the 1962 and 1963 excavation campaigns (Scerrato 1966b: 27, figs. 54 and 58). The same opinion was also shared by Genito (1986: 295), who later stressed the remarkable morphological variability of the attested specimens (Genito 1990: 590, 592, figs. 1-3). Another relevant group of these beakers was found during Iranian excavations at building QN15 (Sajjadi 1380/2001: 52-58, groups A1-A5; Sajjadi 2004: 248; 2007: 143, figs. 11 and 12; Sajjadi and Saber Moghaddam 2004: 294, fig. 5; Sajjadi and Zehbari 2018: 406, 408, 411, fig. 6 nos. 22-33). Some examples were also reported among the materials collected on the surface of the site during the activities carried out by Kourosh Mohammadkhani (2014, fig. 5-3, tab. 51). Several other examples were listed in the catalogue by Zehbari et al. (2015, fig. 19 nos. 28 and 29; fig. 22 nos. 47-53; fig. 26 nos. 80-84; fig. 28 nos. 98 and 99; fig. 30 nos. 114-120, 124 and 125; fig. 31 nos. 130-132; fig. 32 nos. 141-144; fig. 33 no. 147). In a study specifically devoted to the vessels at the issue, the attested specimens from Dahane-ye Gholaman were assigned to seven groups and twenty-one sub-groups on the basis of morphological criteria (Zehbari et al. 1393/2015). The peculiar morphology of these beakers, seemingly unparalleled in the ceramic assemblages known from other sites of the Late Iron Age/Achaemenid period in Iran and neighbouring areas, lead the authors to consider them as an original and typical vessel shape of Dahane-ye Gholaman (Zehbari et al. 1393/2015: 58), following the opinion previously maintained by Scerrato and Genito as well. Evidence for identical cylindro-conical beakers was nonetheless reported from several sites recently surveyed in southern Sistan and dated to the Late Iron Age (Alaeyi Moqaddam et al. 1395/2016; see below), thus outlining a completely new scenario concerning the distribution of this ceramic type in the area.

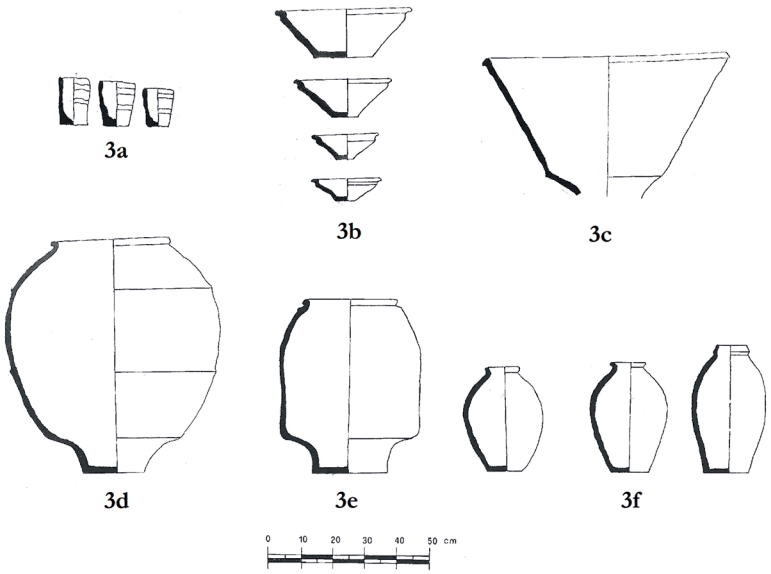

Fig. 3. An overview of the most frequently attested pottery vessels at Dahane-ye Gholaman. 3a: cylindro-conical beakers; 3b: carinated cups; 3c: large cone-truncated basin; 3d: large jar with globular profile and lower carination; 3e: large jar with cylindrical profile and lower carination; 3f: flat-bottomed oval-shaped jars (modified from Genito1990: figs. 1 and 5).

Carinated bowls (Fig. 3b) are also frequently attested at Dahane-ye Gholaman. Scerrato stressed significant variations in the dimensions and in the shape of the rim of these bowls and was able to differentiate between bowls with a "simple" (Scerrato 1962: fig. 13 nos. 7-11, 13-15, fig. 15 no. 14) and "multiple careen" (Scerrato 1962: fig. 13 no. 12). Other examples of carinated bowls were published in the preliminary report of the 1962 and 1963 excavation campaigns at the site (Scerrato 1966b: figs. 52, 53, 58, 61). Several variants of this type of bowls were also documented by Genito, who listed a remarkable series of possible parallels from Iran and Afghanistan (Genito 1990: 592-593). Similar carinated bowls had already been considered among the characteristic pottery vessels on the Iranian Plateau in the Late Iron Age/Achaemenid period, with some late diffusion also in Central Asia (Cattenat and Gardin 1977: fig. 6c-f). Indeed, similar vessels are mainly attested at Nad-i Ali and Old Kandahar. George F. Dales assigned comparable bowls from the former site to two different sub-groups belonging to the same type. While Type F-2 was represented by "*shallow bowl, thin walled with pronounced ledge rim*" (Dales 1977: 37, 52, pl. 19), Type F-6 included "*shallow to medium deep bowl with ledge rim and sharply crested multiple ridging below the rim*" (Dales 1977: 37, 56, pl. 21 nos. 2-5). A similar classification was also provided by Sven Helms for the pottery from the excavations at Old Kandahar. While bowls with simple carination comparable to the examples from Dahane-ye Gholaman were listed as "Genre 10" (Helms 1997: 39, fig. 55), bowls with multiple carination were instead classified as "Genre 12" (Helms 1997: 39, fig. 58).

Large basins (Fig. 3c) are very frequent among the pottery assemblage from Dahane-ye Gholaman and are mostly characterised by a moulded rim and a cone-truncated upper profile connected to a trumpet base by means of a lower sharp carination[33]. Very few complete examples were published (Scerrato 1966b: fig. 60; Genito 1990: figs. 1a, 4a), comparable with similar vessels from Sogdiana or Bactriana (Scerrato 1966b: 30; Genito 1990: 594, fig. 4b-d).

As pointed out by Genito (1990: 595-598), three different types of jars are attested at Dahane-ye Gholaman (Fig. 3d-f). The first one is represented by large jars with a globular profile and lower carination (Scerrato 1962: fig. 16 no. 4; Scerrato 1966b: 27; Genito 1986: 303, tab. XXXVb; Genito 1990: 595, figs. 5a, 6a); the second type is represented by large vessels with cylindrical profile and lower carination (Genito 1986, 303, tab. XXXVa; 1990, 597, figs. 5b, 7a); the third and last type of jars attested at the site can be described as "*flat-bottomed oval-shaped jars*" (Scerrato 1966b: 27, figs. 56, 57, 59; Genito 1990: 598, fig. 5c) featuring several variations in their proportions and in the shape of their rims and neck. The first and second type of jars can be compared with similar vessels from Central Asia (Genito 1990: figs. 6b-h, 7b-e).

Several pottery fragments and vessels from Dahane-ye Gholaman are characterised by the presence of peculiar symbol incised on their wall (Fig. 4), representing an upside-down "trident" surmounted by a small circle (Scerrato 1966b: 27, fig. 58; Genito 1986: 295; Sajjadi and Moghaddam 2004: fig. 5; Sajjadi 1380/2001: 53 nos. 1-5; Sajjadi 2007: fig. 12; Maresca 2010: fig. 3 no. 54, fig. 6 nos. 7, 100 and 33; Zehbari et al. 2015: fig. 17 nos. 13 and 14, fig. 19 nos. 27-29, fig. 22 nos. 47-53 and 60, fig. 25 no. 74, fig. 26 nos. 80-84, fig. 30 nos. 114 and 119, fig. 32 nos. 141-142 and 144; Zehbari et al. 1393/2015: fig. 1, fig. 6 nos. 1-4 and 12, fig. 7 nos. 13-17; Sajjadi and Zehbari 2018, fig. 6 nos. 27, 29 and 30). Frequently interpreted as a potter's mark, this peculiar incised symbol is also attested on a lid and on a jar from the Sorkh Dagh at Nad-i Ali (Ghirshman 1939: pl. IV, N.A. 55 and N.A. 70).

[33] This peculiar type of base, also attested in the case of several large jars, was probably conceived to firmly insert these large storage vessels into the ground.

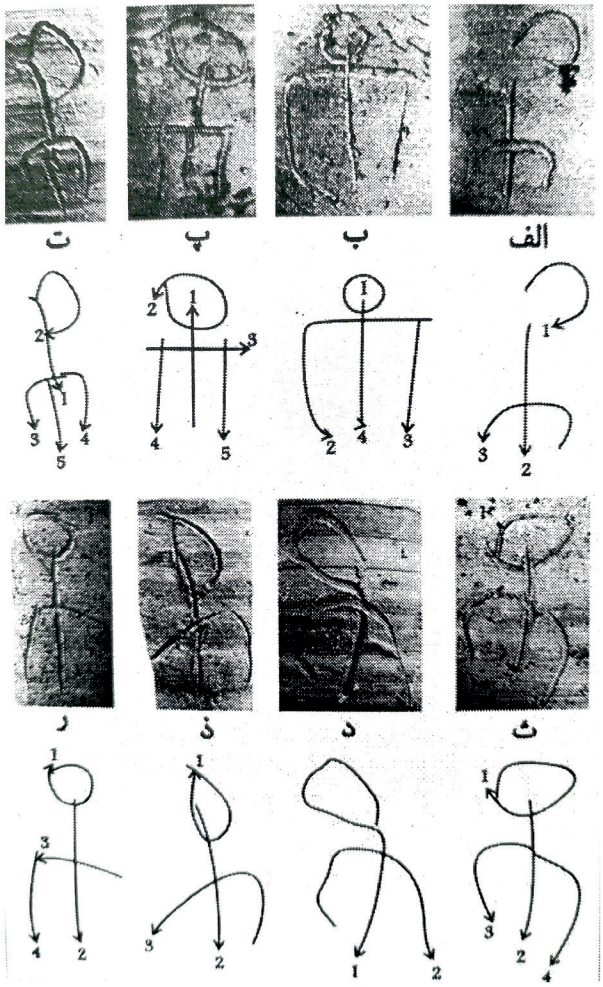

Fig. 4. Different attestations of the peculiar symbol frequently incised on pottery vessels from Dahane-ye Gholaman (after Zehbari 1397/2019: fig. 12).

Its presence on seal impressions found during the excavations at building QN15 (Sajjadi and Saber Moghaddam: 2004, fig. 8b; Sajjadi 2007: fig. 13; Sajjadi and Zehbari 2018: 411) possibly reveals that its real meaning and/or function is not properly interpreted yet (Zehbari 1397/2019).

Research about the pottery assemblage from Dahane-ye Gholaman has been furtherly enriched by publications specifically devoted to archaeometric issues. The prevalent utilisation of the same local raw materials in the ceramic production processes during historical phases in Sistan has been pointed out on the basis of several X-Ray Diffraction (XRD) and X-Ray Fluorescence (XRF) analyses (Sarhaddi-Dadian et al. 2017; Pourzarghan et al. 2017). A rather evident continuity in the utilisation of similar and locally available raw materials for the ceramic production between the Late Iron Age/Achaemenid and later periods in Sistan was also highlighted by preliminary mineralogical and petrographic analyses carried out in Italy on samples of some pottery fabrics largely attested in the assemblage from Dahane-ye Gholaman and samples of the most frequently attested pottery fabrics from the nearby site of Qal'a-ye Sam (Maresca 2016, 204-205; Maresca 2019b: 261-263)[34].

[34] Further data from archaeometric analyses on ceramic samples from Dahane-ye Gholaman are going to be published in a monograph on the Italian excavations at the site (Genito *forthcoming*). Preliminary results, however, were reported by A. De Bonis in a presentation entitled "Petrographic Characterisation of Pottery

Evidence of Early Iron Age pottery from Iranian Sistan is not limited to Dahane-ye Gholaman anymore. More than one-hundred sites apparently dated to the Late Iron Age/ Achaemenid Period were discovered in Southern Sistan during ICHHTO survey activities carried out between 2007 and 2010 (Mehrafarin 2016: 4, 8, fig. 2; Alaeyi Moqaddam et al. 2016: 118, figs. 1 and 5)[35]. The presence of cylindro-conical beakers among the related pottery assemblage (Alaeyi Moqaddam et al. 2016, fig. 10) outlines an intriguing and completely new scenario for the distribution of those vessels in Sistan during the Late Iron Age.

4. Some conclusive remarks

Research about Late Iron Age pottery from Afghan and Iranian Sistan has shown that the so-called "tulip bowls" or "Achaemenid bowls" —a distinctive marker of the Achaemenid influence both in the heartland and at the edge of the Empire (Petrie et al. 2008)— seem to be basically absent in the area[36], where a more prominent role was instead played by carinated bowls with horizontal rim. Indeed, Achaemenid Drangiana was likely a transitional area/"*zone-charnière*" (together with Arachosia and Parthia) between the ceramic tradition of the Plateau and that of the adjacent north-eastern areas of Central Asia (Cattenat and Gardin 1977: 241). Conversely, "tulip bowls"/"Achaemenid bowls" are well documented in Sistan in later epochs (possibly in the Hellenistic period and without any doubt in the Parthian period), being especially attested at the site of Qal'a-ye Sam (see e.g. Maresca 2016: fig. 5 nos. 235 and 236).

An exception could nonetheless be represented by an alleged single attestation of a "tulip bowl" from Dahane-ye Gholaman (Zehbari et al. 2015: fig. 17 no. 10). Besides some doubt from a morphological point of view, this occurrence is also difficult to be interpreted in terms of chronology. The only stratigraphic information recorded for the potsherd at the issue is a generic provenance from building QN16, which had a very peculiar architectural history. Indeed, at a moment difficult to ascertain in terms of absolute chronology, but likely at a very late phase of the life at the site, a small community of farmers settled in a small "village" established in the large court of the building, after the latter had lost its original function (Scerrato 1970: 136 and fig. 8). A late chronology for the ceramic fragment at issue, therefore, cannot be excluded.

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[35] On the importance of water resources for the distribution of Late Iron Age sites in the area see Fathi Sogolitapeh *et al.* 2021.

[36] But see above, fn. 16.

[37] Works written in Persian are transliterated according to the system adopted by *Encyclopædia Iranica*; the English translation of the titles is reported in square brackets; the Persian name of scientific journals and book series is not translated.

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ANOTHER BULLA OF WEH-ŠĀPUR, ĒRĀN-SPĀHBED OF KUST-I-NĒMRŌZ FROM THE TREASURY OF MOSTAZAFAN FOUNDATION'S CULTURAL INSTITUTION OF MUSEUMS IN TEHRAN[1]

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ABSTRACT

This paper introduces a newly-found Sasanian bulla that has two seal impressions, the major of which belongs to Wēh-šāpur, military chief or Ērān-spāhbed *of* kust-ī-nēmrōz *or the south-southeast side of the Sasanian Empire during the reign of Ḵosrow I (539-579 AD). Since 2001 a number of* spāhbed bullae *have been identified and published. These significant objects confirmed the validity of historical narrations regarding quadripartition of military organization of the Sasanian Empire recorded in late and post-Sasanian literary sources. This sealing is part of a bullae collection kept in the treasury of Mostazafan Foundation's Cultural Institution of Museums in Tehran and offers the fifth example of* spāhbed *Wēh-šābuhr seal impression so far known and published.*

KEYWORDS

Sasanian, Bullae*, Sealing,* spāhbed, nēmrōz.

RESUMEN

En este artículo se presenta una bulla *sasánida recientemente encontrada que tiene dos impresiones de sello, la mayor pertenece a Wēh-šāpur, jefe militar o* Ērān-spāhbed *de* kust-ī-nēmrōz *o de la parte sur-sureste del Imperio sasánida durante el reinado de Cosroes I (539-579 d.C.). Desde 2001 se han identificado y publicado varias* bullae spāhbed*. Estos objetos significativos confirmaron la validez de las narraciones históricas relativas a la cuatripartición de la organización militar del Imperio sasánida registradas en las fuentes literarias tardías y postsasánidas. Este sello forma parte de una colección de* bullae *conservada en el tesoro de la Institución Cultural de Museos de la Fundación Mostazafan en Teherán y ofrece el quinto ejemplo de impresión del sello* spāhbed *Wēh-šābuhr conocido y publicado hasta la fecha.*

PALABRAS CLAVE

Sasánida, Bullae*, Sellado,* spāhbed, nēmrōz.

> Before Kisra became king, the office of *Isbahbadh*— that is, the supreme commander of the armed forces— was held by one man, who was responsible for this supreme command over all the land. Kisra now divided this office and rank between four *Isbahbadh*s, namely, the *Isbahbadh* of the East, comprising Khurasan and its adjoining regions; the *Isbahbadh* of the West; the *Isbahbadh* of Nimruz, that is, the land of Yemen; and the *Isbahbadh* of Azerbaijan and its adjoining regions, that is, the Khazar lands. He saw in this new arrangement a way of improving the good ordering of his kingdom[4].

[1] This research has been made possible thanks to the permission granted by Head of Office of Treasuries at Mostazafan Foundation's Cultural Institution of Museums to access and study the bullae collection kept in the treasury in Tehran. Authors would like to express their gratitude for this kind support.
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https://doi.org/10.15366/isimu2023.26.009
ISSN: 1575-3492
ISSN Digital: 2659-9090

According to Tabari, following Ḵosrow I (539-579 AD) military reforms, he replaced the office of *Isfahbadh al-Bilad* (اصفهبذ البلاد) or *Ērān-spāhbed* i.e., supreme military commander of the entire empire's army, with four generals and put them in charge of each region or side —*kust*— of the territory that were established according to cardinal points. Although the term *Ērān-spāhbed* is not recorded in Sasanian primary sources, the title *spāhbed* (MP. *sp'hpt*, Pth. *spdpty*) is attested in the 3rd century inscriptions of Šāpūr I (240-272 AD) on the walls of Kaʿbe-ye Zardošt (ŠKZ. 42)[5] and of Narseh (293-303 AD) at Paikuli (NPi. 16)[6]. It is not however known if this title matched *Ērān-spāhbed* mentioned in later Pahlavi and post-Sasanian Arabic literary sources or it simply designated a military rank in a smaller scale but at the same time very connected and close to the court[7].

The title *spāhbed-ī-Ērān* is recorded once in the Pahlavi treatise Kārnāmag-ī-Ardašīr-ī-Pābagān[8] and there are references to four generals of each side as *spāhbed-ī-xwarāsān* (military chief of the east-northeast), *spāhbed-ī-nēmrōz* (military chief of the nouth-southeast), *spāhbed-ī-xwarbarān* (military chief of the west-southwest), and *spāhbed-ī-ādurbādagān* (military chief of the north-northwest) in Bundahišn and Sūr-Saxwan[9]. Nevertheless, due to lack of primary evidence, the validity of these narrations in predominantly post-Sasanian literary sources —Pahlavi, Arabic and Persian— the reality and nature of such military quadripartition and the appointment of four general were subject of scholarly debate and discussion[10].

Discovery and publication of a number of bullae impressed with seals of *spāhbed*s in 2001 however, provided us with indisputable primary evidence that not only confirmed the historical reality of this military quadripartition but offered us names and titles of some of the generals as well[11].

Since 2001, forty-six examples of *spāhbed* bullae have been known and published. This paper aims to introduce a recently identified *spāhbed* bulla from the time of Ḵosrow I that is kept in the treasury of Mostazafan Foundation's Cultural Institution of Museums in Tehran.

1. *Spāhbed* Bullae; a concise review

In 1991, Ph. Gignoux published a seal fragment with an incomplete inscription read as *nēmrōz spāhbed*[12]. This inscription offered a fundamental sigillographic evidence as to the historical reality of military quadripartition of the Sasanian Empire and the existence of several *spāhbed*s. Ten years later R. Gyselen published eleven bullae from Ahmad Saeedi Collection that were impressed with seals of *spāhbed*s of four regions or sides of the Sasanian Empire[13]. Saeedi collection bullae and seals were fully published in 2007 and a complete set of thirty-one *spāhbed* bullae were introduced there (III/1-III/31). Other examples of spāhbed bullae were since came to light and published by other scholars[14]. Accordingly, today we have a considerable knowledge about iconographic and epigraphic characteristics of late Sasanian *spāhbed* seals.

Sasanian *spāhbed* bullae belong to *Ērān-spāhbed* of the east-northeast side or the *kust-ī-xwarāsān*, *Ērān-spāhbed* of the south-southeast side or *kust-ī-nēmrōz*, *Ērān-spāhbed* of the

[5] Huyse 1999: 55.
[6] Cereti and Terribili 2014: 361.
[7] Gyselen 2019: 271.
[8] Sanjana 1896: 43.
[9] West 1897: 12; Daryaee 2007: 2, 4-5.
[10] Lukonin 1983; Gnoli 1985.
[11] Gyselen 2001; 2007.
[12] Gignoux 1991.
[13] Gyselen 2001.
[14] Akbarzadeh, Cereti and Sinisi 2009: 20-21, 24; Daryaee and Safdari 2010; 2012; Qasemi 2022; Abdulrahman and Ahmed 2023: 19-20.

of the west-southwest side or *kust-ī-xwarbarān* and *Ērān-spāhbed* of the north-northwest side or *kust-ī- ādurbādagān*. Chronologically they all belong to the reign of two late Sasanian kings Ḵosrow I and Hormozd IV (579-590 AD). In addition to historical evidence, attribution of *spāhbed*s bullae to the reign of Ḵosrow I and Hormozd IV is based on two honorific titles of *hujadag-husraw* and *hujadag-ohrmezd* meaning "well-omened Ḵosrow" and "well-omened Hormozd" on the seals that show the relationship between these generals and their patron kings. Since all known *spāhbed*s bullae belong late 6th century AD, there is not much knowledge regarding the status and titles of generals prior to this time. No sigillographic evidence is also available as regards the conditions concerned this after the time of Hormozd IV, although literary sources indicate the continuity of this status up to the end of Sasanian period[15]. Geographical sphere of each side, their changes through time and comparative studies with descriptions and terminology given in Pahlavi, Armenian and Arabic sources have been subject of several investigations by Gyselen[16].

To this point ten, twenty-five, six and five seal impression is respectively published for *Ērān-spāhbed* of *kust-ī-xwarāsān*, *Ērān-spāhbed* of *kust-ī-nēmrōz*, *Ērān-spāhbed* of *kust-ī-xwarbarān* and *Ērān-spāhbed* of *kust-ī-ādurbādagān*[17].

Seal of *Ērān-spāhbed* of *kust-ī-xwarāsān* introduce them as Čihr-burzēn and Dād-burz-mihr who held this office under Ḵosrow I and Hormozd IV respectively[18].

Seals of *kust-ī-nēmrōz spāhbed*s belong to three generals named Pīrag, Wēh-šābuhr and Wahrām-ī-nām-xwāst-husraw ādurmāhān. The first two held the office under Ḵosrow I while the third general served under both Ḵosrow I and Hormozd IV[19]. We find reference to some of these characters in literary sources. A certain Pīrag from Mihran family is named by Dīnavarī (recorded as Fīrak فیرک) while narrating Yazdgerd I (438-457 AD) reign events[20]. Although this might be a homonymy, it is most likely a chronological mistake by Dīnavarī. References to Bahrām-e Māhāzar or Bahrām-e Āzarmāhām are found in Shahnameh[21]. There he is mentioned as one of the dignitaries in the court of Hormozd IV who also held a high rank in his father's court, a report that completely matches with seals of Wahrām-ī-nām-xwāst-husraw ādurmāhān. Furthermore, we find numerous references to a certain Āzarmāhān, *marzbān* and/or army commander of Sasanian-Roman wars during the time of Ḵosrow I and Hormozd IV in various sources on Sasanian-Roman wars such as Evagrius (c. 536-594 AD), John of Ephesus (c. 507-586/8 AD), John of Epiphania (6th/7th century AD), Theophylact Simocata (1st half of the 7th century)[22]. Since all these reports point to his high rank and critical role during the military operations under both Ḵosrow I and Hormozd IV, there would be little doubt that is must be identified with Wahrām-ī-nām-xwāst-husraw ādurmāhān, *spāhbed* of *nēmrōz*.

Sealings of *spāhbed*s of *kust-ī-xwarbarān* introduce this general as Wistaxm, whose seals indicate he held the office under both Ḵosrow I and Hormozd IV[23]. Again, we find reference to a certain Bastām, *spāhbed* of Sawād region (السّواد اصبُهبَذ) who hold the rank of *hazaruft* (هزارافت) and is named along with the aforementioned Fīrak in the context of Yazdgerd I reign in Ketāb al-aḵbār al-ṭewāl[24]. Contemporality of Bastām and Fīrak in

[15] Gyselen 2004.
[16] Gyselen 2001; 2019: 270-277.
[17] Akbarzadeh, Cereti and Sinisi 2009: 20-21, 24, No. 116; Daryaee and Safdari 2010, 2012; Gyselen 2001; 2007; 2019: 450-452; Qasemi 2022: 85-86; Abdulrahman and Ahmed 2023: 19-20.
[18] Gyselen 2004; 2007: 248-254; 2019: 272.
[19] Gyselen 2004; 2007: 254-267; 2019: 272.
[20] Dīnavarī Vol. 1: 55.
[21] Ferdowsi, Vol. 8: 319-326.
[22] Greatrex and Liue 2002: 143,146-147, 150, 164-165.
[23] Gyselen 2004; 2007: 268-272; 2019: 272-273.
[24] Dīnavarī Vol. 1: 55.

Dīnavarī's account that is consistent with sigillographic evidence showing they both held the office during Ḵosrow I, indicates these characters are more likely identifiable with Pīrag and Wistaxm and we face a chronological mistake by Dīnavarī[25]. Furthermore, Dīnavarī mentions his rank of *hazaruft* recorded as *hazārbed* on Wistaxm seals (see Table 1).

Bullae of *spāhbed*s of *kust-ī-ādurbādagān* belong to three generals named Gōrgōn, Sēd-ōš and …. -husraw. The first two acted under Ḵosrow I and …. -husraw held the office under Hormozd IV[26]. In literary sources he is mentioned as Gōrgōn Mehran *spāhbed* of *ādurbādagān*[27].

Examples of personal seals of some these generals have been known and published as well including personal seals of Dād-burz-mihr, Wēh-šābuhr, Wahrām-ī-nām-xwāst-husraw ādurmāhān and probably Čihr-burzēn[28].

2. *Spāhbed*s Sealings Inscriptions

Sasanian seals and sealing are conventionally grouped into two general categories of personal and official-administrative seals/sealing. Seal impressions of late Sasanian *spāhbed*s can be considered official-administrative in terms of their inclusion of *spāhbed*s official position and the territorial sphere under their control. Nevertheless, since these sealings contain *spāhbed*s personal names as well as their honorific and other formal and/or personal titles they can be considered personal seals of these *spāhbed*s. Hence, they are included in a certain category as "personal seals of a dignitary" by Gyselen[29].

The rather long inscription on *spāhbed*s sealings is commonly composed of three parts: *spāhbed*s names, their titles and the geographical domain under their control. Three titles follows *spāhbed* name: a title pointing to his other official positions including *šahr-aspbed* (chief of the cavalry of the entire empire), *aspbed-ī-pārsīg* (Persian chief of the cavalry), *aspbed-ī-pahlaw pārsīg* (Parthian chief of cavalry), *šahr-warāz* (boar of the empire), *šahr-hazāruft* (empire's chief of the thousand), *šahr-hazārbed* (empire's chief of the thousand), *hazārbed* (chief of the thousand) and *nēwānbed ud* šābestan (chief of the brave and eunuch)[30]. It is not known with certainty whether these were honorary titles or designated other official positions which *spāhbed*s might have held prior to their appointment as generals or in addition to it[31]. As mentioned above, apart from their *spāhbed* seals, Dād-burz-mihr, Wēh-šābuhr, Wahrām-ī-nām-xwāst-husraw ādurmāhān are also known through their other personal seals/ sealings that contain their names and the same titles of *aspbed-ī-pahlaw*, *aspbed-ī-pārsīg* and *nēwānbed ud* šābestan recorded on their *spāhbed* seals[32].

Following these titles, comes the honorific title of *hujadag-husraw* and *hujadag-ohrmezd* meaning respectively "well-omened Ḵosrow" and "well-omened Hormozd". And at the final part we find reference to complete title of these generals as *Ērān-spāhbed*s of each four quarters of the territory, i.e. *ērān kust-ī-….. spāhbed*. The word *mihrān* on seal impressions of Pīrag, Gōrgōn and Sēd-ōš refers to their lineage from the noble Mihrān family.

A comprehensive review of *spāhbed*s sealing inscriptions including their transcription, transliteration and translation is given in Table 1 based on Gyselen readings with few minor corrections[33].

[25] Gyselen 2004.
[26] Gyselen 2004; 2007: 51, 272-277; 2019: 273.
[27] Howard-Johnston 2010, p. 56, n. 60 in Gyselen 2019: 273.
[28] Gyselen 2007: 284-286, 288-290; 2019: 273-274; Qasemi 2022: 85-89.
[29] Gyselen 2007: 46-47.
[30] Gyselen 2001: 20-28; 2004; 2007: 52; 2019: 272. For more information regarding these titles see Chaumont 1987; Gyselen 2004; 2007: 57-62; Shayegan 2003.
[31] Gyselen 2004.
[32] Gyselen 2007: 284-286, 288-290; 2019: 273-274; Qasemi 2022: 85-89.
[33] Gyselen 2019: 2019: 450-452.

čtl bwlcyny ZY (…)pty W hwjtk hwslwdy [LBA] ’yl’n kwsty ZY hwl’s’n sp’hpty čihr-burzēn ī …bed ud hujadag-husraw wuzurg ērān kust-ī-xwarāsān spāhbed Čihr-burzēn, chief of …. (?) and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the East	Čihr-burzēn	Erān kust-ī-xwarāsān spāhbed
d’t bwlcmtly ZY ’[s]ppty ZY p’hlwby W hwjtk ’whlmzdy LB[A] ’yl’n kwst’ ZY hwl’s’n sp’hpty ’pzwn’ (?) dād-burz-mihr aspbed-ī-pahlaw ud hujadag-ohrmezd wuzurg ērān kust-ī-xwarasān spāhbed abzōn Dād-burz-mihr, Parthian Aspbed and well-omened Homozd, grandee, Ērān-spāhbed of the side of the East, increase	Dād-burz-mihr	
pylky ZY štlwl’c W hwjtk hwslwdy LBAy ’yl’n kwsty [ZY] nymlwcy sp’hpty pīrag ī šahr-warāz ud hujadag-husraw wuzurg ērān kust-ī-nēmrōz spāhbed Pīrag, boar of the empire and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the South	Pīrag	Erān kust-ī-nēmrōz spāhbed
pylky ZY štlwl’c W hwjtk hwslwdy LBAy ’yl’n kwsty [ZY] nymlwcy sp’hpty mtr’n pīrag ī šahr-warāz ud hujadag-husraw wuzurg ērān kust-ī-nēmrōz spāhbed mihrān Pīrag, Boar of the Empire and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the South, from Mihrān family		
wyd šhpwhly ZY ’sppty ZY p’lsyk k štl(?)…pty W hwjtk hwslwdy LBAy ’yl’n kwsty ZY nymlwc sp’hpty wēh-šābuhr ī aspbed-ī-pārsīg (ud šahr-hazārbed ?) ud hujadag-husraw wuzurg ērān kust-ī-nēmrōz spāhbed Wēh-šābuhr, Persian Aspbed, chief of the thousand of the empire (?) and well-omened Ḵosrow, grandee, Erān-spāhbed of the side of the South	Wēh-šābuhr	
wlhl’n ZY n’m hw[’]st hwslwdy ’twlm’h’n (nyw’n?)pt W š’pstn W hwjtk hwslwdy LBA ’yl’n kwsty ZY nymlwc’ sp’hpt’ wahrām ī nām-xwāst-husraw ādurmāhān (nēwān)bed ud šābestan ud hujadag-husraw wuzurg ērān kust-ī-nēmrōz spāhbed Wahrām ī nām-xwāst-husraw ādurmāhān chief of the brave and eunuch and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the South	Wahrām ī nām-xwāst-husraw ādurmāhān	
wlhl’n ZY n’mhhw[’st hw](slwdy) [’twl]m’h’n …pty [š]’pstny štl hc’lwpt W hwjtk ’whlmzdy LBAy ’yl’n kwsty ZY nymlwcy ’t sp’hpty wahrām ī nām-xwāst-husraw ādurmāhān (nēwān ?)bed ud šābestan šahr-hazāruft ud hujadag-ohrmezd wuzurg ērān kust-ī-nēmrōz spāhbed Wahrām ī nām-xwāst-husraw ādurmāhān, chief of the brave and eunuch, chief of the thousand of the empire and well-omened Hormozd, grandee, Ērān-spāhbed of the side of the South		

wsthm ZY hc'lpty W hwjtk hwslwdy LBAy 'yl'n kwsty ZY hwl'l'n sp'hpty wistaxm ī hazārbed ud hujadag-husraw wuzurg ērān kust-ī-xwarārān spāhbed Wistaxm, chief of the thousand and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the West	Wistaxm	Erān kust-ī-xwarbarān spāhbed
[ws]thm [ZY] hc'lpty … W hwjtk 'whlm[zdy] LBAy 'yl'n kwsty ZY hwlpl'n sp'hpty plhw' wistaxm ī hazārbed ...ud hujadag-ohrmezd wuzurg ērān kust-ī-xwarfarān spāhbed farrox Wistaxm chief of the thousand and well-omened Hormozd, grandee, Ērān-spāhbed of the side of the West, blessed		
gwlgwny ZY mtl'ny … W hwjtk hwslwdy L[BA] 'yl'n kwsty ZY 'twlp'tk'n sp'hpty gōrgōn ī mihrān … ud hujadag-husraw wuzurg ērān kust-ī-ādurbādagān spāhbed Gōrgōn of Mihrān family and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the North	Gōrgōn	Erān kust-ī-ādurbādagān spāhbed
sydhwšy ZY mtl'n štl '[s]ppty W hwjtk hwslwdy L[BA 'yl'n] kwsty ZY 'twlp'tk'n sp'hpty sēd-ōš ī mihrān šahr-aspbed ud hujadag-husraw wuzurg ērān kust-ī-ādurbādagān spāhbed Sēd-ōš of Mihrān family, Aspbed of the Empire and well-omened Ḵosrow, grandee, Ērān-spāhbed of the side of the North	Sēd-ōš	
…'p[…]hwslwd … (štl)… [st]'n ..? W hwjtk 'whrmzdy LBA 'yl'n kwsty ZY 'twlp'tk'ny sp'hpty …-husraw … (šahr)…(st)ān … ud hujadag-ohrmezd wuzurg ērān kust-ī-ādurbādagān spāhbed …-husraw, … of the empire … and well-omened Hormozd, grandee, Ērān-spāhbed of the side of the North	…-husraw	

Table 1. Transcription, Transliteration and Translation of *spāhbed* Bullae Inscriptions (Gyselen 2019: 450-452 with minor corrections).

3. Newly-found Bulla of wēh-šābuhr, aspbed-ī-pārsīg, ērān kust-ī-nēmrōz spāhbed

Mostazafan Foundation's Cultural Institution of Museums holds a collection of about seventy bullae, gathered from private collections with unknown archaeological provenance[34]. The collection includes one *spāhbed* bulla with two seal impressions. Like other *spāhbed* bullae published so far, this one is also rather large in size (67x60x21 mm). It is made of grey baked clay of fine quality. Trace of a cord is visible on the slightly concave back of the bulla and slits through which the document or parcel's binding leather or fabric cord once passed are also observable on the sides of the bulla (Figs. 1-2).

[34] The collection is currently under study by the authors and will be published.

Fig. 1. Bulla of Wēh-šābuhr, aspbed-ī-pārsīg, ērān kust-ī-nēmrōz spāhbed from Mostazafan Foundation's Cultural Institution of Museums Collection in Tehran.

Fig. 2. Seal Impression B on Bulla of Wēh-šābuhr, aspbed-ī-pārsīg, ērān kust-ī-nēmrōz spāhbed from Mostazafan Foundation's Cultural Institution of Museums Collection in Tehran.

The bulla is comparable with sealing III/13-15 from A. Saeedi collection[35] (Fig. 3) and bulla 08 from a bullae collection in the National Museum of Iran returned to Iran from the United States[36]. Hence our bulla is the fifth example of *spāhbed* Wēh-šābuhr seal impression.

Fig. 3. Bullae III/13-14 from A. Saeedi Collection bearing the seal impression of Wēhšābuhr, aspbed-ī-pārsīg, ērān kust-ī-nēmrōz spāhbed from the Time of Ḵosrow I (Gyselen 2007: 261).

Fig. 4. Drawing of Bulla III/13 from A. Saeedi Collection bearing the seal impression of Wēh-šābuhr, aspbed-ī-pārsīg, ērān kust-ī-nēmrōz spāhbed from the Time of Ḵosrow I (Gyselen 2007: 260).

[35] Gyselen 2007: 260-262.
[36] Qasemi 2022: 85-86.

3.1. Seal Impression A

This sealing belongs to a slightly concave and almost round seal (39x34 mm). It depicts an equestrian in full armour holding a lance and moving toward the right. A crescent is visible behind the rider. The seal has a 3 mm thick margin with a small round depression at near 3h that is imprint of projecting knob probably used to hold the seal fix on the clay or its correct positioning on the clay[37]. An inscription in three unequal lengths in lapidary script is engraved around the seal (Figs. 1, 4). The first line starts at 5h and ends at 6h. the second and their line start respectively at 4h and 11h and end at 9h.

Transcription, transliteration and translation of the inscription is given below following Gyselen's reading[38]:

1) wyd šhpwhly ZY 'sppty ZY p'lsyk k štl(?)…pty W hwjtk
wēh-šābuhr ī aspbed-ī-pārsīg (ud šahr-hazārbed ?) ud hujadag

2) hwslwdy LBAy 'yl'n kwsty ZY nymlwc
husraw wuzurg ērān kust-ī-nēmrōz

3) sp'hpty
spāhbed

Wēh-šāpur, Persian Aspbed, chief of …. of the empire (?) and well-omened Ḵosrow, grandee, Erān-spāhbed of the side of the south

Aspbed was the chief of Sasanian cavalry. The phrase wēh-šābuhr ī aspbed ī pārsīg can be interpreted both as the "Wēh-šābuhr Persian Chief of Cavalry" or "Wēh-šābuhr, Chief of the Cavalry, the Persian"[39]. The term *hujadag-husraw* literary meaning "well-omened Ḵosrow" and *hujadag-ohrmazd* on *spāhbed* bullae were honorific titles showing the relationship between the *spāhbed* and the patron king by whom the general was appointed to this position. Therefore, this title has been used to date the *spāhbed* bullae to the reigns of Ḵosrow I and Hormozd IV and their chronological order[40]. Following this title, the word *wuzurg* i.e., grandee, written as ideogrammatic form of LBA points to a specific social rank in Sasanian aristocracy in the third place after landholders and princes. The most important military and administrative positions were bestowed to high-ranking nobility including *wuzurgān*[41]. *Wuzurg* was both a hereditary as well as an earned status but it is not known whether *spāhbed*s were chosen from among *wuzurgān* or this rank were bestowed to them following their appointment as generals.

The term *kust* has been interpreted as "region" and "side" and refers to each of the four quarters of the Sasanian territory already mentioned in the introduction. On the basis of literary and sigillographic evince, Gyselen has defined *kust-ī-nēmrōz* as the region covering the southern part of Iranian plateau that included Spāhaān, Huzestān, Pārs, Kermān and Sakastān[42].

[37] Gyselen 2001: 10.
[38] Gyselen 2007: 260; 2019: 451.
[39] Gyselen 2001: 23; 2007: 57-58; 2019: 169, 175.
[40] Gyselen 2001: 18-20; 2004; 2007: 48- 52; 2019: 275.
[41] Tafazzoli 1989.
[42] Gyselen 2019: 130-133.

3.2. Seal Impression B

A second seal is impressed on the side of the bulla almost near 12h (d. 9 mm). It shows a sign or monogram (Fig. 2). Monograms were one of the most common motifs in Sasanian sigillography although their true meaning and function is still to be identified[43].

The same seal is impressed on twelve bullae in A. Saeedi collection (III/9b-14b, III/18b, III/39b-40b, III/52b and IVD/43b, VC/19a). Among these, bullae III/9-12 belong to Pīrag and bulla III/18 bears the seal impression of Wahrām-ī-nām-xwāst-husraw ādurmāhān, other *spāhbed*s of *kust-ī-nēmrōz*. Bullae III/13 and III/14 are completely identical with our bulla and belong to Wēh-šābuhr (Figs. 1-3). On bullae III/39-40 we find this same seal impression along with wēh-šābuhr ī aspbed-ī-pārsīg seal impression while on III/52 this seal is impressed together with Wahrām-ī-nām-xwāst-husraw ādurmāhān seal imprint. Bulla IVD/43 bear a seal impression that belongs to a certain xwarrh-pīrag decorated by a boar head that reminds us of title of *šahr-warāz*, i.e. boar of the empire, inscribed on Pīrag seals (see Table 1). All these show that there existed a relationship between the monogram seal and seals of *spāhbed*s of *kust-ī-nēmrōz*, although we unfortunately cannot know the nature of which. Gyselen believes sealings that bear the common monogram seal, might have belonged to a single archive[44].

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[44] Gyselen 2007: 10-11.

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EXPLORING THE ARCHAEOLOGY AND SIGNIFICANCE OF MASJED-E SOLEYMAN: A REASSESSMENT OF THE ELYMAEAN TERRACE AND ITS SOCIO-CULTURAL CONTEXT IN SOUTHWESTERN IRAN

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ABSTRACT

The archaeological complex of Masjed-e Soleyman is one of the most famous in the archaeology of ancient Iran[1]. From the time of its discovery until today, there has been much discussion of its chronology and its function. The contribution in particular provided by Roman Ghirshman is still the most significant to this day, although many of his interpretations can be considered outdated. The aim of this contribution is to provide a new analysis of the architecture of the site in the more general context of the archaeology of the Iranian plateau and to verify the validity of the proposals, not only chronological but also functional, regarding the complex.

KEYWORDS

Terrace, archaeology of Iran, Masjed-e Soleyman, Elymais, architecture.

RESUMEN

El complejo arqueológico de Masjed-e Soleyman es uno de los más célebres en la arqueología de la antigua Persia. Desde su descubrimiento hasta hoy, ha sido objeto de numerosos debates acerca de su cronología y su función. La contribución particularmente destacada de Roman Ghirshman sigue siendo la más relevante hasta la fecha, aunque muchas de sus interpretaciones pueden considerarse obsoletas. El propósito de esta contribución es proporcionar un nuevo análisis de la arquitectura del yacimiento en el contexto más amplio de la arqueología de la plataforma irania y verificar la validez de las propuestas, tanto en términos cronológicos como funcionales, relacionadas con el complejo.

PALABRAS CLAVE

Terraza, arqueología de Irán, Masjed-e Soleyman, Elymais, arquitectura.

1. Introduction

Nestled in the foothills of the Bakhtiari mountains, Masjed-e Soleyman (Mosque of Solomon) is situated within a large bend bordered to the south by the Karun River. Approximately 2 km east of the site, there lies a watercourse bed, which flows north-south following the natural slope of the land and appears to have received other streams, although they are drained today. These streams could have supplied the ancient settlement. For nearly half a century, the valley served as an operational center for the *Anglo-Persian Oil Company* (APOC), following the discovery of rich oil deposits at the end of the 19th century by Jacques de Morgan, the first director of the *French Archaeological Mission to Susiana*[2], in this almost

[1] The content of this article has been thought jointly by both authors. In the specific, D. Salaris has written "Chronological Proposals", and "The Archaeological Context", while R. Dan has written "History of Studies", and "Monumental Architecture". "Introduction", "Masjed-e Soleyman: A Critical Approach", and "Conclusions" were written jointly.

[2] Ghirshman 1950: 205.

Isimu 26 (2023): 157-186 https://doi.org/10.15366/isimu2023.26.010
ISSN: 1575-3492 ISSN Digital: 2659-9090

unpopulated area, which had previously represented a space for seasonal grazing by the Bakhtiari nomads.

In the northeastern part of the valley, still in a dominant position compared to the rest of the modern city, a monumental structure based on an artificial terrace (Figs. 1-2)[3] – which, long ago, attracted the attention of archaeologists and explorers – is built on a hill (30-40 m). The vast complex of Masjed-e Soleyman[4], usually considered a sanctuary, now sits amidst active oil wells in the modern city and offers visitors an elusive sense of calm and great firmness. During the Middle Ages, it was called *Talghar* (or *Tolqor*), the name of a land in the vicinity of the Karun river. Later on, the city was named *Jahangiri*[5], then *Naftun*[6], and finally, after the visit of Reza Shah Pahlavi[7], the name now bears *Masjed-e Soleyman*, which was assigned in 1926.

Masjed-e Soleyman became the center of the Iranian oil industry in 1908 and was not visited by Western explorers until the late 1920s. The surrounding environment, characterized by gas leaks and oil spills, left a strong impression on the first European visitors. A situation that was reflected in Pliny's description of "*places which are always burning*" and when reporting on the volcanoes he mentioned that "*likewise in Susa, at the White Tower, from fifteen apertures, the greatest of which also burns in the daytime*"[8]. It is possible that when mentioning the fires of Susa, he had in mind "*petroleum-gas burning*" from Masjed-e Soleyman[9]. Additionally, the area of Masjed-e Soleyman was a source of bitumen for the Mesopotamian urban centres from the 4th millennium BCE as demonstrated by the analysis of carbon isotopes in bitumen samples from Urukean context[10]. There is no doubt that this landscape is distinguishable from any other surrounding environments and well recognizable from miles away. The natural phenomena, often labeled as "divine," must have had a profound impact on the choice of the location for the monumental structure[11]. At the beginning of 20th century, Unvala reported the presence of an underground passage leading to the south-west side of the hill, whose entrance was blocked by a massive boulder due to the accidental deaths

[3] This kind of multiple terraces has been recently classified with the types T.A.b - T.B.b (Dan – Salaris forthcoming).

[4] Masjed-e Soleyman – also spelled in other ways such as *Masjed Soleyman*, *Masjed-e Solaymān*, *Masjed Soleiman*, and *Masjid-i-Sulaiman* – is known in the petroleum industry by the acronym *M.I.S.*

[5] Nowadays, the name *Jahangiri* remains to indicate a rural district (*dehestan*) in the region of Masjed-e Soleyman.

[6] This is a term with which the city was known before 1926 (Amerie 1925: 249; Nahai - Kimbell 1963: 109). Nowadays, the name *Naftun* is still used to designate the cemetery located southeast of the city.

[7] The Shah (r. 1925-1941) visited the city and Sar-Masjed in 1926. Considering the "*atashkade*" on the terrace built by Solomon, he suggested to the Iranian parliament to change the city's name from Maidan-e Naftun to Masjed-e Soleyman, a suggestion taken up within the year. The inhabitant of the town firmly believed that the ruins on the terrace represented the ancient "Temple of Salomon" and use to leave small oil lamp as *ex-voto* offerings (Ghirshman 1950: 217). This folkloristic practice, which is probably still performed nowadays (personal communication to D. Salaris by Prof. Gian Pietro Basello), had deep roots and was not eradicated by the Islamic doctrine.

[8] Pliny, II.110.237, "Susis quidem ad Turrim Albam XV caminis, maximo eorum et interdiu, campus".

[9] In this regard, the description given by J.M. Unvala (1928: 85) appears very appropriate, defining the site of Masjed-e Soleyman he said that "*to-day the sight of a number of jets of the petroleum-gas burning simultaneously day and night in different in the Maidan-i-Naft […]. During the daytime, they burn with a livid red glow and throw up in the volumes of nasty-smelling smoke, and during the night they illuminate the rough, but gorgeous scenery of the Bakhtiari Mountains like big bonfires*".

[10] Schwartz *et al*. 1999. See also Wright *et al*. 1978.

[11] On this point, it has been stressed by Maxime Siroux (1938: 157) how at Masjed-e Soleyman the "*architecture, si l'on juge de ce qui en subsiste, devait parfaitement mettre en valeur les phénomènes d'origine souterraine attribués à la divinité*" and still in 1938 "*les habitants des maisons voisines aiment à conter la force des 'dives' dont les jeux démoniaques se déroulaient sur ces puissantes terrasses par euxconstruites*".

of curious tourists, resulting from poisonous gas leakages[12]. *Sar-Masjed* is the name attached to the architectural complex at Masjed-e Soleyman. The pre-Islamic designation is unknown but its modern one has been derived from the location on top of a hillock overlooking a locality called "Sar-Masjed" ("the top of the mosque")[13]. The original extension of the place is still unidentified since the presence of modern buildings, particularly on the southern and eastern sides, prevents any systematic investigation of further archaeological remains. The main complex of Sar-Masjed, which occupies a space of almost 1.5 hectares and displays the presence of numerous buildings built on a broad terrace with levels at varying elevations, is easily identifiable. It can be assumed that the site served as a suitable surface for the construction of other buildings that have not yet been excavated, and while comparable and clerly identifiable ruins are not found in loco, their presence cannot be ruled out. The only archaeological investigations on the site were performed by Roman Ghirshman, whose work remains essential today for the study and evaluation of the complex, even if some of his interpretations are rather outdated.

The aim of this paper is to critically reanalyze certain aspects of the site, with a specific focus on its architecture, to reassess the previous functional, architectural, and chronological interpretations of the complex in academia. To achieve this, the authors conducted site visits on multiple occasions and carried out a thorough re-evaluation of the information currently available in the literature. The contribution has been conceived in two main parts following the History of Studies: a first section mainly dedicated to the presentation of Masjed-e Soleyman and the main proposals regarding the architecture, function, and chronology of the complex, as proposed by Roman Ghirshman[14]. The second part is instead focused on presenting some proposals for revising Ghirshman's data.[15]

2. History of Studies

The Western scholar acknowledged as being the first to indicate the site of the Masjed-e Soleyman ruins was the British officer Henry Rawlinson, who did not go there in person, but rather "*heard […] of the ruins of a great building, upon the banks of the Kuran, a short distance below Súsan, which was named Masjidi-Suleïmáni-Buzurg* [16]: *by the Bakhtiyáris it was usually likened to the superb remains at Kangáwer, and it doubtless, therefore, marks the site of another of the wealthy temples of Elymais*"[17]. He proposed an identification[18]of

[12] Unvala 1928: 85. See also Siroux 1938: 158-159.

[13] According to Masud Soltani – the former director of the Masjed-e Soleyman *Cultural Heritage and Tourism Organisation* (MSCHTO) – the monument has been under 24-hour security watch to protect the ancient site from intruders, including looters. Furthermore, as it has not benefited from attention to maintenance – the same applies at Bard-e Neshandeh – the site is at a critical stage, and indeed Soltani rang the alarm bells three years ago, declaring: "*The ancient monument requires urgent attention; its surface needs to be restored to protect it from further destruction and the whole structure is in need of strengthening*". He also affirmed: "*Due to the importance of the Sar-Masjed Fire Temple [...] we have asked the Khuzestan CHTO to pay more attention to the edifice*" (Masud Soltani 2010, The Circle of Ancient Iranian Studies). During our visit at the site in November 2015 allowed to confirm this grave situation of risk present in the archaeological area of Masjed-e Soleyman.

[14] The paragraphs of the first section are: *Chronological Proposals*; *The Archaeological Context;* and *Monumental Architecture*.

[15] The paragraphs of the second section are: *The Masjed-Soleyman Terrace: a Critical Approach*; and *Conclusions*

[16] Also worthy of note is the not completely clear distinction that Rawlinson makes: "*Masjidi-Suleïmán, or sometimes Masjidi-Suleïmáni-Kuchuk to distinguish it from another ruin, named Masjidi-Suleïmáni-Buzurg, which I shall hereafter speak of, and represent, without doubt, one of the ancient temples of Elymais*" (Rawlinson 1839: p. 78). See Schippmann 1971: 234-236 for further clarifications.

[17] Rawlinson 1839: 84.

[18] Rawlinson 1839: 86.

the sanctuary with the "Dianae templum augustissimum illis gentibus" recorded by Pliny[19]. "*The description of the ruins given by Major Rawlinson of these ruins […] greatly excited my curiosity*"[20], was Layard's initial reaction as he wrote in November 1941, which was only to be disappointed, on his later visits, to the extent of calling them "*insignificant*"[21]. His concise but approximate description led him to interpret the site as being a place for a Sassanian fire temple[22]. Layard reported the presence of an artificial terrace and traces of foundations for a building, emphasizing the absence of columns and architectural ornaments or inscriptions on all types of material[23]. As occurred at Bard-e Neshandeh, and even more so at Masjed-e Soleyman, many explorers and scholars came over the years to offer diverging interpretations. A brief list of these visitors included: Unvala[24], Godard[25], and Erdmann[26] who referred to Masjed-e Soleyman as a fire temple; Herzfeld, who interpreted it as a sanctuary; Vanden Berghe[27], who catalogued Masjed-e Soleyman as an Achaemenid fortification; and Siroux[28] and Stein[29], who avoided using the attribute of "fire temple," preferring to refer to "sanctuaries" for Zoroastrian worship. Later, during the 1960s, Roman Ghirshman of the *French Délégation Archéologique en Iran* stipulated a "*gentlemen's agreement*" with the Anglo-Persian Oil Company to carry out "*une modeste mission archéologique*" at Masjed-e Soleyman and the neighbouring Bard-e Neshandeh[30]. Ghirshman suggested that a Persian tribe erected the sacred terraces after they came to this area of the Zagros mountains around the 8th-7th centuries BCE[31]. In general, he proposed several interpretations now outdated. Indeed, he supposed that this Iranian community learned how to build the terraces when they were still living in northwest Iran under the control of Urartian rulers[32] and used the terraces as places of Zoroastrian worship throughout the Achaemenid period[33]. As discussed earlier, Ghirshman further assumed the possible presence of a Macedonian garrison – or rather, a Macedonian settlement – at Masjed-e Soleyman, emphasizing that underneath the *Grand Temple* there would be an older structure, noted only through limited investigative digs,

[19] Pliny, VI.31.135.
[20] Layard 1846: 81.
[21] Layard 1846: 61-62.
[22] Layard 1894: 340.
[23] See also Schippmann 1971: 236. Layard reported how the Bakhtiari tribes had anticipated the finding of King Solomon's hidden treasure in the palace, and describing their astonishment that this discovery had not been made, as well as their fear of having disturbed supernatural beings in the location. He also reported several legends relating to Masjed-e Soleyman, told to him by some of the Bakhtiari tribesmen (Layard 1894: 341-342). It is to be noted that when he was informed that there was "*sometimes called by the Lurs the Masjdi Suleiman*" (Layard 1846: 62), this phrase led Hansman to believe that Layard had not heard the ruins described in this way but was simply going back over references made by Rawlinson (Schippmann 1971: 227). A discussion regarding places outlined by Rawlinson and Layard, and their related descriptions and interpretations, is developed in-depth by Schippmann in his book on the fire temples (Schippmann 1971: 226-227, 234-236).
[24] Unvala 1928: 86-87.
[25] Godard 1949: 153-162.
[26] Erdmann 1941: 29.
[27] Vanden Berghe 1959: 64-65.
[28] Siroux 1938: 157-159.
[29] Stein 1940: 162-163.
[30] Ghirshman 1976: *Preface*.
[31] Ghirshman 1976: 55.
[32] On the history of Urartu, see Salvini 1995: 18-121 and Salvini 2006. On the Urartian cultural and architectural influences on the Iranian plateau, see Dan 2015.
[33] Ghirshman 1976: 281-282. For Ghirshman, this would have been proved by the building methods used on the terraces, which were consistently made up of walls of rough stone (Ghirshman 1976: 1950: 215; Stronach 1974: 246). This hypothesis did not in the slightest convince the German scholar, Schippmann, who regarded them as "*eine schlecht gelungene Nachahmung*" of the terraces of Pasargadae and Persepolis (Schippmann 1971: 248).

which was dated to the Seleucid period and dedicated to Athena *Hippia*[34]. He believed such a structure or structures would be like those described by Strabo as having been destroyed by a Parthian king[35], by the discovery inside and near the temple of two images of Athena and a series of votive terracotta of Macedonian horsemen. The use of limited findings to determine the deity to whom a temple was dedicated may be speculative, and for the moment it is probably better to leave the question open. At the same time, the absence of systematic surveys and excavations around the area of the site, in particular on southern and western sides, which cannot be adequately undertaken due to the presence of the modern city of Masjed-e Soleyman, ensure that the hypothesis of the presence of a Seleucid garrison at Masjed-e Soleyman proposed by Ghirshman cannot be entirely ruled out[36]. Ghirshman's discovery, though, of a statue of Heracles and various other finds near a smaller temple structure led him to identify this construction as a sanctuary for the Greek semi-god[37]. During the following Parthian period, Ghirshman argued that the *Grand Temple* would have served as a place of worship for the Iranian deities Anahita and Mithra based on the discovery of an image on a bronze plaque in Room no. 6 (which he identified as an *antecella*). According to the scholar, this interpretation was supported by the features of the so-called temple *cella* (i.e. Room no.4) with two entrances and two altars. The modest structure was attributed as being dedicated to Verethragna, whom the Greeks identified as Heracles[38]. As stressed by Ghirshman[39], this would be the first place of worship for a Greek deity in Iran. Concerning Ghirshman's assumptions of Masjed-e Soleyman as an Iranian sanctuary depositary of the sacred fire[40], some scholars soon expressed reservations. An example is Schippmann in his complete study on "*Die iranischen Feurheiligtümer*"[41], where he affirmed without hesitation that on the terrace of Masjed-e Soleyman there were no structural remains or discoveries of any kind that could be linked with places of Zoroastrian worship. Schippmann further believed that these complexes were used as independent Elymaean sanctuaries not connected with Iranian cults[42].

3. Chronological proposals

The assumptions proposed by Ghirshman in the 1970s to present the terraces already in use during the Achaemenid period were based on the discovery of some modest materials, amongst which were the theriomorphic extremity of a *rhyton*[43] analogous to those found at the "*Village perse-achéménide*" of Susa (6th century BCE)[44], and the white-alabaster head remarkably similar to the Achaemenid lapis-lazuli head from Persepolis (5th-4th century

[34] Ghirshman 1976: 281-282.
[35] Strabo XVI.1.18.
[36] Ghirshman (1976: 72) also assumed that if there were an expectation of there being temples and chapels for Greek deities as well as homes, none of these were found. Moreover, Ghirshman even suggested that evidence of such a Greek religious cult could have been from the era of Antiochus I (280-261 BCE), without offering any justification for such a proposition (Ghirshman 1976: 99).
[37] Ghirshman 1976: 191.
[38] Ghirshman 1976: 195-196. As further pointed out by Potts (2016: p. 368), it would be interesting to broaden the discussion regarding Greco-Iranian religious interactions with the aim of understanding if, for example, in this case, the representations of a Greek Heracles in an Iranian-Elymaean context could reflect the spontaneous worship of a Greek deity in Iran or an assimilation with the Zoroastrian god Verethragna or with a local deity. See also Bivar - Shaked 1964; Scarcia 1979; von Gall 1986: 212-213; Potts 1993: 352-353.
[39] Ghirshman 1976: 101.
[40] Ghirshman 1950: 216-217; Ghirshman 1969: 484, 492; Ghirshman 1972.
[41] Schippmann 1971.
[42] Schippmann 1971: 248. On the religious aspect, Hansman 1985: 240-246; Boyce - Grenet 1991: 35-48.
[43] Ghirshman 1976: 85.
[44] Ghirshman 1954.

BCE)[45]. As showed by Stronach, this head would not be earlier than the 5th century BCE[46], but this is not enough to consider the site in the list of the Achaemenid ones[47].

Schippmann firmly showed that no Achaemenid or preceding discoveries had exhaustively been made during the excavations at Masjed-e Soleyman, suggesting instead a more practicable Hellenistic or Parthian dating for most of the items found on site[48]. This point was partly supported by successive publications regarding the study of ceramics discovered during the excavations[49]. Haerinck suggested a dating between the 4th-3rd century BCE and 150 BCE, evaluating the arrival of Mithridates I in Susiana (*ca* 140-138 BCE) as a reliable *terminus ante quem* for the complex of Masjed-e Soleyman[50]. In this regard, the high quantity of *unguentaria*-like recipients, suggests a particular activity of the site around the 3rd-2nd century BCE. It is to this time of Greek presence that Ghirshman attributes the dating of the primitive phase of the *Grand Temple* (or "*temple antérieur*"), and the first phase of the smallest *temple of Heracles*.

The dating to the Seleucid period for the presumed terrace extension and the first foundation of the two main buildings is largely based on small finds that came to light during the French missions, mainly votive offerings such as terracotta objects, bronze figurines, jewellery and pottery. The modest nature of this material implies a certain caution in the approach, which however does not exclude the dating to the Seleucid period[51]. Unfortunately, the meagre numismatic data from this period offers inadequate support[52]; in contrast, the architectural and ceramic evidence propose a date between the 4th-3rd and early 2nd century BCE[53]. The structures erected on the terrace have primarily been ascribed to the Parthian/ Arsacid period, particularly with regard to the sculptures[54]. Nevertheless, it is plausible to consider a potential Seleucid-era date for the terrace itself, at least as concerns the earlier ground level (i.e., so-called temple of Athena *Hippia*)[55].

3.1. The Archaeological Context

The Masjed-e Soleyman is a massive stone structure located 100 km east-southeast of the ancient city of Susa (Shush). It is situated on the first foothills of the Zagros Mountains bordering the town of the same name. The complex is precisely located on the north-western outskirts of the city on a natural elevation, affording a dominant view of the plain to the west and south[56].

[45] Ghirshman 1954: pl. LXXIII.3.
[46] Stronach 1974: 246; Stronach 1978: 283-284.
[47] Boucharlat 2005: 238.
[48] Schippmann 1971: 248, 257.
[49] Haerinck 1983; Martinez-Sève 2004.
[50] Haerinck 1983: 14, 244. The pottery dating is generally proposed between 250 BCE to 150 BCE (Haerinck 1983: 14), however during his study Haerinck shows how along "Zone I" (Elymais and Susiana) the production may have started some time before (e.g., glazed ceramic) between 4th and 3rd century BCE (Haerinck 1983: 244).
[51] There is an interesting personal comment made by David Stronach, and reported by Susan B. Downey in her book "*Mesopotamian Religious Architecture. Alexander through the Parthians*" of 1988, where the Scottish archaeologist affirmed that during his many visits to Masjed-e Soleyman – while excavations were still under way – there was no pottery found that could be classified as Seleucid (Downey 1988: 131). However, this can be related to the fact that the surveys to deeper layers were very limited due to the agreement with *Archaeological Service of Iran*, and the site was mainly studied on its Parthian occupation level.
[52] Augé *et al.* 1979: 15-16.
[53] Haerinck 1983: 14, 244. Martinez-Sève 2004; Martinez-Sève 2014: 258.
[54] Hannestad - Potts 1990: 115.
[55] Callieri – Askari-Chaverdi 2013: 697.
[56] Coordinates: 31°59'0.73"N 49°16'53.84"E; elevation: 320 m. a.s.l.

The Masjed-e Soleyman complex unfolds across an extended trapezoidal surface (*ca*. 136×125 m)[57] constituted by an artificial terrace (Fig. 3)[58]. This terrace features an external retaining wall characterized by a cadenced alternation of buttresses and recesses (Fig. 4), showing a more intricate structure than that observed at Bard-e Neshandeh. It appears evident that the concept of the artificial terrace can be traced back to the tradition established during the Achaemenid era —as seen in Pasargadae and Persepolis— where palatial and temple complexes were elevated on large terraces,. A tradition that has its roots in the late Assyrian tradition[59]. At the same times, the intentional use of regularly spaced and protruding buttresses in the retaining walls is an element that can be connected to the fortification walls of Persepolis, which extends from the terrace to the Kuh-e Rahmat and are a remnant of the late Assyrian era, as seen, for instance, in Khorsabad. In the Iranian World, other examples of platforms/terraces equipped with regular buttresses include Pasargadae and Ulug Depe[60], both of which share a distinctive feature with Masjed-e Soleyman: integrated access stairs seamlessly incorporated into the body of the terrace (Figs. 5-6). At the level of site organization and buttress morphology, comparisons can be drawn with the walls of Old Nisa, the Arsacid capital constructed on an extensive clay platform dating back to the 2nd century BCE[61]. In particular, the buttress number "t" on the "Terrace I" of Masjed-e Soleyman[62], characterized by an obtuse angle instead of the conventional 90°, exhibits planimetric similarities with the northern and eastern bastions of Nisa[63].

A particularly interesting element positioned on the northern perimeter walls of the terrace are three blind windows or niches (Fig. 7), which present morphological comparisons in the Parthian era, as for example in the monument of Qal'eh Zohak[64]. Despite variations in construction and dimensions, this type of blind window must be considered in as an element inherited from the Achaemenid culture. It originated from the Urartian reinterpretation of Mesopotamian models, transmitted through cultural interactions with the Assyrians[65].

As previously introduced, the Masjed-e Soleyman complex is composed of a vast terrace that extends across multiple horizontal levels, which Ghirshman subdivided into six terraces (I-VI), each with varying dimensions and functions. The terrace is supported by imposing retaining walls —constructed from stone blocks of diverse geometries and sizes (Fig. 8)— which are characterized by regularly spaced rectangular buttresses. These architectural elements serve to confine the loose filler within the terrace (Fig. 9). Access to this extensive artificial terrace is facilitated through a main stairway located at the northeast corner, complemented by smaller staircases situated along the northern and southern flanks.

[57] These measures were taken by the authors in a visit at the site, in 2015. The maximum distance north to south extends from the projection on which stairway B was built to the projection identified by Ghirshman as terrace III; for the east to west axis, this extends from the entry to stairway H until the so-called *western sanctuary*. It is striking that Ghirshman (1976: 55) reports only terrace measurements of the most ancient phase (terrace I, 54×91.5 m) but does not continue with more comprehensive measures, reporting only the fact of an extension of the platform that took place towards the north and the west due to the Macedonian installation at Masjed-e Soleyman (Ghirshman 1976: 72).

[58] On the terminological distinction between "terraces" and "platforms", with a specific reference also to the Masjed-e Soleyman case, see Dan – Salaris forthcoming.

[59] On the difference between platform and terrace, with reference also to the Masjed-e Soleyman, see Dan – Salaris forthcoming. On the development of the Achaemenid platform and terraces from late Assyrian prototypes, see Dan 2023.

[60] Dan 2023.

[61] Jakubiak 2016.

[62] Ghirshman 1976: pl. III.

[63] Pugachenkova 1958: 33.

[64] On this monument and its interpretation, see Schippmann 1971: 372; Kleiss 1972: 160-165, figs. 34-35, pls. 42-33; Kleiss 1973: 171-182, figs. 4-17, pl. 41; Kroll 1984: 42, 118, tab. 5.

[65] On these aspects, also in reference to Masjed-e Soleyman, see Dan 2015: 43-46 and Dan 2023.

4. Ghirshman's architectural and chronological proposal

Ghirshman identified four distinct occupation phases, which are reflected in the construction level of the complex:

An initial archaic period (*phase I*) or *époque perse*[66] (subdivided into two periods) was characterized by a single terrace (I) of 91.4×54 m on whose southern sector which the scholar identified as a podium for outdoor worship[67]. A rectangular-shaped room (2.70×1.15×2 m) with a roof composed of large slabs – one of which (1.60×1.15 m) discovered still *in situ* – was placed into a section of the northern foundation wall (north-west corner). This closed space was erroneously interpreted as an *atesh-gah*[68] where the fire was kept for subsequent ritual exposure on the podium. Although no trace has so far been found in such a place (i.e., podium) during this phase, the structure was identified with the rebuilding of the same podium (8.12×7 m)[69], that occurred in a second stage of terrace I[70]. During the so-called *phase II*, Ghirshman considered a widening of the terrace itself with the reconstruction of the southern substructure wall[71]. At this stage, the terrace was accessible through four staircases (A[72], B[73], C[74]-D), possibly connected to the ceremonial activities of the sanctuary as at Bard-e Neshandeh[75]. Whether it involved a Macedonian presence or not, a second construction phase (*époque séleucide*)[76] connected to a Greek community (garrison?) at Masjed-e Soleyman

[66] Ghirshman 1976: Pl. XLVI-XLVII. Ghirshman even refers to the presumed installation on this site of a Persian tribe towards the end of the 8th and the beginning of the 7th century BCE. The site would have been chosen because it was located in a valley close to a small watercourse (a landscape typical of this region), as at the location of nearby Bard-e Neshandeh. The village would have been near a spring, nowadays dried up, which gave its name to a section of the modern city about 2 km from the sanctuary, *Chashmen Ali* or "Spring of Ali." This village extended to the east and moreover to the south where there was a bare hill that Ghirshman thought may have covered the remains of a chieftain's dwelling (Ghirshman 1976: 55).

[67] Ghirshman 176: 61.

[68] The hypothesis advanced by Ghirshman (1976: *Neshandeh*, 21, *Masjed-e Soleyman*, 61-62) which identified the niches within the exterior facades of terraces at both Bard-e Neshandeh and Masjed-e Soleyman as fire-temples or *atesh-gah*, appears to be scarcely credible. These niches, already discussed above in this text, given that they are near access stairways and that they do not have flues, would seem "*far more likely to have sheltered oratories for cult-image*" (Boyce - Grenet 1991: 47). For the same misguided interpretation provided by Ghirshman about the niche of Bard-e Neshandeh, see Ghirshman 1976: 21.

[69] Ghirshman 1976: Plan VI.

[70] Ghirshman (1976: 62) also connected the disappearance of the podium with the confirmed destruction of the most ancient podium of Bard-e Neshandeh.

[71] The south foundation wall, where the hill has a cliff of 20 m that falls straight down into the modern city, is indeed to be considered as the most vulnerable part of the terrace, due to the most exposure to environmental and climatic severity.

[72] Ghirshman 1976: pls. XLVI, XLVII, LI.2-3, LIV.1. The principal stairway (A) is 24.40 × 4.50 m and made up of 20 steps with a height of 18-27 cm each (Pl. X.1).

[73] Ghirshman 1976: pls. XLVI, LI.1-2, LIV.2; fig. 25. This stairway (4.40/4.99 × 5.16 m; southeast corner) is composed of 29 steps.

[74] Ghirshman 1976: pls. XLVI, LIV.3; fig. 26. The stairway (pl. XII.c) is 4.90/4.55 × 5.16 (south side) and made up of 26 steps.

[75] Ghirshman (1976: 61) suggested the existence, during *phase I*, of a religious cult that would have followed the same process as on the superior terrace at Bard-e Neshandeh and attested in the Babylonian and Assyrian sources. During the ceremony, the worshippers most likely might have gone up on the northeast corner using the spacious stairway A, and then descending to leave the sanctuary by the minor stairways B (southeast corner) and C-D (south side). The ceremonies unfolded in all probability around a podium as at Bard-e Neshandeh (Ghirshman 1976: 50).

[76] Ghirshman 1976: 71, Plans III-IV; Pls. XLII, XLIII, XLIV, XLV. According to Ghirshman (1976: 73), during the so-called *époque séleucide* of Masjed-e Soleyman, the sanctuary had a fundamental function in the politics of the Seleucid kings for the internal administration of Iran, in particular regarding the mountainous region of Elymais.

was proposed by the French scholar due to the finding of some artefacts (e.g., Greek-style cavalry riders wearing the Macedonian *kausia*)[77]. During this phase, a new construction asset brought an expansion of the terrace towards the north and west. Ghirshman indicated the construction of three new platforms (II, III, IV), respectively flanking the north side of terrace I (Pl. XII.g), where the existence of a Greek garrison was suggested[78]. These terraces allowed a gradual ascent to the superior terrace (V) by three different levels[79] through the use of five stairways, of which four (H[80], J[81], K[82], L[83]) are placed one after the other, while the fifth (G[84]) separately accessed terrace IV. This array of stairways, levels, and terraces was considered as an indication of the significant influx of worshippers periodically visiting the sanctuary. A further three staircases (E[85], F[1][86], F[2][87]) also provided direct entrance to the superior terrace (V)[88]. According to Ghirshman, this new terrace reveals more thorough work with the use of smaller material selected with higher accuracy, which has assured a better conservation compared to the more ancient phase. Noteworthy, on terrace III, there is a small building (*north-east construction*) which was found, including two rectangular rooms with different entries both posted on the north side and not directly connected to each other. This construction was identified as a possible location for temple personnel of the same type as rooms nos. 7-8 in the lower terrace of Bard-e Neshandeh[89]. During this phase, the terrace had more than double its surface. On the west side, Ghirshman indicated a low and long north-south wall[90], which flanks the western limit of the most ancient terrace (I), as a structural border between this latter and a new and broader extension. The new identified platform (V) was slightly higher hosting two presumed temple buildings with walls composed of irregular stone blocks and earth, and two other smaller buildings with secondary functions. On the southeastern corner stood the so-called *Grand Temple* that Ghirshman placed within the third structural phase of Masjed-e Soleyman (*époque parthe*)[91]. An older structure was subsequently unearthed beneath the initially visible surface of the temple, and tentatively

[77] Ghirshman 1976: 79-80; Martinez-Sève 2004.
[78] Ghirshman 1976: 73.
[79] Ghirshman 1976. There is a difference of around 5.30 m between lower ground level and the superior terrace.
[80] Ghirshman 1976: Plan V; Pl. LV; fig. 22. This one is made up of three steps around 18.35 m wide. Even with smaller steps than those on stairway A, it seems it would have been destined to receive large crowds.
[81] Formed as stairway H with three steps, its dimensions of J were reduced (9.15 m). Interestingly, towards the top of stairway J, the doors of an underground chamber open surrounded by a corridor (1.75×2.70 m).
[82] The stairway K is divided into two parts: the bottom has five steps 18.50 m wide and the higher part has two steps, 13.40 m for the first one and 12.40 m for the higher one.
[83] This is 12.10 m wide and distributed over four steps.
[84] The stairway G is made up of 14 steps set between a buttress (H) and the substructure wall of terrace III, having a lower part of four steps 9.90 m wide and a superior section of 10 steps 8.45 m wide.
[85] Ghirshman 1976: pl. LV.5; fig. 30-31. The closest stairway to the mountain, it is made of four steps 5 m wide.
[86] Ghirshman 1976: Pl. LV.3; fig. 30-32. This is characterized by five steps 4.37 m wide.
[87] Ghirshman 1976: Pl. LV.4; fig. 32. According to Ghirshman (1976: 73), this is a later extension made of 14 steps 2.60 m wide.
[88] Ghirshman proposed that ascent to the sanctuary would have been along the stairways H, J, K, and L, thus keeping the main access on the northeast corner (as occurred with stairway A of terrace I). At the same time, descent would have been made along the other four stairways (E, F[1], F[2], G), all on the north side, the area that for the French archaeologist would have been the Macedonian quarter (Ghirshman 1976: 73).
[89] Ghirshman 1976: 74.
[90] Ghirshman 1976: pl. XLVI, XLVII. This wall has been defined as "symbolic" with the function of dividing the old terrace, along with the podium for Iranian fire worship, from the new area of worship used by the Macedonian community, in this way favouring the birth of Hellenistic-Parthian culture in the region (Ghirshman 1976: 76).
[91] Ghirshman 1976: 77.

dated to the Seleucid era (temple of Athena *Hippia*)[92]. Approximately 30 m. northwest of the *Grand Temple* and connected to it by a paved path[93], there are the remains of a multi-room rectangular structure conventionally labelled as a *temple of Heracles*, basing on the finding of a Heracles statue strangling the Nemean lion. Other structures discovered on terrace V included a further two-room *north-west construction*, whose use remains obscure due to the scarcity of items attributable to it, which were found here and on nearby stairway L on an axis with the portico of the *Grand Temple*[94]. About a dozen metres to the west of the latter, excavations revealed a small building —*southern construction*— with two rooms not connected to each other and with their entrances facing the side of the *Grand Temple*[95]. According to Ghirshman, at the time when Ardashir, founder of the Sasanian dynasty, seized control of Elymais in 224 CE, Masjed-e Soleyman represented one of the most important cult centres of the region[96]. The complex of Masjed-e Soleyman appear to have been seriously damaged by a period of religious intolerance during Shapur II's (r. 309–379) rule, based on monetary finds. This time did not cause the definitive cessation of the terrace, which remained in existence and underwent a further three new phases[97]. According to Ghirshman[98], during the 1st phase after its abandonment, a foundry was installed in the southern part of the *temple of Heracles*' *cella*. A tiled floor covered this area, while a low wall divided the *cella* into two halves with a small roughly-pierced door opening on the southern side. Its soil (*ca*. 50 cm above the level of the pavement) was littered with ashes and charcoal.

At any rate, this phase did not seem to have lasted long, and possibly stopped during the transformation undertaken in the western part of the terrace (2nd phase), where it already

[92] The name *Hippeia* (Hippia) appeared to have its roots in the Mycenaean period and was always used in a context of cavalry and military power. It seems that from ancient times these functions were linked to Athena, who was often given the epithet, "of the Horses." According to myth, Athena showed humanity how to tame horses, and she gave to Bellerophon —the conqueror of the Chimera— a golden bridle for his horse Pegasus (Burkert 1985: 221). Horses were a sign of nobility, an indicator of the cavalier class and their military capacity. *Athena Hippia* was probably the protecting goddess of this class. For this reason, statues of cavaliers were generally dedicated to this goddess and placed in their sanctuaries.

[93] Ghirshman (1976: 90) reports the distance between the two structures as being 15 m, but the examination of the plan that he published seems to indicate a greater distance (Ghirshman 1976: Plan III), data confirmed by our visit to the site in 2015.

[94] Ghirshman (1976: 101) suggests a dating to the Seleucid era because of the existence of a head of the Egyptian deity Bes (Ghirshman 1976: 101; Pl. CX.3; Pl. 68 GMIS 701) which is also well known from excavations at Susa.

[95] Ghirshman 1976: 118. It has been suggested by Ghirshman that the rooms of the "*southern construction*" were erected at different times: first, the smaller room (1.80×1.60 m) and then the larger (2.90×2.20 m), providing a Parthian date based on the relics found. Ghirshman offered this picture even if he also assumed that one of these spaces, identified as a possible habitation for temple guards, may have existed since the Seleucid era.

[96] Ghirshman 1976: 133. The political transition under the control of the Sassanian authority (224-651 CE) did not seem to have affected, at least at the beginning, the performance of the local religious practices, which included the concomitant cult of four Mazdean deities, i.e. Ahuramazda (podium), Anahita and Mithra (*Grand Temple*), and Heracles (temple). Referring to the inscriptions of Antiochus I of Commagene which presented a Greco-Iranian dynastic cult with gods who bore Greek and Iranian names, Ghirshman debatably tried to connect these four Iranian deities (Ahuramazda, Anahita, Mithra and Verethragna/Heracles) to the four aspect of Zurvan, the tetramorphic god whose cult Ghirshman confidently considered to be existing prior to the establishment of the Achaemenid empire (Ghirshman 1976: 133-134). In reality, although the details of the origin and development of Zurvanism remain debated (for a summary of the opposing opinions, see de Jong 2014), it is generally accepted that Zurvanism was a "hypothetical" religious movement in the history of Zoroastrianism which is well attested in Greek, Syriac, Armenian and Arabic sources but surprisingly absent in any Zoroastrian texts found so far (de Jong 2014).

[97] Ghirshman 1976: 136.

[98] Ghirshman 1976.

leaned against the mountain. A new terrace VI (18×27 m) was then erected, according to Ghirshman, which entirely covered the *temple of Heracles*[99]. Its walls were composed of massive stones and fragments of columns, including three pieces of the Heracles statue (head, torso, and legs)[100]. Access was provided through a large door (1.15 m wide) on the northern side. The western area of the terrace presented a construction of which only the southern part of the rear remained, divided into two parts, with an access door opening on the south wall and a second one on the terrace[101]. The wall *apparatus* (high 0.82-1.28 m) was unrefined, the room partially cut into the mountain, and the rear wall directly covered with unworked stone slabs, placed and glued against the slope of the hill. The remains of four columns, which were constituted from reusing material supplied by the *Grand Temple*, were also found aligned along the primitive room of the construction[102].

According to Ghirshman, the third (and last) phase described the existence of Masjed-e Soleyman after the hostile activity led by Shapur II on the territory. As a replacement for the small columned structure of terrace VI, a new construction was established. It was considered the first structure to be cleaned out and analyzed on the platform by the French mission, which interpreted it as a sanctuary (*western sanctuary*)[103].

4.1. Monumental Architecture

When Ghirshman began working at the *Grand Temple* —aiming to discover any prior constructions under the visible temple of the Arsacid period— he first had to enter into an agreement with the *Archaeological Service of Iran*, which crucially limited the aspect of the mission. This agreement permitted excavations but it did not allow walls to be touched and it did not authorize any work that could have compromised the state of the monument[104].

The complex of Masjed-e Soleyman is dominated by two principal edifices built on stone foundations and delineated in rectangular environments: the major *Grand Temple* (Figs. 10-11) and a modest structure tentatively associate to Heracles (Figs. 11-12). According to Ghirshman, the visible structures of the *Grand Temple* concealed under its ground-level (Parthian) the remains of an "anterior" temple attributed to Athena *Hippia*[105], whose planimetry would not have been much different from the Parthian one (*phase II*). Few permitted surveys showed how the two construction phases (Seleucid and Parthian) of the walls were overlapped in some areas. To be more precise, the surveys on the north corridor[106] and on the southwestern section of Room no. 4[107], which passed through three different stratigraphic layers reaching a depth of around 3 m, were the more informative. The survey attained an accumulation of stones, which were dispersed in a bed of other pebbles to level the ground, derived from the demolition of a wall. It was possible to distinguish the walls of the most ancient parts, then covered with a layer of loose earth, and above which the two overlaid sections of the rear wall construction were raised. Remarkably, among that load

[99] Ghirshman 1976: pl. III-IV, IX.
[100] Ghirshman 1976: 136; Pl. LXX.
[101] Ghirshman 1976: plan IX, rooms nos. 3-4; Pls. XLV, XLVI, XLVII, XLVIII, XLVIX, LVIII.
[102] Ghirshman 1976: pl. LVIII. Ghirshman considered the building of this building modest assembled and the reusing of material from the *Grand Temple* inadequately executed, that prompted him to assume the laborious realization of terrace VI as an attempt to eliminate the *temple of Heracles* and its statuary in the logic of religious intolerance which pervaded that historical period.
[103] Ghirshman 1976: 138.
[104] Ghirshman 1976: 77.
[105] Ghirshman 1976: 80.
[106] Ghirshman 1976: Plan VII; Pl. LXIX.2.
[107] Ghirshman 1976: pl. LXXVII.1-2.

of stones, a considerable number of votive objects from the "anterior temple" were unearthed in a quite clear stratigraphic context[108].

After the archaic phase (Seleucid), and during the Parthian period, Ghirshman recognized four successive structural phases (*I*, *II*, *IIIa,* and *IIIb*) of the *Grand Temple*, among which *phase IIIa* (Fig. 10) was regarded as the most complete in plan, despite the fact that a major proportion of the complex was devastated by the digging of graves for a modern cemetery[109].

In *phase, I*[110] a line of stones evoked evidence of an initial wall structure[111] even though the limited evidence left makes it impossible to define an overall plan, even only in part. At this stage, the *Grand Temple* seems to be constituted by Room no. 4 (Ghirshman's *cella*) and Room no. 6 (Ghirshman's *antecella*) with the same plan of the *temple of Heracles* and the *western sanctuary*. This situation suggested to Ghirshman and other scholars that the temple of Athena *Hippia* during this phase could have had a planimetry similar to other Hellenistic shrines in Near East and central Asia, especially in Mesopotamia (e.g., Anu-Antum temple and Irigal temple at Uruk)[112].

The wall partitions during *phase II* were approximately the same as those in *phase IIIa*, except for room no. 7, with a surface apparently smaller compared to the plan of following phases, creating uncertainties in the definition of a plausible planimetry for the structure. As a result of some surveys (marked with an "S" on the plan), a certain number of walls and corners were identified, and tentatively combined to provide a consolidated plan despite knowing that other fractures could be interlayered between the partially revealed walls[113].

Phase IIIa[114] is considered the most complex and articulated planimetry, despite the depredations, which has undergone because of graves dug across its entire surface[115]. The roughly-squared perimeter (31×33.08 m) has a corridor of varying width[116] running along all four sides isolating the central block of the building from the outer wall. Four entrances lead into this exterior corridor: from the eastern corner, preceded by three steps (likely the main entry); on the northern corner another entrance on the same principal façade (much disturbed by the digging of graves); from the southeast corridor and practically in line with the latter; and a fourth entrance on the northwest side. The northeast façade is especially elaborate. Ghirshman envisioned a portico (no. 14) of 34.52 m between the two doors of the main northeast wall, completely paved and having three lines of columns[117] placed on bases, each composed of a thick *torus* then a *scotia* separated from another much thinner one. These

[108] Ghirshman 1976: 77.

[109] The main problem for Ghirshman was that this cemetery covered most of the southern area of the terrace. He defined this obstacle as almost insurmountable, but it was overcome after a plea was made to the Shah. The Shiite religion in Iran permitted relocation of graves older than 30 years, and the Shah granted the request because he did not want to limit archaeological work that could bring prestige to all of Iran (Ghirshman 1969: 484).

[110] Ghirshman 1976: Plan IV and VII.

[111] Ghirshman 1976: Pl LXXVII.1-2.

[112] Ghirshman 1976: 103. For planimetric comparisons, see Downey 1988; Shenkar 2011; Canepa 2015; Salaris 2017.

[113] Ghirshman 1976: 105.

[114] Ghirshman 1976: Plans III, IV, VII; fig. 36.

[115] Ghirshman 1976: pl. XLIII, XLIV, XLV, XLVI.

[116] The corridors on the NW (1-2), and NE (5-13) were larger, respectively 3.05 m and 2.40 m and built with a bench that ran along their interior walls. Corridors on the SW (no. 16) of 1.45 m and SE (no. 15) of 1.25 m were instead of smaller dimensions, and perhaps because of space restrictions and the need for ease of access they were not built with benches. All of this brought Ghirshman (1976: 105) to believe that the difference in dimensions indicated a difference in importance, supported by the fact that the NW and NE corridors framed the most important sectors of the temple, the facade with the main entrance and the most sacred area with its cella (no. 4) and antecella (no. 6).

[117] The 21 columns were arranged in rows of eight, seven and six columns, as counted from outside moving inwards.

were built on squared plinths (50 cm) that were still in place —as was the case at Bard-e Neshandeh— at the time of the French excavations. The principal entrance, located near the northeast corner, had a protruding threshold and a line of three steps (benches?) that flanked the entire northeast external façade and framed the main door. In the northwest corner of this façade, there was a low podium (4.90×3.75 m) which was accessed by three steps on the east side. A second door on the north façade led from the podium into the isolating corridor. From the main door, through corridor no. 13, the way ahead was via a long narrow vestibule (no. 12) of 10.20×3.10 m and passing through a door in line with the other two[118], which also provided access to a large court no. 11 (14.35×12.80 m) surrounded on all four sides by narrow benches[119]. Rooms nos. 4 and 6 were on the western side of the court, occupying the breadth of the vestibule and the court. Access came through a set of two identical doors (1.80 m) placed on the same axis in the northwest wall of the court and opening into Room no. 6 (16.92×4.28 m) and then Room no. 4 (15.80×2.58 m)[120]. Under the paving of Room no.6, in the northeast corner, excavators found a large water jar, and presumably a drain from outside the sanctuary which channelled water into it[121]. Two altars of different sizes (respectively: 2×1.10 m; and 1.40×0.90 m) rested against the rear wall of Room no. 4 in a direct line with the doors (Pl. XIII.b-d), while between the court and the isolating corridor (no. 16) on the south side, there was a long room of 13.68×4.05 m (no. 10), which could be entered only via the court (no. 11) through two doors of 1.70 m width[122]. Room no. 10 covered the length of the entire southwest side of the court (no. 11) and through a large door (2.20 m)[123] communicated with room no. 9, which was equal in length to the two southwest short sides of Room no. 4 and Room no. 6. According to Ghirshman, these two elongated rooms (nos. 9 and 10) were considered a sacred space (like Rooms nos. 4 and 6), or perhaps as sacristies[124]. At the north (northwest) corner of the building, a rectangular podium (4.90×3.75 m; elevated 0.70 m) was reached by three steps, while a door opened into corridor no. 5. Interestingly, a drain pipe was present in the external north-western wall near the north corner.

In the next construction stage (*phase IIIb*)[125], some structural adjustments appeared to have been made, such as the removal of almost all the benches of court no. 11 and corridors (nos. 1, 2, 5, 13) likely due to the elevation of the ground, or the installation of two doors on the short sides of the Room no. 6, one opening into corridor no. 5 and the other communicating with Room no. 9. Additionally, vestibule no. 12 accommodated a small socle (4.20×2 m) on the northeast rear wall, and the northern short-side wall of Room no. 4 was doubled in thickness. According to Ghirshman, towards the end of the temple's existence, the wall structures between court no. 11 and chamber no. 10, and those between the latter and Room no. 9 could have been removed to create a large L-shaped court[126]. Finally, the stone slabs of the Room no. 6 and Room no. 4 were covered with new paving, separated by a 15-cm layer of earth[127].

Contrary to the area where the main building was erected, on its upper part the terrace was not affected by the cemetery's invasiveness[128]. Moving to the northwestern flank a

[118] Ghirshman 1976: pl LXIV.1-2.
[119] In this area, the modern tombs were numerous, and according to Ghirshman (1976: 106), cover stones for court no.11 were cleared to make way for them.
[120] Ghirshman 1976: pl. LXVI.1-2-5.
[121] Ghirshman 1976: pl. LXV.2, 4.
[122] Ghirshman 1976: pl. LXIV.3-4.
[123] Ghirshman 1976: pl. LXVIII.4.
[124] Ghirshman 1976: 107.
[125] Ghirshman 1976: fig. 37.
[126] Ghirshman 1976: 108.
[127] Ghirshman 1976: pl. LXVII.1-2. The paving of room no. 10 in front of the two doors was covered by a layer of gypsum, typically used in the Sassanian period.
[128] The graves began from the southern corner (Ghirshman 1976: 119).

modest structure (possibly consecrated to Heracles) stood as a simplified version of the *Grand Temple*.

The so-called *temple of Heracles* (17.08×8.03 m), which roughly faced east, consisted in Room no. 5 (Ghirshman's *antecella*) measuring 13.10×3.40 m, Room no. 6 (Ghirshman's *cella*) of 17.05×2.50 m and an additional room (no. 13) that opened to the outside (Pl. XIV.2). This last room (interpreted as a sacristy[129]) was situated between the Room no. 5 and the northern wall of the temple, thus reducing the length of Room no. 5. As in the *Grand Temple*, access to Room no. 5 involved two doors (respectively of 1.65 m and 1 m). Three steps, with the top level marked by some *graffiti*, were identified as low benches, which were made of large stone slabs running along the external wall of Room no. 5[130]. A single entrance – in line with the larger one that opened into Room no. 5 – provided access in its turn into Room no. 6. Two bases, probably for statues, also flanked this door. The small room no. 13 (3.65×3.3 m) – north of Room no. 6 – may have been used as a sacristy, and it had the particularity of opening to the outside only on the southeast side like Room no. 5 (similar to environment no. 4 at Bard-e Neshandeh). As reported by Ghirshman, the northwest wall of Room no. 6 seemed to have been adjacent to an older construction (no. 9) which was 17.10 m long and 2.95 m wide[131]. In a subsequent phase, the temple had a further six rooms added, reasonably because of the major construction that became structurally inadequate to hold the increasing number of worshippers or votive statues[132]. Two sets of two communicating rooms (nos. 14-15 and 16-17) were then located on the northeast side of the temple, where the section was composed of one short side of Room no. 6 and one of Room no. 13, and additional two chambers (nos. 12 and 18) which were adjoined at the southern corner of Room no. 5.

The dating for these changes is not known, but what appears evident to Ghirshman is that the *temple of Heracles* of Masjed-e Soleyman was repeatedly modified during its prolonged existence. These structural adaptations were probably not caused by a protracted destructive action – as perhaps occurred in the *Grand Temple* – but rather involved diverse restorations, which caused it to disappear in the Sasanian era under terrace VI, replaced by the more modest *western sanctuary* characterised by an innovative vaulted roof[133].

5. The Masjed-e Soleyman terrace: a critical approach

In this section, a systematic reanalysis and reorganization of the data presented by Ghirshman are undertaken, encompassing both the nomenclature of the structures (terraces and buildings) and the chronology of the archaeological phases he identified. One of the primary issues with Ghirshman's proposals is related to the structural subdivision of the terraces and the names assigned to the different structures preserved on them. Assigning names such as the *Grand Temple*, *Temple of Heracles*, Temple of Athena *Hippia*, etc., has contributed to the prevailing notion within the scientific community that it could confidently

[129] Ghirshman 1976: 90.

[130] Ghirshman (1976: 91) compared these stone slabs with those present within the terraced rooms (*salles aux gradins*) at Dura-Europos in Syria, and as such these would have included benches for people attending sacred rites. Ghirshman (1976: 91) further suggested a similarity between these steps/seats and those present at the temple of Ai Khanoum in Afghanistan, where, however, the steps constitute the base of the temple, undermining the hypothesis that they could have been used as benches by spectators (Downey 1988: 132). The French archaeologist speculated that the steps of the *Temple of Heracles* might have been an addition in the Parthian era and so would not have been present in the original phase (Ghirshman 1976: 189).

[131] Ghirshman 1976: 90-91; Pl. LXII.1-2, 5. As suggested by the finding of red earthenware of the same type found at Susa from the same period, this construction could be traced back to the Persian epoch, when the temple was supposed to lay against the hill.

[132] Ghirshman 1976: 119.

[133] Ghirshman 1976: 138-139, pl. LVIII.1-2-3.

possible to attribute a sacred function to these buildings. To address this concern, an alternative approach is adopted, involving the reorganization of the complex of structures by assigning new nomenclature.

In this paragraph, the terraces are being re-evaluated, and a new numbering system is being implemented, taking into account considerations of stratigraphy and site plan. Subsequently, a new nomenclature for all the structures previously described by Ghirshman is being introduced

6. The terrace

Ghirshman classified the Masjed-e Soleyman complex into six terraces built during various historical periods (Fig. 3), spanning from the Achaemenid to the Sasanian era. However, based on the existing state of available data —including the textual and photographic materials provided by Ghirshman in his publications— such a detailed sub-division of the terrace complex does not appear to be supported by sufficient evidence. Considering both the architectural evidence and the distinct features observed on the "different" terraces, the system of terracing appears highly homogeneous in terms of construction technique, access points, and the articulation of external walls with buttresses, all of which bear significant similarity to each other (Figs. 13-14). The apparent disparities in block sizes utilized in construction, which could be interpreted as a chronological indicator, might be better explained by structural considerations. For instance, a comparison between the dimensions of the blocks used in the substantial corner buttresses and those in the linear stretches of walls reveals a marked contrast, with the latter being significantly smaller. The observation suggests that even if multiple construction phases took place, they probably occurred within a relatively limited timeframe, rather than spanning several centuries as implied by Ghirshman's reconstruction. In this context, Ghirshman's criterion for subdividing Terrace I and Terrace II is illustrative. This criterion relies on a low wall running approximately from north to south, located in the central part of the complex (see Fig. 15). According to the excavator's identification, this wall serves as the demarcation between the Achaemenid terrace (Terrace I) and the presumed later Seleucid-Sasanian expansions (Terraces II-VI). However, it is argued that the absence of a comprehensive examination of this wall segment, which lacks the characteristics of a terrace boundary or a retaining wall, does not provide substantial evidence for the division of the terrace into two major sections (i.e.,Terrace I and II). Without additional investigations, it should be considered as part of the same architectural phase. From this perspective, the "small wall" could be interpreted either as a dividing threshold between two areas on the same terrace or as a low connecting step between areas positioned at slightly different elevations. Similar "small walls" are found in the north-western area, where Ghirshman divided Terraces II, III, IV, and V. These structures evidently serve as connecting steps between different floor levels situated at varying elevations.

7. The structures

This contribution does not serve as the appropriate framework for conducting an exhaustive analysis of each individual building encountered on the terrace[134]. Nevertheless, in order to recognize the limitations in Ghirshman's interpretations, it is useful to consider the case of the so-called "Podium" situated on the southeastern flank of the terrace (Fig. 16), which Ghirshman tentatively identified as an Ateshgah[135]. The scholar proposed two distinct architectural phases for this "Podium". Firstly, during the earlier phase of Terrace I it was connected to the Achaemenid era. Later renovations were associated with the expansion of

[134] The authors defer this systematic analysis to a future contribution.
[135] Ghirshman 1976: 61-64.

the terrace's southern side, which apparently belonged to the second phase of Terrace I. This phase was also speculatively attributed to the Achaemenid era. It is immediately apparent from the published excavation plans that both architectural phases of the Podium overlay one of the two enclosing walls. This undermines any plausible scenario of contemporaneity between what Ghirshman interpreted as the ancient phase of the terrace (*époque perse*) and the two phases of the podium's construction. A noticeable discrepancy in Ghirshman's reconstruction proposal is likewise discernible in the representations of these two phases[136]. The podium is shown on the axonometric rendering of Phase I of Terrace I as being recessed in respect to the perimeter wall, which is incompatible with the excavation plans since the podium should either cover or intersect with the wall[137].

Below, a concise table enumerating the structures of Masjed-e Soleyman is provided, accompanied by both Ghirshman's original nomenclature and our newly suggested names for these structures

Ghirshman 1976	Salaris – Dan 2023
Podium (perse - phase I)	Building A
Temple of Athena Hippia (séleucide - phase II)	Building B2
Grand Temple (séleucide - phase III)	Building B1
Temple de Heracles (séleucide - phase III)	Building C
NE construction (parthe - phase IV)	Building D
NW construction (parthe - phase IV)	Building E
S construction (parthe - phase IV)	Building F
Western Sanctuary (parthe - phase IV)	Building G

Challenging the architectural, chronological, and functional assumptions encompassing the entire complex of Masjed-e Soleyman prompts a comprehensive reevaluation of its potential functions. It is no longer possible to categorically classify Masjed-e Soleyman as a sacred terrace. This terraced complex clearly aligns with a broader tradition rooted in both Iranian and Mesopotamian heritage, characterized by elevated complexes encompassing palatial and sacred elements. Given the current stage of research, it remains unfeasible to restrict all the structures within Masjed-e Soleyman to an exclusively sacred function. Nonetheless, the possibility that certain phases may have seen the presence of structures serving as centers of power cannot be excluded. This potential interpretative perspective could offer insight into the current absence of identified administrative centers in the Elymaean highland.

Among the structures that present significant interpretative issues, the two phases of Building B (B1: *Grand Temple*; B2: Temple of Athena *Hippia*) deserve special consideration. Notably, Phase B1 —commonly referred to as the *Grand Temple*— lacks unequivocal evidence supporting its exclusive use for sacred purposes, both in terms of its architectural features and the materials found within. A notable feature in this regard is the discovery of two podiums in Room no. 4. Ghirshman interpreted these as small altars for sacred statues, but it is plausible that they functioned as pedestals for the thrones of regional kings. This alternative perspective gains support from the axial alignment —and consequently the absence of a bent-axis— of these podiums with the openings of Room no. 6 and Court no. 11. Notably, individuals entering the large Court no. 11 would have had a direct view of the two low podiums, a circumstance that raises questions regarding their exclusive sacred function. Therefore, it is important to explore comparative studies, such as the analysis of temple architecture in Mesopotamia

[136] Ghirshman 1976: 69, 131, figs. 29, 42.
[137] Ghirshman 1976: fig. 29.

during the Seleucid period. Among the diverse types of structures, the sanctuary of Bit Resh is particularly significant, housing the temple of Anu-Antum. This complex clearly illustrates the pivotal role played by the presence and coexistence of an axial *antecella-cella* block and the bent-axis structural model within a sacred edifice[138].

Significant is also the structure B2, which seems to represent the earliest archaeological evidence discovered at Masjed-e Soleyman[139]. Although it makes it difficult to assign an exact chronological period, it attests to an architectural phase that predates the Parthian period. This architectural structure provides evidence of distinct archaeological strata within the terrace. These layers may represent remnants from a pre-existing site that were integrated into the construction of the terrace, without necessarily being associated with an underlying structure[140].

Additionally, the discovery of terracotta figurines and other paraphernalia as moveable artifacts within a relatively uncertain archaeological and architectural context does not provide unequivocal confirmation that structure B2 was designed as a sanctuary. This perspective —which highlight the need for interpretative caution— finds corroboration in other archaeological excavations in Iran and Mesopotamia dating back to the 1st millennium BCE. In these endeavours, votive figurines and ritual paraphernalia have been unearthed in conjunction with architectural contexts of varying complexity and function. An example can be found at the archaeological site of Tell Halaf in northeastern Syria[141]. Here, a notable assemblage of terracotta figurines, characterized by the depiction of horsemen adorned with the distinctive *kausia* headgear appears in the Hellenistic layers at Tell Halaf during the 2nd century BCE[142]. Analogous to the similar prototypes from Masjed-e Soleyman, the Hellenistic horsemen are depicted with the so-called *kausia* on their heads[143], a distinct element of Macedonian origin traceable archaeologically to the latter part of the 4th century BCE[144]. This data can be confidently used as a *terminus post quem* for dating of the B2 building at Masjed Soleyman. However, it is noteworthy that the horsemen figurines from Tell Halaf do not appear to have been employed for votive purposes, as indicated by Stern's observations, given their absence from dedicatory contexts within Syrian temples[145]. The presence of the *kausia* headgear, instead, may be indicative of local royal associations or reflective of evolving political dynamics, particularly within the Hellenistic-Greek sphere, where the *kausia* held connotations of regal authority[146]. A common variation on the Masjed-e Soleyman type, also present at Susa and Uruk, places a small 'oriental goddess' figure between the necks of a double-headed horse[147]. The female figure is nude allowing for interpretation either as a divine goddess or as a representation of a mortal woman, potentially the results of spoils of war. The introduction of this female figurine serves to enhance the votive and amuletic attributes of the figurine, calling on female fertility as well as male military strength[148]. In summary, while the recovery of votive figurines and ritual paraphernalia undeniably contributes valuable insights into the tapestry of religious beliefs and practices, their presence in isolation does not confer

[138] Downey 1988: 38-42.
[139] In Ghirshman's perspective, the oldest structure is the so-called podium and terrace I, which we have demonstrated can hardly be considered as the oldest element of the complex.
[140] Consider, for example, the artificial terrace built in Susa by Darius I, which cut through and incorporated an older tell into its structure (Ladiray 2013: 140, fig. 121).
[141] Katzy 2020.
[142] Katzy 2020: 214.
[143] About the origins and the distribution of the *kausia* see Jansen 2007.
[144] Jansen 2007.
[145] Stern 1982: 161.
[146] Katzy 2020: 216.
[147] Martinez-Sève 2002: no.761-765, 766-767.
[148] Ghirshman 1976: 79-80; Martinez-Sève 2002: 481.

indisputable confirmation of a singular religious context for the associated structures. The presence of these votive artifacts within ceremonial or architectural settings, as witnessed at Tell Halaf or Masjed-e Soleyman, does not unequivocally designate the entire complex as an exclusive sanctuary or religious site.

8. Conclusions

The occupation phases proposed by Ghirshman for Masjed-e Soleyman, as at Bard-e Neshandeh, appear more based on theoretical data than methodically developed. In general terms, no surveys have been conducted with the purpose of providing a meticulous stratigraphic study of the terraces, which are fundamental to understanding the chronology of the site and the architectural structures on it, and the relationship between the different stratigraphic contexts. However, it is important to mention that Ghirshman's excavations were relatively shallow limited by the agreement with the *Archaeological Service of Iran*. Through some surveys, it emerged that the stratigraphic layer of the 3rd century BCE, where the terracotta figurines had been found, lay 3 m deep beneath the Building B1[149]. In the section of Building C, instead, the excavations stopped at the "anterior" construction (no. 9) on the northwest of the Room no. 6 where some red ceramic fragments were found, chronologically attributed to the Achaemenid period[150], with no attempts to excavate deeper. As a result, the foundation plan in *phase I* for the walls of structure no. 9 —only 80 cm beneath the walls of Building C's Room no. 4[151]— and the respective location of the earliest occupational layer are missing, while the difference in *strata* is evidently slight compared with those, which have been observed for the Building B1. The measurements reported on the various topographic plans[152] are those that correspond to the latest levels of occupation without providing any significant data for the earlier contexts.

In light of factors discussed up to this point, it appears that the foundation of the terrace to the pre-Achaemenid period is rather insubstantial. On the other hand, the ceramic findings, such as terracotta statuettes and coroplathes seem to demonstrate that the site was occupied between the post-Achaemenid era and 2nd century BCE[153], but it is impossible to clarify the aspect of the terraces at the time. With this in mind, the Parthian era is responsible for most of the visible structures, while the last phase of the principal temple and the Building G may be dated to the proto-Sasanian period.

Finally, it is essential to provide some general conclusions regarding the remarkable case study of Masjed-e Soleyman and the archaeological and interpretative distortions that continue to influence not only this significant site but, more broadly, the archaeology of Elymais. Ghirshman's classification of two of the most representative sites in this region of Iran, namely Masjed-e Soleyman and Bard-e Neshandeh, as the "sacred terraces" of Elymais, along with his interpretation of all discovered structures within a sacral and religious framework —often with an incorrect use of ancient sources— may potentially concealed the presence of probable centers of political and administrative power in this region of the Zagros.

The architectural design of Masjed-e Soleyman's terrace unequivocally aligns with a well-established tradition prevalent in Mesopotamia,[154] which reached its zenith on the Iranian plateau with the construction of Persepolis. This tradition is characterized by the elevation of political and religious complexes atop extensive platforms or artificial terraces.

[149] Ghirshman 1976: 77.
[150] Ghirshman 1976: 90.
[151] Ghirshman 1976: 90.
[152] Ghirshman 1976: Plan IV and VIII.
[153] Martinez-Sève 2004.
[154] Consider the Assyrian palaces, expecially Sargon II's palace of Khorsabad.

It is highly probable that Masjed-e Soleyman conforms to these standards in terms of architectural structure, and the buildings that have been found there are most likely used for both religious and political purposes.

Regarding its chronological history, it seems evident that a site occupied this location prior to the extensive developments during the Parthian period, however it is difficult to date it precisely. The evidence that is currently available is insufficient to determine whether there are any potential underlying terraces beneath the ones that are currently visible or whether the main terrace included an older site of a different kind within its perimeter, as was customary in the area.

In conclusion, it is essential to maintain an open-ended perspective when considering the archaeological complexities of Masjed-e Soleyman. We must remain receptive to the prospect that future excavations at the site may unveil new interpretations and dating. The archaeological works carried out in Khuzestan have shown how the Seleucid and Parthian eras represented a period of considerable activity in southwestern Iran[155], probably based on a certain socio-political stability[156]. The valuable work led by the *Iranian-Italian Joint Expedition in Khuzestan* over the last ten years in the area of Izeh-Malamir and Kaleh Chendar is just the last example.

The development of a critical perspective is crucial in the intricate landscapes of the Iranian plateau and the broader Ancient Near East, where the data available often stemmed out from excavations conducted during the pioneering years of archaeological research. This critical approach should challenge established theories and assumptions that need to be reevaluated and reformulated in light of new methodological approaches and comparative data. This process is indispensable for the advancement of interpretative research, both functionally and chronologically. Within this framework, the case study of Masjed-e Soleyman stands out as a remarkable example of the transformative power of critical analysis in resolving historical and archaeological complexity.

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[155] Boucharlat 1985; Martinez-Sève 2002. It cannot be ignored that the last and so far, only excavations of this site, as its "neighbouring" at Bard-e Neshandeh, were those conducted under Ghirshman in the 1960s (Ghirshman 1976).
[156] Salaris 2021: 40-44.

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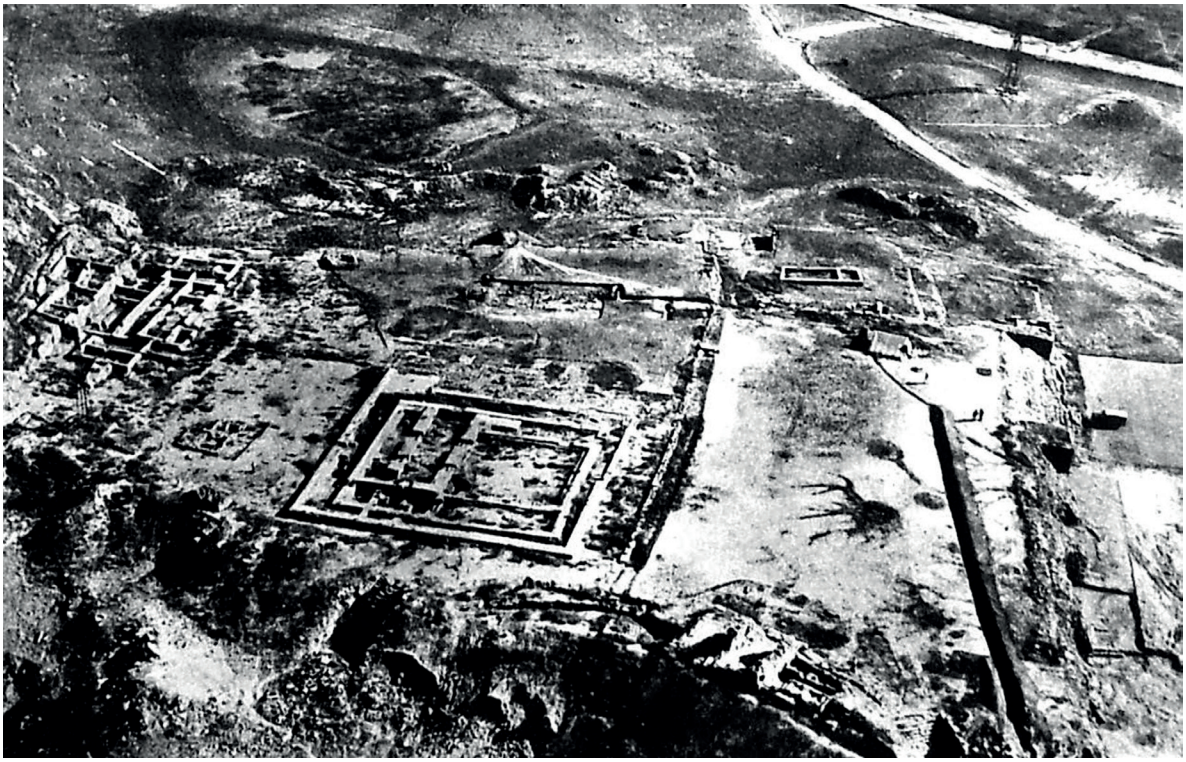


Fig. 1. Aerial view of Masjed-e Soleyman, seen from north-east (after Ghirshman 1976: Pl. LI.2).

Fig. 2. Aerial view of Masjed-e Soleyman, seen from east (after Ghirshman 1976: Pl. LI.3).

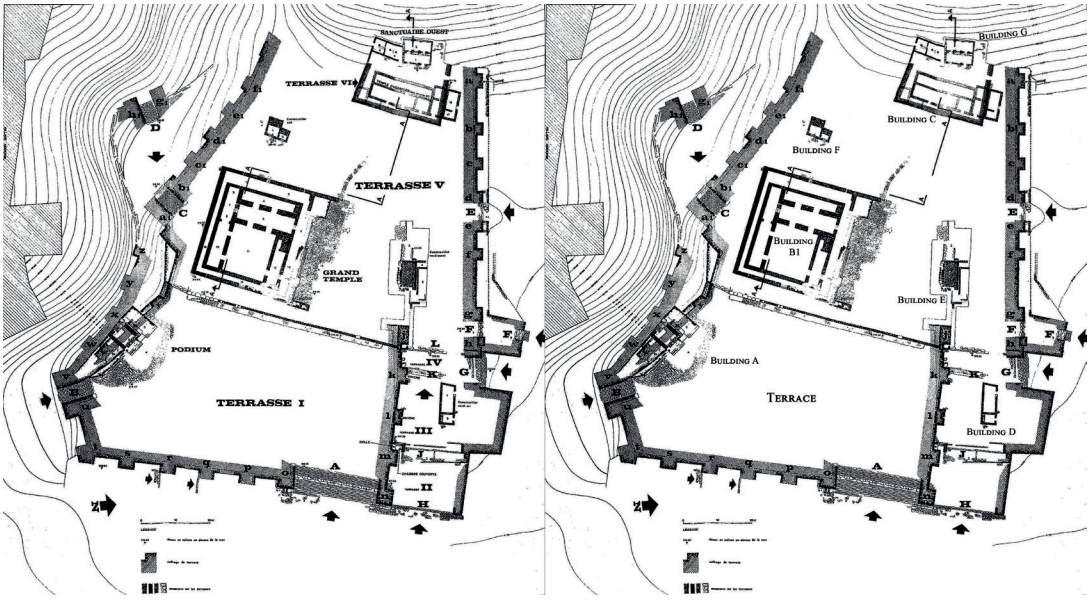


Fig. 3. On the left, plans of the structures investigated by Ghirshman
(after Ghirshman 1976: Pl. III); on the right the same plan with the features renamed.

Fig. 4. The eastern retaining wall of the terrace of Masjed-e Soleyman (D. Salaris 2015).

Fig. 5. The main stair entrance to the terrace (A) on the eastern side of the complex
(R. Dan 2015).

Fig. 6. The secondary stair entrance on the south side of the complex (R. Dan 2015).

Fig. 7. The buttress “k” with one of the blind windows/niches (D. Salaris 2015).

Fig. 8. The corner buttress “n”, where is well visible the different masonries used (R. Dan 2015).

Fig. 9. The corner buttress “n” seen from the top, where is visible the filling of the terrace with loose materials (D. Salaris 2015).

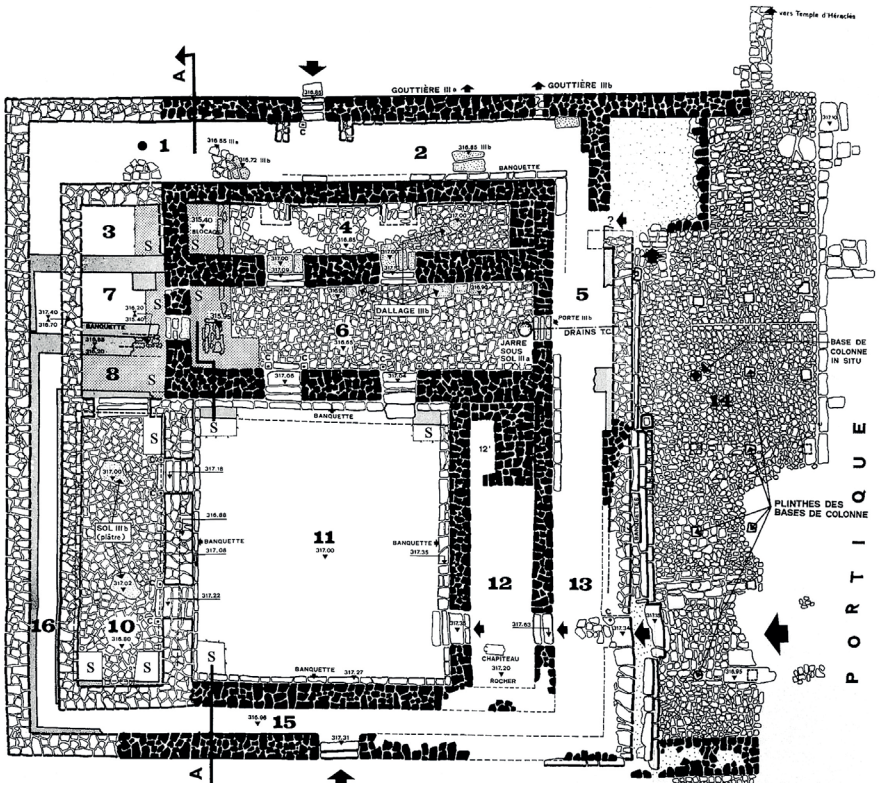


Fig. 10. Plan of the building B1, the so-called "Grand Temple" (after Ghirshman 1976: Pl. VII).

Fig. 11. General view of the terrace as seen from the relief to the west. In foreground the Building C (Temple of Heracles); on the right Buildings B1 (Grand Temple) and A (Podium) are visible (D. Salaris 2015).

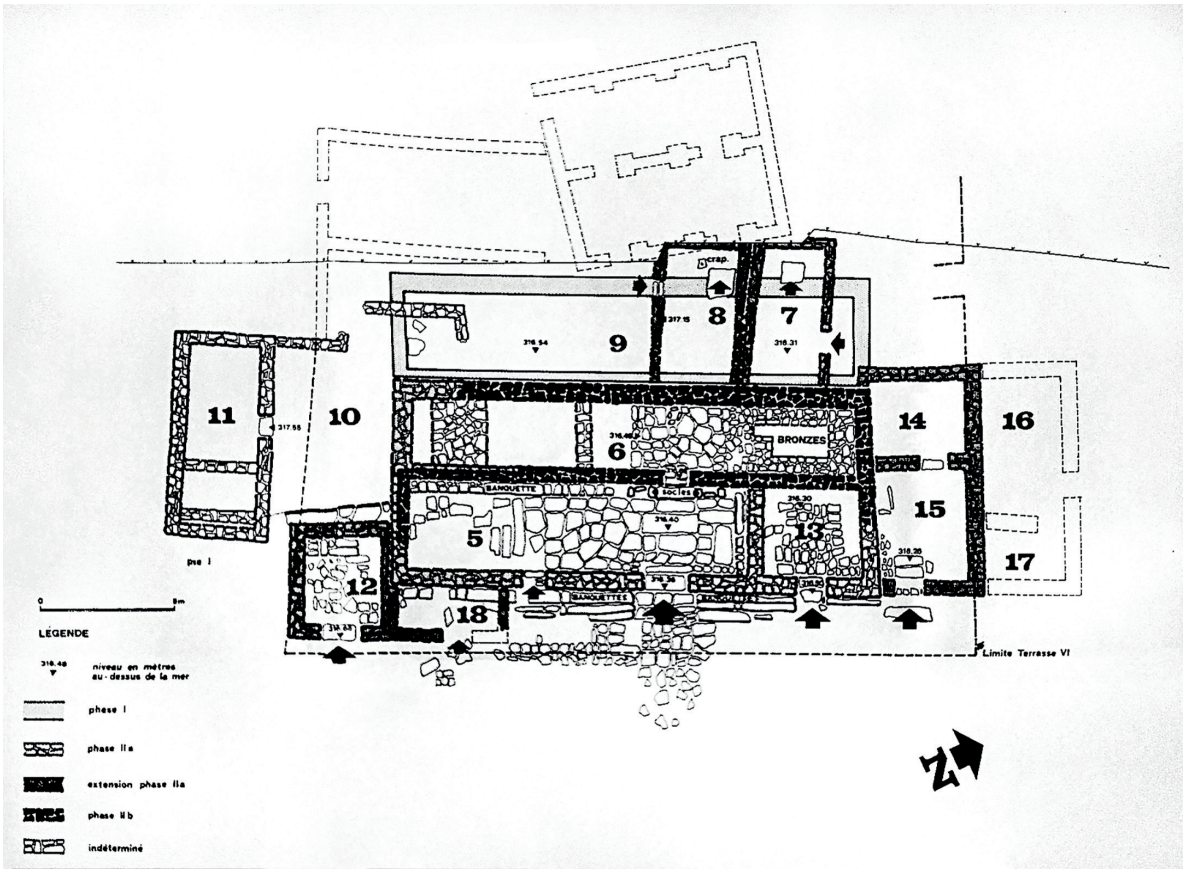


Fig. 12. Plan of the Building C, the so-called “Temple of Heracles”
(after Ghirshman 1976: Pl. VIII).

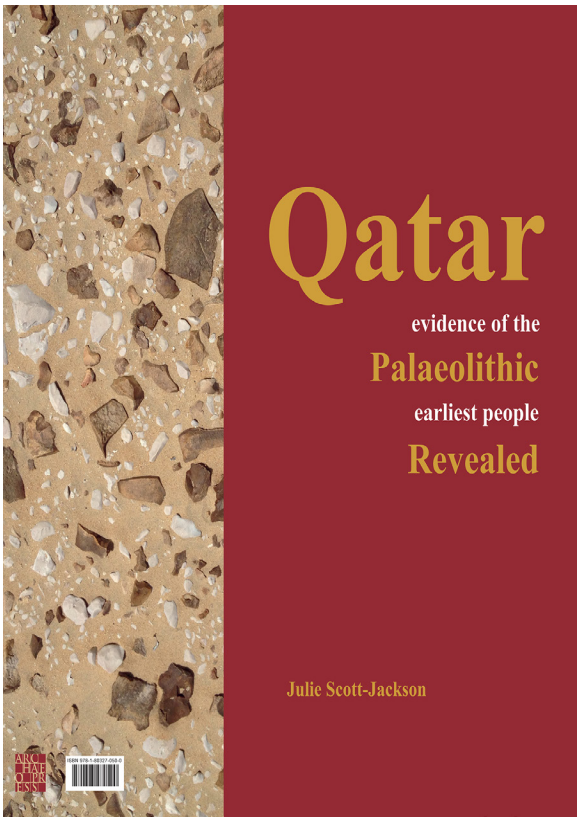
Fig. 13. View of the stairway “E” with the “a-e” buttresses and the relief on the western side of the terrace in the background (R. Dan 2015).

Fig. 14. The low stair between the terraces “II and III” as defined by Ghirshman (D. Salaris 2015).

Fig. 15. The low wall which, according to Ghirshman, divided the “Terraces I and V” (D. Salaris 2015).

Fig. 16. View of the Building A, the so-called “Podium”, as seen from west
(R. Dan 2015).

II
RESEÑAS
BOOK REVIEWS



Julie Scott-Jackson
Qatar: Evidence of the Palaeolithic Earliest People Revealed
Archaeopress, Oxford, 2021
258 páginas con ilustraciones
Medidas: 27 x 24 cm.
ISBN (impreso): 9781803270500
ISBN (E-book): 9781803270517
£45,00 (publicación impresa) /
Acceso libre (E-book)

La doctora Julie Scott-Jackson dirige la Unidad PADMAC, una entidad multidisciplinaria con sede en la Universidad de Oxford especializada en el estudio de la arqueología del paisaje, el análisis geofísico y la tecnología de los artefactos prehistóricos, entre otras áreas. Su investigación se centra en los procesos geoarqueológicos relacionados con yacimientos paleolíticos. Sus estudios abarcan emplazamientos ubicados en diferentes regiones, incluyendo Gran Bretaña, Omán, Emiratos Árabes y Qatar. El libro *Qatar: Evidence of the Palaeolithic Earliest People Revealed* se centra precisamente en esta última región.

Este libro, escrito en inglés y en árabe en la misma edición, aborda de una manera sencilla los eventos que condujeron a una conclusión largamente mantenida entre la comunidad científica: no hay restos del Paleolítico en Qatar. También expone de una forma clara y concisa evidencias, tanto bibliográficas cómo basadas en el trabajo de campo, que desestiman esta idea. Estos dos aspectos fundamentales se encuadran en un texto dividido en nueve secciones.

La primera, *Introduction: An interview with H.E. Sheikh Khalifa bin Jassim Al Thani,* comienza por plantear por qué existe la percepción internacional de que no hay niveles paleolíticos en Qatar, como esto motiva la investigación y cuáles son sus objetivos. La doctora Scott-Jackson, como autora y directora de la Unidad PADMAC, está interesada en la investigación paleolítica. Por otro lado, el impulsor del proyecto Su Excelencia Sheikh Khalifa bin Jassim Al Thani, explica que su interés por la arqueología surge de la relación de su padre con los arqueólogos daneses que trabajaron en la región en la década de los sesenta. A pesar de tener diferentes puntos de partida ambos comparten el interés de base que impulsa la investigación, y sus enfoques parecen conducir inevitablemente a la reescritura de un libro sobre el Paleolítico en Qatar añadiendo nuevas perspectivas y estudios.

La importancia de estudiar el pasado radica en cómo se relaciona con el presente. Bajo esta premisa comienza la segunda sección de este libro: *Investigations: Why look for evidence of Palaeolithic huntergatherers in Qatar?* La investigación planteada se basa en la búsqueda de evidencias para comprender la presencia de los cazadores recolectores durante el Paleolítico en Qatar. Desde el principio la autora considera importante establecer un marco explicativo claro que aborde los diferentes periodos del Paleolítico, y su relación con la evolución humana y la tecnología de las herramientas de piedra. Además, se destaca el estudio del genoma humano como una línea de investigación que aporta perspectivas innovadoras sobre la historia de las poblaciones antiguas.

"La presencia del Paleolítico en Qatar tendría un impacto en la comprensión de los

patrones de migración y el uso del paisaje por las poblaciones de cazadores-recolectores. El desarrollo acelerado de Qatar implica que muchas de las pruebas se hayan perdido o se estén perdiendo". Es así como la autora pone en valor el fruto de las investigaciones en *The Pre-History of Qatar (Part 1): Traces of prehistoric occupation and the importance of Palaeolithic surface-scatters of stone-tools.* Los estudios de la dispersión superficial de las herramientas líticas son fundamentales y proporcionan una comprensión del uso y la transformación del paleoambiente.

En *The Hiatus in Palaeolithic Research in Qatar: Identifying the problem,* la autora presenta de manera cronológica la compleja cadena de malentendidos e interpretaciones que condujeron a la creencia generalizada de que no existía el Paleolítico ni en Qatar ni en otras regiones del golfo Pérsico. Esta cadena de acontecimientos se originó en la identificación de herramientas paleolíticas en Qatar durante el transcurso de las investigaciones realizadas por la Misión Arqueológica Danesa en 1956, las cuales fueron clasificadas y publicadas por Holger Kapel en *Atlas of the Stone-age Cultures of Qatar* (1967). Posteriormente la actuación de la Misión Arqueológica Francesa en 1978, 1980 y 1988 concluye en sus informes que estas herramientas habían sido erróneamente atribuidas a este periodo. Esto marcó el final de la investigación del Paleolítico en Qatar durante más de treinta años.

La disputa se centró en la interpretación de conjuntos líticos localizados en la región de Jor, en la costa este de Qatar, los cuales diferían en aspectos técnicos y tipológicos de otras herramientas paleolíticas. Es en *Answers to the Question: What curtailed Palaeolithic research in Qatar for over 30 years?* donde la autora introduce brevemente este emplazamiento. Tanto el lugar como las herramientas halladas serán utilizados como objeto de estudio y comparación con nuevos sitios y hallazgos, enmarcándolos a su vez en el contexto de los sucesos históricos descritos anteriormente. También expone como, por primera vez, los resultados de la investigación de la Unidad PADMAC revelaron este hecho e impulsaron nuevamente la investigación a partir del año 2009.

The Pre-History of Qatar (Part 2): In search of the Palaeolithic of Qatar; new investigation; new discoveries expone como se desarrolla una metodología de investigación que combina el trabajo bibliográfico con el de campo. También presenta el objetivo de la Unidad PADMAC, que es identificar nuevas áreas con posible potencial paleolítico teniendo en cuenta las migraciones humanas influenciadas por el cambio climático, la actividad tectónica y las fluctuaciones del nivel del mar. Además, proporcionan una base de datos para el análisis de los procesos geomórficos implicados en la preservación y dispersión de los artefactos líticos en superficie. Identifican veintiún puntos nuevos de dispersión lítica en el sur de Qatar: un lugar Neolítico y veinte con evidencias de herramientas del Paleolítico.

La siguiente sección, *Found: The Palaeolithic of Qatar,* expone el análisis tecnológico y tipológico de las herramientas, no sin antes señalar algo que parece importante para la autora: los resultados de la investigación actual se deben también a las contribuciones realizadas en el pasado. De hecho, este análisis comienza con el estudio de los conjuntos líticos almacenados en el Museo de Qatar, los cuales fueron descritos en 1967 por H. Kapel, y que sirve como punto de partida para su comparación con los nuevos hallazgos localizados por la Unidad PADMAC. Se discuten las diferencias y similitudes de ambos conjuntos de herramientas y sus respectivos lugares de hallazgo. Finalmente se recuperan las evidencias arqueológicas que sugieren la actividad humana durante los periodos del Paleolítico Inferior y Superior en Qatar, y se añaden nuevas.

En *All Things Considered: Summary results of the 2009-2020 investigations in Qatar by the PADMAC Unit* la autora concluye que los análisis tecnológicos y tipológicos de los conjuntos líticos identificados por la Unidad PADMAC proporcionan evidencia de

la ocupación en Qatar durante los periodos del Paleolítico Inferior y Superior. Actualmente se están esperando estudios más detallados de un conjunto potencialmente identificado como Paleolítico Medio. También demuestra que la clasificación cronológica de las herramientas líticas realizada por H. Kapel en 1967 es correcta, reconociéndole, aunque sea de forma tardía, como la primera persona en identificar el Paleolítico en la región. Sin embargo, esto es solo el principio. La sección concluye con una reflexión y una larga lista de preguntas aun por responder. No obstante, la autora se muestra optimista de cara a las investigaciones futuras y confía en que la evolución en las técnicas modernas de análisis de ADN antiguo permitirá abordar preguntas sobre el Paleolítico de la región, relacionadas con los patrones de migración de los primeros cazadores-recolectores en la Península Arábiga.

Las últimas páginas del libro están dedicadas a dos lecturas de material complementario. La primera, titulada *Palaeolithic Material Culture,* expone de forma breve la cultura material de cada uno de los periodos del Paleolítico, que van adquiriendo cada vez mayor complejidad, basándose en elementos descritos por otros autores y localizados en otros lugares del mundo. En la segunda, *Geospatial analyses*, se expone la metodología utilizada por la Unidad PADMAC para la identificación remota de nuevas áreas con potencial paleolítico no reconocidas previamente, mediante un análisis geoespacial que incluye imágenes satelitales, fotografías aéreas, escáner láser, fotogrametría y sistemas de información geográfica.

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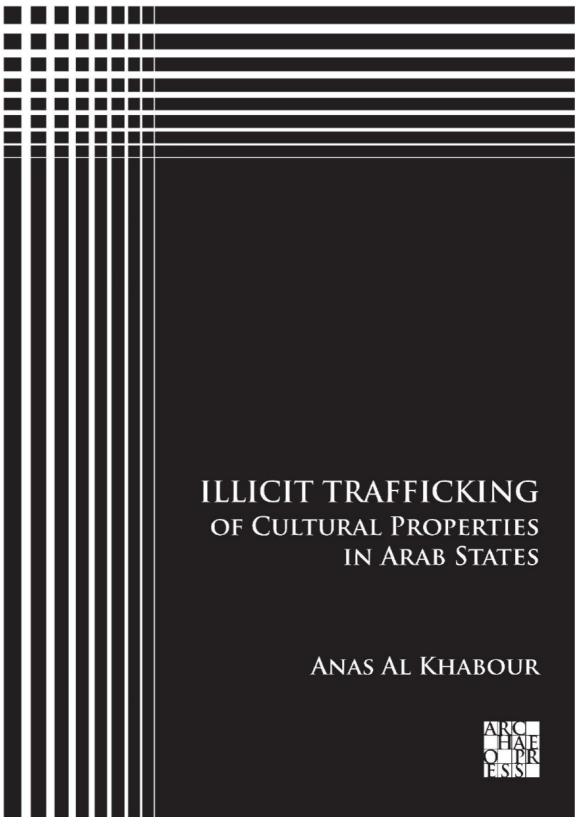

Anas al Khabour
Illicit Trafficking of Cultural Properties in Arab States
Archaeopress Archaeology, Oxford, 2023
178 pp. con ilustraciones y figuras
Medidas: 24,5 x 17,4 cm.
ISBN 978-1-80327-338-9
38 £

Anas al Khabour fue director del Museo Nacional de Raqqa (Siria) entre 2003 y 2008 y entre 2006 y 2008 ocupó la Dirección de Antigüedades y Museos de la provincia de Raqqa. Durante este periodo ha participado en numerosos proyectos arqueológicos nacionales e internacionales en la rivera del Éufrates, como en el proyecto sirio-alemán en Resafa (Sergiópolis), en el sirio-americano de Tell Zaidan o en el sirio-italiano en Arslan Tash. Posteriormente realizó su tesis doctoral en la Universidad Autónoma de Madrid entre 2008 y 2012 y, desde entonces, ha trabajado en varias universidades europeas. Actualmente es investigador contratado por la Universidad de Lund. Las líneas de investigación que ha desarrollado se han centrado principalmente en la arqueología de la rivera del Éufrates.

Sin embargo, a partir del estallido del conflicto civil sirio e iraquí, ha iniciado una serie de proyectos sobre la destrucción de su patrimonio arqueológico y cultural, con varias monografías como *El conflicto armado en Siria y su repercusión sobre el Patrimonio Cultural* (UNESCO, 2015) en tres volúmenes y *Cultural heritage of modern Raqqa, history of cultural heritage destruction since the modern settlement until the Islamic State in Iraq and Syria* (Leuven, 2020).

Su última obra pertenece precisamente a esta segunda línea de investigación en la que reúne, organiza y pone al día la información que se tiene sobre el tráfico ilícito de bienes culturales en países árabes, posiblemente los más afectados a nivel global por esta práctica. A través de este estudio, pretende comprender su naturaleza, así como la regulación y medidas vigentes para evitarlo, sus deficiencias y posibles soluciones. Este libro está organizado en nueve capítulos más tres anexos con las referencias bibliográficas utilizadas (las cuales ha ido señalando al final de cada capítulo), una relación de leyes de patrimonio de los diferentes países árabes y una serie de tablas en donde se resumen los robos de antigüedades que se han dado en los últimos años en diferentes países árabes.

En la introducción, además de marcar sus objetivos, hace un análisis terminológico de los diferentes conceptos que se utilizan dentro del tráfico de bienes culturales, desde los roles que puede representar un país (exportador, de tránsito, importador o combinados), hasta los términos aplicables al propio mercado y a los objetos comercializables en sí. Finalmente, señala el marco geográfico en el que centrará su investigación: los veintidós países que conforman la Liga Árabe más Israel.

En el capítulo dos el autor explica la metodología del estudio. Por un lado, ésta consiste en observar los cambios que se han dado en el mercado de antigüedades durante los últimos años y las características que lo definen hoy en día. Por otro, también pretende reconstruir el proceso de expolio, tránsito, venta y destino final de los bienes culturales. La información y los datos para este trabajo han sido extraídos de las bases de datos de organismos internacionales: UNESCO, ICOM e INTERPOL, así como de informes de agencias nacionales, publicaciones y discusiones académicas. En lo que respecta al análisis de sitios arqueológicos, este trabajo también se vale de la tecnología por satélite de cara a observar su estado actual.

En el capítulo tres se analiza la que viene siendo una característica fundamental del mercado de bienes culturales actual, el tráfico *on-line* y el papel de las TIC. Si bien se podría pensar que este mercado se da a través de la red profunda y de la red oscura, recientes investigaciones han demostrado que el mercado de bienes culturales no se vale de estos instrumentos, sino que más bien circulan en circuitos legales, visibles y públicos. Entre las plataformas más utilizadas están *eBay*, *Telegram* y *Facebook*, pese a que ha habido acuerdos con estas compañías para restringir este tipo de ventas.

En el capítulo cuarto, se explica el concepto de análisis de riesgo que tiene un bien cultural en ser objeto de comercio ilegal. Para ello, el autor presenta el trabajo de la profesora Frida Larsdotter para el ámbito sueco cuya metodología es fundamental para entender este concepto. Según esta metodología, cada objeto es catalogado en tres categorías: naturaleza del objeto, país de compra y país de salida y se le añaden todo tipo de detalles con el objetivo de identificarlo con precisión (material, autor, antigüedad, etc.), características que, en definitiva, añaden valor al bien en cuestión. Así, se genera una base de datos que indica aquellos objetos más cotizados en el mercado acorde a su procedencia, destino y características. De este modo, los datos estadísticos procedentes de estas bases de datos permiten identificar patrones.

El capítulo cinco está dedicado a describir las rutas principales para el tráfico ilícito de bienes culturales procedentes de países árabes, siendo los países de destino aquellos más ricos de Europa, Asia y Norteamérica. Para conocer estas rutas se

han estudiado los robos denunciados por las fuerzas policiales de trece países de los veintidós que componen el estudio. Otras fuentes son informes y trabajos realizados por organismos internacionales, los cuales vienen a completar la información para los nueve países restantes. Los países analizados son: Mauritania, Marruecos, Argelia, Túnez, Libia, Egipto, Sudan, Djibouti, Somalia, Jordania, Palestina, Israel, Líbano, Siria, Iraq, Arabia Saudí, Yemen, Kuwait, Bahrain, Omán, Qatar y EAU. De ellos se han podido identificar, por la naturaleza de las piezas encontradas y la procedencia de las antigüedades, lugares de paso, como será EAU e Israel, y lugares de partida como Siria o Iraq.

Seguidamente, el capítulo seis estudia la relación entre tráfico ilegal de bines culturales y la financiación de grupos armados. Aunque estos grupos han usado tradicionalmente productos como los narcóticos para financiarse, desde 2004 el Consejo de Seguridad de la ONU reconoció la importancia del tráfico de bienes culturales para estos mismos grupos. En este sentido, existe una conexión entre los conflictos armados y el incremento en la destrucción, saqueo y exportación de bienes culturales. De entre los casos más recientes y dramáticos se encuentran los casos de Siria e Iraq, donde el expolio y exportación de antigüedades llevado a cabo por el grupo DAESH alcanzó proporciones industriales, un sistema perfectamente organizado y burocratizado.

Por su parte, en el capítulo siete, el autor pasa a analizar el procedimiento del tráfico de bienes culturales en los países árabes. Existen tres tipos de países que intervienen en este mercado. En primer lugar, se encuentran los países de salida que se caracterizan normalmente por tener recursos limitados, gobiernos corruptos y/o en conflicto. En segundo lugar, están los países de tránsito donde la ley y la frontera es laxa y donde los bienes culturales son "blanqueados" y puestos en el mercado. Finalmente están los países compradores, países ricos donde estas piezas llenan museos y galerías privadas. En cuanto al proceso, se aprecian cuatro pasos: expolio y robo, transporte, "blanqueo" y venta final. En el primero, los agentes pueden ser desde grupos armados a locales con escasos recursos; los objetos tienden a ser pequeños, pero de gran gusto estético o con materiales de gran valor económico, pudiendo proceder tanto de lugares y monumentos arqueológicos como de museos. Éstos, una vez extraídos, son comprados por un primer intermediario que se encarga de transportarlos a países con una legislación más laxa. Una vez llegan aquí, se les da un aspecto legítimo gracias a especialistas, que son capaces de asignarles una cronología y una procedencia distinta, de tal manera que pasan por piezas de naturaleza legal a través de certificados falsos. Finalmente, estas piezas que han pasado al mercado legal son compradas por los grandes museos o colecciones privadas que, en su mayoría, actúan engañados y de buena fe.

La última parte del capítulo está dedicada a los instrumentos que se han creado para combatir el mercado de antigüedades. De entre ellos, podemos destacar varios, como el sistema *object ID* por el cual se describe una pieza y que permite una rápida identificación de la misma en el mercado de antigüedades. Igualmente, se han creado certificados de exportación de bienes culturales estandarizados para prevenir la falsificación. La UNESCO creó también una base de datos con la normativa de cada país sobre este tráfico de bienes culturales, lo cual permite identificar sus deficiencias y países potencialmente exportadores o comercializadores de bienes culturales. Así mismo, destaca la WCO ARCHEO, una plataforma de intercambio de información entre profesionales de arqueología y de legislación con el objetivo de colaborar contra este mercado ilegal.

El capítulo ocho está dedicado a estudiar el grado de aplicación de las convenciones internacionales para evitar el tráfico ilícito de bienes culturales en los países árabes. Entre estas convenciones, las principales son: la Convención de la Haya en 1954,

protegiendo los bienes culturales en caso de conflicto, y la Convención de la UNESCO de 1970, prohibiendo el tráfico ilícito de bienes culturales, con especial mención a bienes expoliados de museos u otros edificios o monumentos públicos. Posteriormente, con el objetivo de concretar estas medidas generales se han ido aprobando resoluciones que venían a completar la legislación general. En 1990, por ejemplo, se aprobó el Tratado marco para la prevención de crímenes que se infringen sobre el patrimonio cultural y, en 1995, se aprueba el *UNIDROIT Convention on stolen or illegal exported cultural objects*, para favorecer la devolución de bienes culturales acorde al derecho internacional privado.

Pese a la adopción de estas resoluciones, su implementación en países árabes se ha realizado de manera desigual. En primer lugar, aquellas convenciones que se adoptaron entre países árabes son limitadas, el papel de la propia Liga Árabe ha sido insignificante y muchos países ni siquiera cuentan con tratados bilaterales para combatir este tipo de crímenes. Igualmente, uno de los principales instrumentos contra este tráfico ilícito, la *UNIDROIT*, posiblemente sea la que menos han adoptado los países árabes. Tampoco han adoptado el Código Ético Internacional para los tratantes de bienes culturales. Así mismo, la legislación de varios países árabes se ha demostrado insuficiente, tanto en la propia definición de bien cultural como en las penas por el expolio, y muchos de los países árabes ni siquiera tienen un inventario actualizado de sus bienes culturales y monumentos. Además, aunque las excavaciones arqueológicas están reguladas en todos los países de forma más o menos similar, la regulación en cuanto al comercio de bienes culturales es muy diferente de un país a otro. En cuanto a cuerpos policiales dedicados específicamente a combatir el tráfico de antigüedades, no todos tienen uno. Por último, la mayoría carece de programas de concienciación a la población sobre la importancia del patrimonio.

Finalmente, en las conclusiones, el autor hace un resumen y balance de todo el estudio realizado. Según el autor, el tráfico ilícito de bienes culturales en los países árabes ha alcanzado unas proporciones globales y casi industriales. Entre los factores que han intervenido están: el contexto socio-político, el marco legislativo, los recursos invertidos en protección del patrimonio y la concienciación ciudadana. Los estados árabes, dada la carencia de recursos, no cuentan con el control de su patrimonio. El sistema de blanqueamiento de bienes culturales ha alcanzado una gran profesionalidad y el mercado *on-line* ha sido el canal principal de distribución, el cual ha crecido en los últimos años unido al desarrollo tecnológico, siendo los principales países de tránsito EAU e Israel. Por otro lado, la ausencia de catálogos e inventarios de estos bienes, unido a la laxitud legislativa (así como a la riqueza patrimonial de los países árabes), otorgan un alto riesgo a los bienes culturales de los países árabes. A esto se suma la existencia de conflictos armados que redunda en la falta de control gubernamental, dejando que diferentes agentes, como grupos armados o comunidades despojadas de otro medio de vida, expolien y vendan estos objetos. Además, la implementación de convenciones internacionales es deficiente, como las relaciones y la cooperación entre los propios países árabes.

Por estos motivos, el autor finaliza con una serie de recomendaciones. En lo que respecta a la recogida de datos e información, el autor apunta a la necesidad de crear inventarios rigurosos de bienes y sitios arqueológicos, así como bases de datos de objetos robados. Por lo que respecta a la legislación, se necesita reforzar la inviolabilidad de los sitios arqueológicos y la regulación sobre este tráfico, armonizar la legislación entre países árabes, utilizar los instrumentos creados por los organismos internacionales para evitar el blanqueo de bienes culturales e implementar rigurosamente las convenciones internacionales. En lo referente a la colaboración internacional, el autor reclama una mayor coordinación entre países árabes para identificar los lugares

de salida y llegada de bienes culturales, así como la creación de un comité de restitución para los países árabes y de un sistema de transferencia de colecciones museísticas en momentos de conflicto. Finalmente, en lo que respecta a la inversión de recursos, el autor considera que se deben desarrollar programas de concienciación ciudadana, así como de formación y contratación de especialistas y de creación de cuerpos policiales dedicados a perseguir este tipo de crímenes.

En general, se puede decir que, si bien este trabajo constituye una primera aproximación al problema del tráfico ilegal de bienes culturales en los países árabes (como el propio autor reconoce), se trata no obstante de una lectura previa y necesaria a cualquier estudio concreto sobre esta cuestión. En esta obra se describe, no solo una metodología de trabajo concreta aplicable a cualquier caso, sino también los medios y las fuentes necesarias para llevarlo a cabo, desde las bases de datos de los organismos internacionales a la legislación nacional e internacional vigente, pasando por los estudios y publicaciones académicas más recientes.

A través de esta obra, A. Al Khabour sitúa la lacra del tráfico ilegal de bienes culturales en un primer plano, dándole una naturaleza y unas características propias, indicando su importancia y la necesidad de atajarlo. Gracias a esta obra se observa cómo el tráfico ilegal de bienes culturales no solo constituye una pérdida de conocimiento científico, sino que también influye de manera directa en otro tipo de problemas, como la financiación de grupos armados o la pérdida de posibilidades de desarrollo económico para las comunidades locales. Felizmente, el autor hace una relación final de propuestas necesarias, alcanzables a largo plazo y que solo requieren de la voluntad política de los propios países árabes, así como de la comunidad internacional. Estas recomendaciones, resultado del análisis riguroso del problema, ofrecen un rayo de esperanza para acabar con lo que posiblemente sea uno de los principales enemigos de la arqueología y del conocimiento del pasado y del cual los propios países árabes son los principales afectados.

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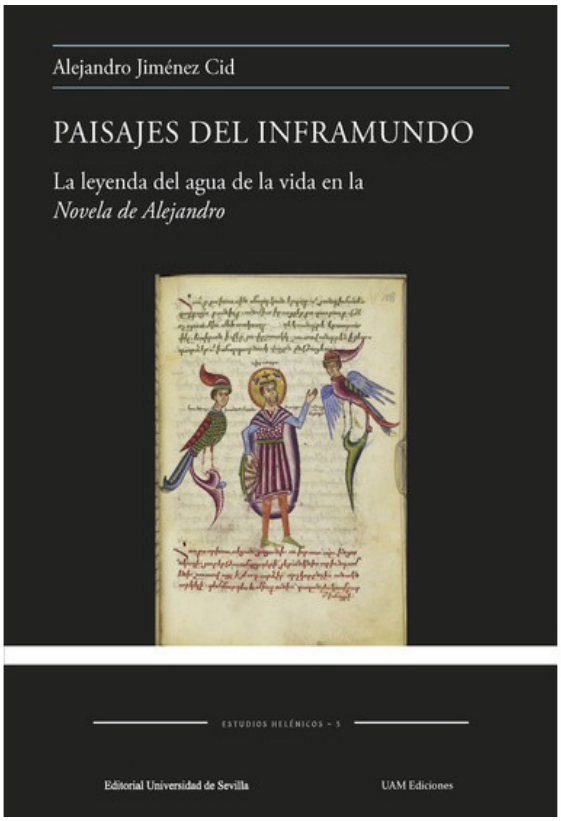

Alejandro Jiménez Cid
Paisajes del Inframundo. La leyenda del agua en la Novela de Alejandro
UAM Ediciones /Editorial Universidad de Sevilla, 2023
338 páginas
Medidas: 17 X 24 cm.
ISBN 978-84-8344-866-3
21 €

Como el autor señala en algún punto del texto, el libro está concebido como un viaje que recorre por veinticuatro capítulos los tránsitos y los interludios que la leyenda del agua en *La novela de Alejandro* ha ido dejando en textos y composiciones que trascienden culturas y por supuesto paisajes y territorios.

Siempre es interesante buscar interconexiones, influencias o sincretismos en temas y personajes que, a veces por desconocimiento, ubicamos solo en una cultura o en un tiempo. Este libro es todo lo contrario, es una explosión de interrelaciones y búsquedas de versiones o interpretaciones de ideas y personajes que vemos en culturas muy distintas pero que, sin embargo, y quizá obviamente, se han ido reinterpretando y adaptando a países, pueblos, culturas y tiempos que van evolucionando y se van formando.

En la lectura de este libro no hay que dejarse engañar ni por el tono coloquial que a veces se utiliza ni por los límites que parece señalar el título. En su interior hay mucha información que trasciende culturas y lenguas, hay interpretación histórica y literaria, búsqueda valiente para comprender allí donde pueda haber resquicios de información, y atrevimiento para hilar redes con tejidos e hilos que no siempre se han unido. Pero el resultado no es un *patchwork*, que estaría bien, es una gran tela que abarca todo lo que el autor ha pensado que está relacionado con el agua de la vida que está recogido en la *Novela de Alejandro*, y aun así presenta interpretaciones nuevas de muchos temas que aquí han sido expuestos.

Paisajes del Inframundo es un libro que emana de una tesis presentada en 2020: *Pervivencia y transición de elementos grecolatinos en el mito de Alejandro en la literatura indo-persa*. Al acabarla, tal y como viene descrito al principio del escrito, entre los muchos temas que se van presentando en una tesis doctoral, y que se apartan o se integran parcialmente en el discurso principal, quedó la catábasis que identificó en torno a la leyenda de Alejandro y el árbol de la vida, en el que se integran elementos que van desde la antigua Mesopotamia, el legado griego de Alejandro o la reinterpretación y aportación del islam. Jiménez, en este ensayo, en el que él mismo se dice libre de ataduras académicas, habla también de legado, que es por definición asimilación y reinterpretación de ideas y representaciones, mezclándose además aquí muchas culturas, eso sí, no tan diferentes ni desligadas entre sí como a veces se ha podido pensar.

En una investigación donde se analicen otras culturas es fundamental manejar las lenguas utilizadas, y el autor lo hace con el persa. Este ensayo trabaja la figura de Alejandro de modo que la visión es más oriental que occidental, y eso ya de por sí

es una gran noticia. En un país que tuvo importantes contactos históricos con Persia como España, los estudios sobre su lengua y su cultura son excepcionales o incipientes, y aunque en la UAM se puede estudiar persa, Jiménez señala su agradecimiento a la labor docente del Centro Persépolis.

Igual que en una tesis doctoral hay que ir apartando o integrando temas para no alejarse ni de la tesis planteada ni de los plazos asignados, el autor también va planteando temas que son sin embargo resueltos correctamente, siendo susceptibles de desarrollo para ulteriores (propios o no) trabajos, y que tienen un sentido en el conjunto que plantea como objetivo. Habla, y es el punto de partida, del mito de Alejandro (Iskandar en persa), del porqué de su viajar constante, de su afán imparable, de sus ciudades, o de la novela griega y qué significa.

El autor va acompañando, discutiendo y explicando, al lector en su argumentación, consciente de que este no tiene por qué conocer las distintas versiones, recensiones y variantes de la Novela de Alejandro, escrita además en idiomas muy diferentes y no siempre conocidos en Occidente, y también comparte con el lector el curso de sus reflexiones.

Iskandar, Alejandro, no solo quemó Persépolis, también está presente en el *Shahname* de Ferdosi. Analizar cómo se produce este legado, lógico por otra parte, pues Iskandar se convirtió en el señor persa y se comportó como el heredero de Darío III, al que derrotó, es un proceso más que interesante. Analizar significa integrar elementos como las Rutas de la Seda o los nestorianos que no solemos tener en cuenta, y el autor del libro ofrece perspectivas y enfoques que deberían ser continuados. Es lo que tienen los libros de viajes, o los que se mueven en las fronteras, que las posibilidades de integrar acompañantes, variar la ruta o volver atrás siempre son alternativas reales de trabajo. Da la impresión de que Jiménez se siente cómodo en ese mar proceloso.

Claro que, en su periplo, como no podía ser de otro modo, corre también peligros, como cuando analiza en el mismo capítulo a Gilgameš y a Borges. En lo mesopotámico, como en otros ámbitos, escoge solo algunas fuentes, válidas en el hilo de su argumentario, pero que podrían ser completadas y discutidas. También es cierto que entonces entraríamos en el peligro de las tesis de no acabar nunca, y hay un camino claro que pretende recorrer y que es el que sigue.

Es muy interesante el planteamiento holístico en lo geográfico y en lo temporal que Jiménez plantea en torno a un tema concreto, recordemos, la leyenda del agua de la vida en la *Novela de Alejandro*. Señalar el Talmud, o el análisis de Harrán (simbólica y arquitectónicamente) en el viaje que plantea, son dos elementos significativos más de una obra ambiciosa.

En el capítulo decimoctavo, *Imitatio mortis*, que se puede entender como un vórtice, o quizá tenga algo de conclusión, plantea que "la narrativa del agua de la vida en el mito de Alejandro se inscribe en una tradición más amplia de relatos de viajes al otro mundo, cuyo modelo nos presenta el motivo de un héroe (rey, sabio, guerrero, profeta) que se interna en la oscuridad en busca del secreto de la eterna juventud. Se trata de una historia ancestral, mucho más vieja que la *Novela de Alejandro* y que el propio Alejandro" (p.207). Aquí puede estar resumido el objeto de su búsqueda, a través de mundos y tiempos muy distintos. A justificar esta idea es a lo que dedica el volumen.

Lo que hace Jiménez Cid en *Paisajes del Inframundo* no es solo rastrear estas narrativas en un marco geográfico que trasciende los territorios recorridos o gobernados por Alejandro, busca nexos y transferencias, y para eso habla de culturas y lenguas, historias y mitos, que se conocieron y se influenciaron, que convivieron y se nutrieron los unos de los otros, y cuyos legados, desde la Antigüedad mesopotámica, pasando por la clásica, y luego hasta el Medievo, musulmán y cristiano, tienen mucho más en común de lo que pueda al principio parecer. Este libro es, efectivamente, un viaje por la historia y por la literatura, por la religión y por el

mito, por el saber y por sus mecanismos de transmisión. Esperamos que, como debieran ser las tesis, no sea el final de nada sino el principio de mucho.

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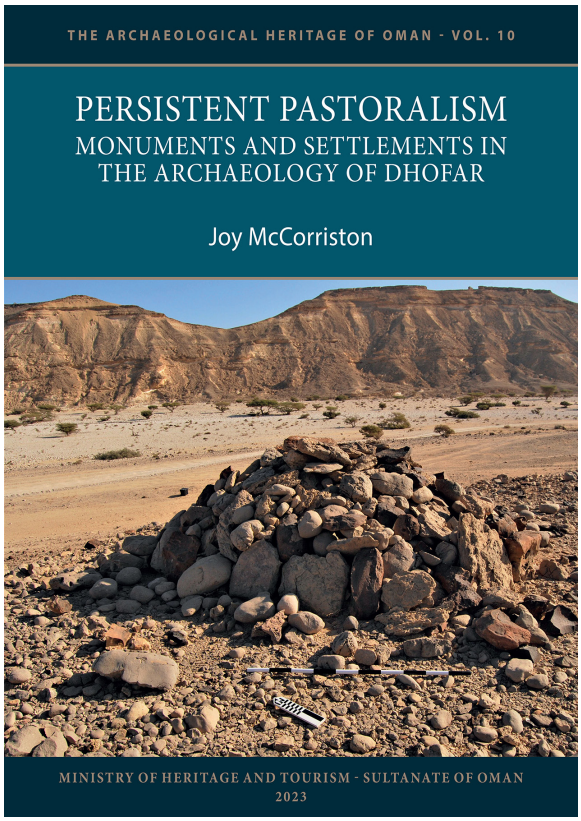

Joy McCorriston
Persistent Pastoralism. Monuments and settlements in the archaeology of Dhofar
Archaeopress: Muscat, 2023
144 páginas con ilustraciones
Medidas: 29,7 x 21 cm
ISBN: 978-1-80327-453-9
£45

Joy McCorriston, arqueóloga y antropóloga de la Ohio State University desde 2012, ha trabajado en el sur de la Península Arábiga desde 1996. Especializada en los orígenes de la agricultura y el desarrollo de condiciones paleomedioambientales en el Próximo Oriente Antiguo, ha estado elaborando trabajos sobre la evolución del nomadismo en las regiones de Ḥaḍramawt y Dhofar desde hace diez años. Este volumen es fruto de los resultados de estas investigaciones, centrado en las campañas desarrolladas entre 2009 y 2018 en la región de Dhofar, en el suroeste del Sultanato de Omán.

El AHSD Project (*Arabian Human Social Dynamics Project*), dirigido por McCorriston, busca entender qué tipo

de relaciones sociales tenían lugar entre comunidades sudarábigas de grupos pastoralistas en continuo movimiento, y cómo éstas se mantuvieron a través del tiempo. Como parte de este proyecto, la autora desarrolla en la obra un estudio completo de las estructuras monumentales de Dhofar, para poder explicar el fenómeno del pastoralismo persistente que se mantiene desde hace aproximadamente ocho mil años hasta nuestros días. Acompaña sus explicaciones con una gran variedad de imágenes, incluyendo paisajes, planos, secciones… etc., así como gráficas y tablas.

El libro está organizado en nueve capítulos, tras los que se incluyen una bibliografía final muy completa y el índice. Los primeros cuatro capítulos tratan de forma más general el estudio del entorno de Dhofar y su tradición pastoralista, así como el tipo de investigaciones y excavaciones que se han llevado a cabo en la zona. Los apartados cinco, seis, siete y ocho describen en detalle el tipo de estructuras monumentales que se construyen en la región desde el Neolítico hasta la Edad del Hierro Tardía. Finalmente, el capítulo nueve sirve como conclusión de la obra, respondiendo a las hipótesis planteadas al comienzo. En él, McCorriston aúna los distintos elementos que ha ido mencionando a lo largo del libro y que nos indican la persistencia de una cultura pastoralista en Dhofar.

Varios de estos capítulos incluyen, a modo de introducción, una breve narración en la que la autora imagina las posibles vidas de los habitantes del Neolítico, Bronce y Hierro de Dhofar. Imagina qué tipo de economía desarrollarían, cómo serían los contactos entre los distintos grupos de la región, o los ritos que se llevarían a cabo durante un enterramiento. Aunque la creatividad y la imaginación son la base de estas historias, utiliza indicios arqueológicos reales con los que desarrollarlas, por lo que ayudan a comprender y visualizar las explicaciones y descripciones de las estructuras.

El capítulo inicial del libro introduce las problemáticas e hipótesis de partida de la autora y del equipo del AHSD Project. Buscan entender, a través del estudio arqueológico, cómo se mantienen las relaciones sociales y culturales entre grupos de poblaciones nómadas, con modelos económicos pastoralistas, en regiones áridas como el sureste de la Península Arábiga. McCorriston y su equipo hipotetizan que las tumbas y las construcciones monumentales de estas zonas servirían como marcadores y señalizaciones entre los distintos grupos móviles. Esta premisa, planteada también para otras regiones en Siria y Arabia, conlleva un gran respeto hacia los ancestros, testigos de un pasado común y perpetuadores de la propiedad y división de las tierras. Sin embargo, es imposible llegar a conocer la complejidad de estas relaciones sociales, y en muchos casos son solo los restos materiales los que orientan al investigador para resolver estas preguntas.

La autora continúa describiendo el clima y paisaje de Dhofar en el segundo apartado. En esta región se pueden encontrar cuatro tipos de paisajes: la planicie costera, las laderas boscosas, la sabana de piedemonte y el desierto del Nejd. El clima, por su parte, ha ido aridificándose gradualmente desde hace cinco mil años, de forma más acentuada en los últimos dos mil. Además, es importante tener en cuenta el efecto antrópico en los diferentes paisajes. Las condiciones climáticas y el tipo de recursos disponibles en cada zona influyen en el desarrollo, relaciones y movimientos de los grupos pastoralistas.

El tercer capítulo presenta el *Arabian Human Social Dynamics Project* (AHSD): qué metodología y técnicas llevó a cabo el equipo para desarrollar el proyecto, los puntos clave que tuvieron que tratar y su proceso y evolución. Ya desde la década de 1950 diferentes equipos internacionales investigan y prospectan en Dhofar. Sin embargo, el AHSD Project es el primero en llevar a cabo un registro concienzudo y la excavación de varias estructuras. En total, el equipo liderado por McCorriston prospectó 343 monumentos de diversa naturaleza y excavó veintisiete de ellos. Para ello, utilizaron herramientas

como imágenes de alta resolución o GPS de alta precisión, que permitieran detectar rápidamente la presencia y distribución de monumentos en el paisaje, y complementaron las excavaciones con estudios antropológicos y etnográficos.

En el cuarto apartado la autora desarrolla cómo el paisaje y las costumbres de la región de Dhofar están totalmente moldeadas por la persistencia del pastoralismo, desde que éste comienza alrededor del año 6000 a.C. Para designar el cambio gradual que se registra en el paisaje y la fauna durante este proceso la autora acuña el término de "herencia ecológica". Además, con el fin de mantener y perpetuar el sistema pastoralista, las tribus de Dhofar tuvieron que desarrollar una serie de tecnologías, visibles arqueológicamente: la domesticación de especies animales, herramientas como las puntas de proyectiles, la quema intencionada de vegetación, o la construcción de casas, establos o estructuras monumentales.

McCorriston comienza en el apartado cinco con la descripción y el estudio de las diferentes estructuras prospectadas y excavadas, empezando por las que datan del Neolítico. Durante este periodo se detecta por primera vez en la Península Arábiga la domesticación animal y comienzan a construirse pequeñas estructuras en piedra, que el equipo del AHSD Project cataloga en dos tipos: plataformas y montículos bajos (o SCABs, *Stepped Concentric Aligments of Boulders*), ambos construidos con piedra local. McCorriston describe cinco de estas estructuras, ilustrando con imágenes el proceso de excavación o los elementos más llamativos de cada una de ellas.

En el capítulo seis la autora mantiene la misma estructura: enumera y describe nueve construcciones monumentales, esta vez de la Edad del Bronce. Las estructuras de este periodo pertenecen en su mayoría al ámbito funerario; el equipo se centró en la prospección de un tipo específico de tumbas, conocidas como *High Circular Tombs* (HCT), fácilmente localizables vía satélite y mucho más numerosas que las construcciones neolíticas. Sin embargo, también se mencionan otros dos tipos de tumbas: las "Tumbas de Pared" (*Wall Tombs*) y las tumbas tipo Ḥalūf, más grandes y de estructura alargada. Tras una tabla con los datos principales de cada una de las tumbas, McCorriston detalla algunas de las características más destacables de los nueve ejemplos seleccionados, como los materiales de construcción, medidas, localización, técnicas de datación utilizadas o tipo de restos óseos y ajuar encontrados en su interior.

Los trabajos de prospección y excavación en estructuras de la Edad del Hierro comienzan a detallarse en el capítulo siete, empezando por los asentamientos y las zonas de hábitat, y continúan con las estructuras de carácter funerario en el octavo apartado. Por un lado, dos asentamientos al Este del Jebel Qara, Shakeel y Halqoot, muestran la presencia de poblaciones menos móviles durante este periodo. Las excavaciones en Halqoot revelaron la zona de hábitat de mayor tamaño, así como un patrón en la construcción de las casas, pero muy pocos materiales. Ambos asentamientos presentan cuatro fases de ocupación que muestran cómo el modo de vida nómada en la región de Dhofar varía hacia un cierto sedentarismo entre el 300 a.C. y el 300 d.C., por factores y circunstancias aún desconocidas.

Por otro lado, en la zona de Muḍayy el equipo no localizó asentamientos, sino túmulos con carácter funerario y trilitos, ambos fechados en la Edad del Hierro, tal y como explica McCorriston en el capítulo ocho. Los restos óseos hallados en las cámaras selladas de los túmulos testimonian su uso como estructuras funerarias. Sin embargo, el equipo del AHSD *Project* desconoce qué finalidad podrían tener los trilitos, si pudieron ser algún tipo de marcador territorial o haber surgido por acumulación de construcciones a lo largo de distintos periodos.

En el capítulo final, McCorriston da respuesta a sus preguntas iniciales: concluye que las costumbres y redes sociales, al actuar como nexo entre los distintos grupos de

poblaciones móviles de la región de Dhofar, son las que mantienen un pastoralismo persistente y continuado, con muy escasas interrupciones (por ejemplo, durante la Edad del Hierro Tardía) a lo largo de toda la prehistoria y protohistoria de Dhofar. Uno de los usos sociales más importantes en la configuración de este modelo económico es la relación con los ancestros, que sirve para reclamar la pertenencia y derecho a unas ciertas propiedades o tierras. Igualmente, el desarrollo de la domesticación animal, la evolución de las rutas de comercio en la región o los cambios en el clima y el entorno son cuestiones íntimamente relacionadas con la evolución de las corrientes pastoralistas nómadas. Al comparar el panorama económico de estos periodos con el presente vemos cómo el modelo pastoralista ha influido no solo en el Omán actual, sino también en buena parte del sur de la Península Arábiga.

Con todo, este libro logra explicar la evolución y conceptos esenciales del pastoralismo persistente a través del estudio arqueológico, centrándose en el ejemplo de la región de Dhofar, aunque también puede aplicarse a otras regiones áridas cercanas como Ḥaḍramawt en Yemen. El equipo del AHSD *Project* cuenta con el apoyo logístico y financiero del Ministerio de Patrimonio y Turismo de Omán, así como de otras instituciones como la Universidad de Ohio o la Fundación Científica Nacional de los Estados Unidos.

Pese a ser un volumen más enfocado a un público especializado en arqueología e historia, McCorriston emplea una estructura muy clara y ameniza el contenido a través de las breves historias de recreaciones del pasado incluidas en varios capítulos. Las imágenes, tablas y gráficas están igualmente muy bien seleccionadas y ayudan a visualizar de forma más clara el proceso de excavación y los trabajos de prospección.

Finalmente, nos gustaría felicitar el trabajo de McCorriston y del equipo del AHSD *Project* a través de esta reseña, así como su labor de investigación y difusión del patrimonio omaní. Esperamos en un futuro próximo poder seguir conociendo más investigaciones y avances sobre el modelo nómada pastoralista en Dhofar, y ver ampliados estos estudios a más regiones de la Península Arábiga.

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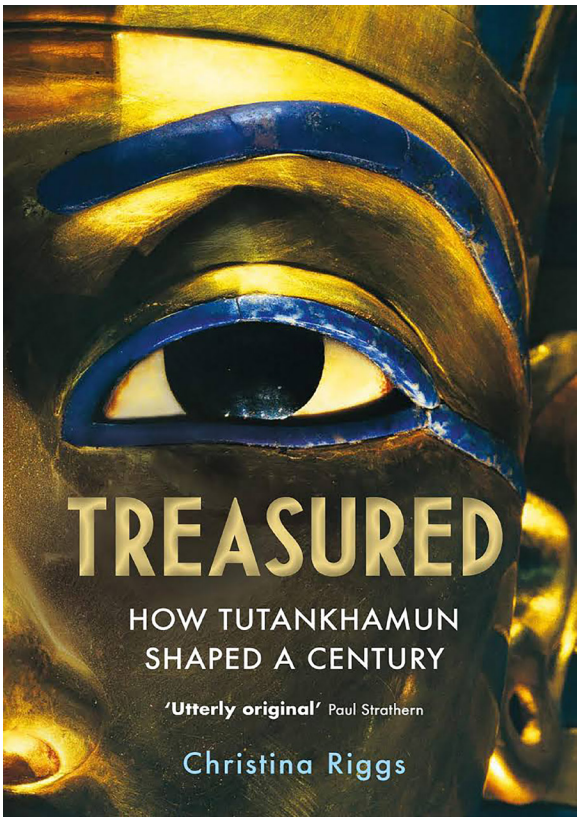

Christina Riggs
Treasured. How Tutankhamun Shaped a Century
Atlantic Books: London, 2022
XIV + 426 páginas
Medidas: 12.9 x 3.1 x 19.8 cm.
ISBN: 978-1-838-95053-8
12,46 €.

Christina Riggs comenzó su formación en Egiptología en la Universidad de Brown y realizó su doctorado en la Universidad de Oxford, centrado en la cultura funeraria del Egipto romano. Actualmente, es profesora en la Universidad de Durham. Sus intereses han derivado hacia el mundo de la fotografía como medio de expresión de la Historia y el poscolonialismo, los cuales ha aplicado a la Egiptología. Así, cuenta con varias publicaciones sobre Tutankhamon que se enmarcan en esta tendencia crítica: *Unwrapping Ancient Egypt* (2014), *Tutankhamun: The Original Photographs* (2017), *Photographing Tutankhamun: Archaeology, Ancient Egypt, and the Archive* (2018).

En la introducción, *Discoveries* (pp. 1-34), Riggs realiza una aproximación a lo que pretende con esta obra. El grueso de este apartado se centra, como la mayor parte de aquellas que "redescubren" a Tutankhamon, en los hallazgos de la tumba por parte de Howard Carter y su equipo, que sumarían entre cinco y seis mil objetos. Considera que la entrada en la tumba provocó su desacralización y descontextualización, separando los objetos entre sí, limpiando la resina que debía purificarlos y exponiéndolos en vitrinas que impiden comprender la tumba como un *todo* que debía garantizar el paso al más allá del difunto. Sin embargo, no solo las *cosas maravillosas* que encontró Carter han tenido fama mundial; para la autora, Tutankhamon ha tenido una notoriedad y reconocimiento que nunca logró en vida, siendo "embajador" de Egipto en múltiples exposiciones mundiales. Los trabajos en Amarna dirigidos por W. M. Flinders Petrie, en los que Carter estuvo trabajando, y el posterior hallazgo del busto de Nefertiti en 1912 por Ludwig Borchardt, hicieron que el Egipto faraónico, y más concretamente el periodo amarniense, tuvieran una rápida popularidad en Occidente. También la fama llegó a Carter y su equipo, si bien esta es pocas veces entendida en un contexto de expansión colonial, ocupación militar y racismo sistemático, pilares básicos que permitieron que el hallazgo de la tumba tuviese lugar.

El primer capítulo, *Creation Myths* (pp. 35-66), comienza con la biografía de Howard Carter, su formación como artista (que aprendió de su padre) y sus trabajos en Egipto anteriores al descubrimiento de la KV 62, en Beni Hassan y Deir el-Bersha, Amarna y el templo de Hatshepsut en Deir el-Bahari. Tuvo allí como mentores a Percy Newberry, W. M. F. Petrie y Édouard Naville, respectivamente. La carrera de Carter es, para Riggs, uno de tantos ejemplos donde un arqueólogo occidental podía triunfar con relativa facilidad en el Egipto del momento, obteniendo concesiones para tumbas o yacimientos e incluso siendo nombrado inspector de los monumentos del

Alto Egipto. En la década de 1880, al poco de nacer Carter, unos cien mil europeos y norteamericanos vivían en Egipto con clubes, sitios de recreo y jardines propios. Así, muchos egiptólogos vieron, durante su infancia, cómo Reino Unido tomaba el control del Egipto otomano, considerando esa dominación como "natural". La autora considera este espacio de dominación colonial como la base de los "mitos de creación" de la Egiptología, donde varios arqueólogos, hombres y occidentales, venían a descubrir un pasado intacto, únicamente manchado por la presencia de los egipcios árabes. Este racismo, que se mantiene hasta hoy en día, daba poca importancia a lo que los egipcios tuvieran que decir sobre su propio pasado. Así, el propio Lord Carnarvon, mecenas de Howard Carter durante décadas, dejó escrito en su diario que los trabajadores de la tumba eran tan deshonestos como el resto de *fellahin* (campesinos de Egipto).

El segundo capítulo, *The Reawakening* (pp. 67-109), es el que utiliza Riggs para adentrarse en la excavación de la tumba de Tutankhamon al mismo tiempo que analiza la buena y mala praxis de esta. Para ella, una vez pisada la tumba el enterramiento pasaría a ser una herramienta social, política y popular, despertando en Occidente una fantasía orientalizante y exótica. Carter diría de esos primeros momentos que "fueron emocionantes", tanto para él como para los "trabajadores nativos". Riggs llama de nuevo la atención sobre el desconocimiento de los nombres de los trabajadores egipcios, mientras que los occidentales que estaban en el equipo de Carter han sido ampliamente estudiados y admirados. Algunos de ellos eran empleados del *Metropolitan Museum* de Nueva York o de la *Egyptian Exploration Fund* que se encontraban en Luxor porque ambas instituciones esperaban obtener piezas de la tumba que pudieran musealizar y de las que sacar un rédito económico. Sin embargo, la declaración del primer ministro británico, David Lloyd George, donde daba libertad de gobierno interno a Egipto tras varias revueltas, trastocaba los planes de sacar los objetos de la tumba. Riggs considera que, al establecer que cualquier descubrimiento intacto era propiedad de Egipto, se forzó el relato de los dos robos del sepulcro, donde Carter vio unas huellas de unos probables ladrones y agujeros en paredes. Sin embargo, para la autora estos pueden ser señales del depósito de los objetos en el momento del enterramiento y de agujeros de salida una vez depositado el ajuar. Por otro lado, a medida que avanzaba el trabajo Carter prometía visitas a dignatarios y personalidades inglesas, regalando pequeños objetos del ajuar. Así, antes de la apertura se declaró en bancarrota ante la dificultad de trabajar bajo las condiciones del gobierno egipcio, que le recriminó por considerar el enterramiento "de su propiedad".

En el tercer capítulo, *Caring for the King* (pp. 110-139), la autora muestra al lector los acontecimientos que tuvieron lugar durante el final de la vida de Carter y los años posteriores. Con la muerte del arqueólogo se descubrió que pudo haber intentado guardar algunos objetos para su colección particular, ocultándolos de los registros tan minuciosos que mantuvo. Entre ellos se encontraban artefactos con el cartucho del rey, como una espiga de plata de uno de los ataúdes y un pequeño vaso de fayenza, amuletos de cristal, lapislázuli y oro, y un reposacabezas de cristal azul. Sin embargo, el más significativo fue una pieza de madera policromada, la cabeza del rey surgiendo de un loto, uno de los objetos más icónicos del ajuar. En sus últimos días Carter diría que se trató de un fallo humano, si bien estuvo oculta durante mucho tiempo en la tumba de Seti II que usaban como almacén y laboratorio. Con esto Riggs destaca que no todo fue brillante en la actuación de Howard Carter, animando a reevaluar el concepto que la Egiptología tiene de sus "inicios maravillosos". Asimismo, vuelve a señalar que, con la muerte de Harry Burton (el famoso fotógrafo que acompañó a Carter), se olvidó a su asistente, Hussein, de quien conocemos su nombre por el diario de Minnie Burton. No quedó constancia de quién hizo qué fotografías, pues todas

tenían la autoría de Burton, y lo que le quedó a Hussein tras la muerte de su jefe fue ir a trabajar en las obras del Canal de Suez, pasando a la historia de manera indirecta y sin ningún reconocimiento. En ese sentido, la autora vuelve sobre el colonialismo y el racismo al destacar el caso de Ahmed Kamal, uno de los primeros egiptólogos egipcios que pudo formarse en un programa para hombres egipcios, pero que tardaría en encontrar trabajo y un sueldo acorde al de sus colegas occidentales por la oposición de Auguste Mariette, creador del Museo Egipcio y del Servicio de Antigüedades, quien cerraría los programas de formación a los egipcios. Por último, Riggs destaca que las mujeres también han sido olvidadas: con la caída en popularidad de Tutankhamon emerge Penelope Fox, que revisó y catalogó las fotografías de Burton en Nueva York y Oxford, creando un archivo coherente que le permitió publicar en 1951 *Tutankhamun's Treasures*.

El cuarto capítulo, *Rescue and Reward* (pp. 140-178), se centra en el papel que jugó Tutankhamon con la construcción de la presa de Asuán y el salvamento de monumentos coordinado por la UNESCO. Sin embargo, Riggs antes lleva a cabo una contextualización, destacando el establecimiento de la república en 1952 y el cambio que esto supuso para la Egiptología. Con la creación del CEDAE (*Centre des Études et de Documentation d'Archéologie Égyptienne*) se trató de promover que en la disciplina tuvieran más peso los investigadores egipcios, lo cual fue muy alentado por la egiptóloga formada en París, Christiane Desroches-Noblecourt. El CEDAE fue el que advirtió a la UNESCO del riesgo patrimonial que implicaba la creación de la presa, pero la crisis de Suez en 1956 complicó las futuras actividades, ya que Egipto prohibió la entrada de franceses, ingleses e israelíes en el país (exceptuando a la propia Desroches-Noblecourt). Fue en este escenario en el que entra en escena Estados Unidos, donde la autora considera que comenzaron los "juegos capitalistas" con respecto a Tutankhamon. El congreso estadounidense aprobó una donación de doce millones de dólares para el salvamento de los templos, sabiendo que este podía retornarse en forma de pequeños templos que, una vez desmantelados, podían volver a montarse en suelo americano. La exposición *Tutankhamun Treasures* contaba con objetos del monarca y de las tumbas reales de Tanis y fue excelentemente recibida por el público en las dieciocho ciudades en las que se expuso durante los tres años que estuvo en marcha. Las entradas, así como el *merchandising* que se puso en venta generaron altos beneficios para Estados Unidos y, en menor medida, para Egipto. Sin embargo, no se tuvo en cuenta, y sigue olvidada, la diáspora que la construcción de la presa provocó en la población nubia. La autora considera que, si bien la UNESCO y la atención internacional jugaron un papel fundamental en el patrimonio (sin entrar en la comercialización de este), las poblaciones nubias eran invisibles y carecían de importancia a nivel internacional. Así, hoy en día un movimiento entre las generaciones más jóvenes aboga por poder volver a sus hogares.

En el quinto capítulo, *The Dance of Diplomacy* (pp. 179-220), la autora ahonda en el tour internacional que las piezas de Tutankhamon realizaron a lo largo del siglo XX. En este caso se centra en el espacio británico, dada la repercusión que tuvo a nivel diplomático. Tras la operación de la UNESCO y la exposición en Estados Unidos, el Reino Unido pretendía recuperar las relaciones con Egipto, tensas desde la crisis de Suez y complejas por la no tan antigua dominación colonial. Tras varias reuniones se estableció que se llevaría a cabo en 1972, coincidiendo con el quincuagésimo aniversario del descubrimiento y que incluiría cincuenta piezas que Egipto no había dejado salir anteriormente. Tuvo lugar en el Museo Británico, donde se adaptó la primera planta para ello. La disposición de los objetos, las explicaciones y los paneles fueron, para Riggs, un ejemplo del mantenimiento de las creencias coloniales británicas sobre Egipto. Se presentaba a Carter como un gran

descubridor, admirable por su perseverancia, y a Carnarvon como un generoso aristócrata, sin mención alguna a la dominación colonial o a las disputas entre el equipo británico y el gobierno egipcio. Largas colas se arremolinaban en torno al museo para ver la exposición y la visita de la reina Isabel II remarcó el aire oficial y diplomático como si, apunta la autora, dos gobernantes se reunieran cara a cara. El egiptólogo I. E. S. Edwards, encargado de la disposición en el museo, fue galardonado en 1973 con la Orden del Imperio Británico dada la complejidad que, para Riggs, consistía en llevar a cabo la exposición con éxito, obviando un pasado de dominación aún latente para muchos ingleses que aún veían a Tutankhamon como propio.

El sexto capítulo, *Land of the Twee* (pp. 221-256), recoge la recepción estadounidense de Tutankhamon en la década de 1970. Riggs comienza analizando la exposición que se hizo, conmemorando el 55º aniversario del hallazgo, en siete ciudades a lo largo del país. Con la guerra árabe-israelí de 1973 y la posterior crisis del petróleo en Occidente, Egipto se convirtió de nuevo en protagonista para los intereses estadounidenses. Richard Nixon fue el primer presidente en visitar el país para reunirse con Anwar el-Sadat y llegar al acuerdo en el que Egipto reconocía a Israel como país a cambio de una buena suma de dinero. Esta reunión se cerraría con la exposición de Tutankhamon, que prometía otorgar altos beneficios económicos para ambas partes. Así, destaca la autora, el faraón volvía a ser empleado en las actuaciones diplomáticas del momento, siendo siempre un punto de encuentro en las hostilidades. En este caso, la exposición no tenía relación con la UNESCO y no se iba a realizar en museos arqueológicos, así que se puso en marcha una maquinaria que trataba de ofrecer una imagen de Egipto desde una perspectiva artística, haciéndose más accesible para el público y atractiva en sus ventas. Riggs considera que el capitalismo fue patente en las siete ciudades, con talleres artesanales generando multitud de piezas del ajuar de Tutankhamon, que permitían al espectador llevarse algo de Egipto consigo. Esto se acentuaba con la disposición de las piezas, recreando la tumba en el momento del descubrimiento por parte de hombres blancos, ya que en ningún momento se mencionaba a los trabajadores egipcios o al *rais* Ahmed Gerigar. Este escenario colonial fue respondido por el afrocentrismo promovido por Cheikh Anta Diop. En el Museo de Arte de Brooklyn una exposición paralela, *Akhenaten and Nefertiti: Art from the Age of the Sun King*, recogió comentarios de visitantes que veían en el arte amarniense y de Tutankhamon rasgos de una cultura faraónica que, sin duda, eran negroides. Este movimiento denunciaba una "conspiración del silencio" en el blanqueamiento que hacían del Egipto antiguo, si bien obviaba objetos representando a nubios sometidos típicos del arte egipcio y encontrados también en la KV 62. Con esto, la autora trata de poner de manifiesto que las interpretaciones sobre la cultura egipcia dependían, y siguen haciéndolo, de lo que los visitantes quisieran ver en ella. Podía realizarse una musealización que obviara el pasado colonial y vinculara el inicio de la civilización con la democracia estadounidense o podía ser un ejemplo del blanqueamiento que el afrocentrismo denunciaba sufrir; Tutankhamon sería el ejemplo perfecto en ambos casos.

En el séptimo capítulo, *Restless Dead* (pp. 257-289), la autora deja las exposiciones mundiales de Tutankhamon para centrarse en su cuerpo momificado y el tratamiento que se le ha dado desde su descubrimiento. Una vez que Carter y su equipo pudo sacar la momia, a diferencia del cuidado con que se trató a los objetos del ajuar, el objetivo fue poder manejarla a cualquier coste. Las vendas, que sacralizaban y unían el cuerpo con los amuletos, fueron cortadas y desechadas. Para poder retirar las sandalias, anillos, dediles y otras joyas, el cuerpo fue mutilado y cortado en pedazos, así como decapitado para poder sacar la máscara del ataúd. Por último, la máscara fue retirada mediante el uso de cuchillos calientes para separarlo de las resinas que, al haber sido vertidas demasiado calientes, se habían adherido

permanentemente al cráneo y parte del torso. Carter declaró que el cuerpo recibiría un trato digno y que sería dejado en la tumba una vez estudiado, si bien se aseguró de que su desmembramiento y decapitación no trascendieran. Así, Riggs analiza cómo en las fotografías realizadas por Burton se cubrió el cuerpo con lino de manera estratégica para ocultar esto, con muy pocas imágenes que documenten el verdadero trato de los restos humanos. Desde la apertura de la tumba hasta la realización de un documental de la BBC en 1968, *Tutankhamun Postmortem*, el cuerpo del monarca no había sido examinado, oculto a la vista de los turistas, pero cuando la caja donde reposaba fue abierta descubrieron que había sido vandalizado. Según Riggs, esto debió de tener lugar entre 1942 y 1945, cuando un brote de malaria sacudió Luxor y los únicos visitantes eran los soldados ingleses. Tras recolocar los restos y realizar el documental, todo volvió a la "normalidad". A pesar del trato que recibió el cuerpo de Tutankhamon, no todos los restos de personas momificadas han tenido tanta suerte, al descansar, por ejemplo, en el lugar de enterramiento original. Miles de momias se acumulan en el Museo Egipcio de Tahrir y la sala que albergaba las momias reales, antes de ser trasladadas al Museo Egipcio de la Civilización, contaba con unas condiciones de conservación y exposición anticuadas. Así, en la KV 62 fueron halladas dos momias más, correspondientes a dos fetos femeninos no natos, hijas de Tutankhamon, que estuvieron perdidas durante décadas. La poca importancia dada a este hallazgo hizo que cuando fueron redescubiertas su estado de conservación fuera nefasto. La autora denuncia, así, que la supuesta maldición de la momia recae, más bien, sobre ellos, ya que en ningún momento han sido respetadas las creencias, sacralidad y ritos de los antiguos egipcios.

El último capítulo, *Tourists, Tombs, Tahrir* (pp. 290-325), analiza el turismo actual y el papel que juega Tutankhamon en él. El Museo Egipcio, con una arquitectura parisina, es el ejemplo que toma la autora para denunciar que el Egipto actual, con su cultura y costumbres, se ha adaptado para que el turista se sienta cómodo en el país. Luxor ha sido uno de los principales centros de atracción del turismo, por lo que las autoridades no dudaron en demoler poblados como el de Old Gurna o las casas construidas sobre la avenida de esfinges que conectaba el templo de Luxor con el de Karnak. No todas las familias aceptaron las modernas casas que les ofrecían a cambio de dejar el poblado, a pesar de que este no tenía agua corriente, viendo en el trabajo arqueológico y el turismo la causa de su sufrimiento. Así, Riggs considera que los egipcios se han visto relegados por parte de un turismo únicamente interesado en un pasado ajeno y del que les culpaban no ser capaces de mantener. En este escenario del turismo basado en el pasado colonial Tutankhamon volvía a ser protagonista mediante exposiciones internacionales, pero en este caso las reproducciones han tomado el relevo de los objetos del ajuar. Diferentes empresas firmaron contratos con Egipto, como la madrileña Factum Arte, para crear réplicas hiperrealistas. En este caso, se trataba de una copia de la KV 62 que se expuso cerca de la casa de Carter en Luxor (incluyendo la imagen de Isis que Carter demolió, por considerarla tosca, para pasar las capillas funerarias), pero las más habituales han sido las copias para evitar el traslado, y los costes, de los objetos originales. Multitud de exposiciones se montaron con réplicas y alguna pieza original, generando beneficios para las empresas y, en menor parte, para Egipto. La autora termina denunciando el colonialismo de los medios de comunicación durante la revolución de enero de 2011, donde la principal preocupación era por las piezas de Tutankhamon, mientras agradecían que la piedra de Rosetta o el busto de Nefertiti se encontraran fuera del país. Sin embargo, como indica Riggs, fueron los propios egipcios quienes hicieron una cadena humana para proteger el Museo Egipcio de cualquier vandalismo.

En las conclusiones, *The Museum of Dreams* (pp. 326-350), la autora comienza

describiendo su visita al Gran Museo Egipcio, aún por inaugurar, donde Tutankhamon ocupará una de las principales salas, siendo su gran atractivo. El museo se ha construido, principalmente, con capital japonés y pretende dar a todos los turistas que veían en el museo de Tahrir un edificio sucio y viejo un espacio limpio, amplio y similar a las galerías de arte europeas. De esta manera, Riggs considera que se sigue perpetuando el colonialismo con el que Egipto mantiene una relación compleja, ya que el turismo colonial es una de las grandes aportaciones económicas del país. Sin embargo, la autora anima a la Egiptología a no considerar las tendencias anticoloniales como una moda sino como una fase que debe llevarse a cabo desde la reflexión y la autocrítica, viendo a Egipto sin paternalismo o racismo, desde los países involucrados en el sometimiento de un país que no pudo reclamar un pasado como propio.

Christina Riggs lleva a cabo con este libro una profunda revisión de uno de los hitos de la Egiptología y la Arqueología. Con un excelente manejo de las fuentes egiptológicas y modernas, en especial el archivo fotográfico de Burton o los diarios de Carter, expone de manera detallada el descubrimiento de la tumba y su impacto a nivel internacional. Asimismo, aplica en todo momento una metodología novedosa al centrarse en el poscolonialismo como forma de entender el Egipto del siglo XX y XXI, donde dichas dinámicas siguen vigentes, tanto en gran parte de la Egiptología como en el turismo. En ese sentido, es destacable que la autora trate de rescatar a las mujeres desconocidas en el estudio de Tutankhamon, así como a los egipcios que trabajaron en el descubrimiento de la tumba y su tratamiento posterior.

La obra se erige, de esta manera, como una recomendable lectura para el público interesado en Tutankhamon y obligatoria para la Egiptología y disciplinas afines. El análisis de las exposiciones de Tutankhamon no ha sido realizado anteriormente, así como el enfoque crítico con el capitalismo y la monetización del patrimonio. En ese sentido, la cuestión sobre el tratamiento del cuerpo del rey difunto por parte de los egiptólogos es un elemento de discusión hoy en día en la comunidad egiptológica, si bien Riggs es clara con el ausente respeto al desacralizarlo y mutilarlo. Finalmente, cabe reseñar que la escritura es clara y original, mezclando el discurso con algunas vivencias personales de la autora que usa para contextualizar distintos sucesos.

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Módulo II, Despacho 3.6.
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Dolce 2010: 14-15.

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Dolce, R., 2017, *Losing One's Head in the Ancient Near East: Interpretation and Meaning of Decapitation*, London.

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Dolce, R., 2012, "On Urban and Ideological Routes at Ebla. A look at the Topography of Cult Places in the Early Syrian City", in R. Matthews *et al.* (eds.), *Proceedings of the 7 ICAANE*, Vol. 1, London, pp. 35-52.

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III
SECCIÓN EN ÁRABE
ARABIC SECTION

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