Corpus of Indus Seals and Inscriptions

2. Collections in Pakistan

edited by

SAYID GHULAM MUSTAFA SHAH and ASKO PARPOLA

in collaboration with

and with the assistance of
Jyrki Lyytikä, S.M. Ilyas, Arto Vuohelainen and Petteri Koskikallio

HELSINKI 1991
SUOMALAINEN TIEDEAKATEMIA
Presented for publication in the Annales Academiarum Scientiarum Fennicae
at the meeting of the Academy on September XIII, 1985

Editor: Professor Pekka Suvanto

Copyright © 1991 by
by Academia Scientiarum Fennica (for the volume)
and by the owners of the original objects (for the photographs)

Published with the financial assistance of the Unesco
on the recommendation of
the International Council for Philosophy and Humanistic Studies
and with grants of
the Ministry of Education of the Government of Finland,
the University of Helsinki, and
the Academy of Finland

ISSN 0066-2011
ISBN 951-41-0556-7

Printed in Finland by Karisto Oy, Hämeenlinna, 1991
Photo repro masters by Offset-Kopio Oy, Helsinki
Contents

Foreword by Professor Sayid Ghulam Mustafa Shah ........................................ V
Foreword by Dr Ahmad Nabi Khan ................................................................. VI
Preface ........................................................................................................ VII

Introduction................................................................................................ XV

1. Indus seals and inscriptions and the archaeological sites in Pakistan .............. XIV
2. Indus seals and the external contacts of the Indus Civilization ...................... XX
3. The function and iconography of the Indus seals and tablets ....................... XXI
4. The enigma of the Indus script .................................................................. XXII
5. Earlier documentation of the Indus seals and inscriptions .......................... XXII
6. The purpose and scope of the Corpus ......................................................... XXIII
7. The documentation of the objects ................................................................ XXIV
   Original objects and their present-day impressions ...................................... XXIV
   Broken objects ......................................................................................... XXIV
   Different sides of the objects and their specification .................................. XXV
   The scaling and printing of the photographs .............................................. XXV
8. The criteria of arrangement and related conventions of the Corpus .............. XXVI
   General considerations ............................................................................ XXVI
   The 1st criterion: the owners of the objects; and the overall publication plan ... XXVI
   The 2nd criterion: the provenance of the objects; and their numbering system .... XXVII
   The 3rd criterion: the stratigraphy of the site of provenance ....................... XXVIII
   The 4th, 5th and 6th criteria: the object type, form and material; and the symbols in the page captions .......................................................... XXVIII
   The 7th criterion: the iconographic motifs ................................................. XXX
   The 8th, 9th and 10th criteria: the size, style, and state of preservation ........... XXXI
9. On the material and production of the objects and on the colour photographs ... XXXII

Black-and-white photographs ........................................................................ 1-416

A. Sites with many seals or inscriptions / graffiti (in descending order of their total number)

Mohenjo-daro (M-595, 621 to 1659) ............................................................... 1-252 & 416
Harappa (H-266 to 275, 356*, 383 to 1019) ................................................. 253-351
Rahman-dheri (Rhd-1 to 270) ....................................................................... 352-378 & 416
Pirak (Pk-1 to 49) ....................................................................................... 379-386
B. Sites with few seals or inscriptions / graffiti (in alphabetical order)

Allahdino (Nel Bazaar) (Ad-1 to 11) .......................................................... 387-388
Amri (Ai-3 to 8) ............................................................................. 389-390
Bala-kot (Blk-1 to 6) .................................................................. 391-392
Gharo Bhuro (Nuhato) (Grb-1) ...................................................... 392
Gumla (G-1 to 16) ...................................................................... 392-394
Hissam-dheri (Hd-1 to 7) ................................................................. 395
Jhukar (Jk-3) ............................................................................. 396
Kalako-deray (Kl-1) .................................................................. 396
Kot-Diji (Kd-1 to 17) .................................................................. 396-400
Lewan-dheri (Dar Dariz) (Lwn-1) .................................................... 400
Loebanr III (L III-1) ................................................................. 401-405
Mehrgarh (Mr-1 to 18) ................................................................. 401-405
Naru-Waro-dharo (Nwd-1 to 3) ...................................................... 406
Nausharo (Ns-1 to 10) ................................................................. 407-409
Nindowari-damb (Nd-1 to 3) .......................................................... 409-410
Periano-ghundai (Pg-1 to 2) .......................................................... 410
Sarai Khola (Skh-1 to 10) .............................................................. 410-411
Sibri-damb (Sb-1 to 3) ................................................................. 411-413
Tarakai Qila (Trq-1 to 8) ............................................................... 414
Provenance unknown (?-1 to 6) ...................................................... 415
Addenda (M-858 and 1659; Rhd-270) .................................................. 416

Colour photographs (1 to 36) ......................................................... 417-432

Table 1: The iconographic criteria applied in arranging the 'unicorn' seals .......... 433

Table 2: Symbols of the form classes of Indus seals and tablets in this volume .... 433

Basic data for the objects illustrated ............................................. 434-447

Corrigenda .................................................................................. 447

Map showing the discovery sites of the Indus seals and inscriptions .............. 448
Foreword

Pakistan, situated at a crossroads of historical passages, has become the home of a wide variety of peoples coming from all over Asia and speaking diverse languages. This land of glaring contrasts — with its deserts, green pastures, and mountain heights — has been the battleground of great wars and an abode of great religions. It is a vast storehouse of antiquities, and an engrossing subject of archaeological research. This fascinating country occupies a prideful place in the history of human civilization.

The great river Indus has played its own part in shaping the destiny of the peoples who have lived along its banks. Geographers as well as historians have described its awe and majesty. From its sources in the mountains, this life line of Pakistan enters triumphantly into the Punjab and winds its way through the plains until it ends up in the vast Arabian Sea. The Indus has been a source of subsistence for Pakistan throughout the ages gone by. The volume of water at the peak of the monsoon season has both destroyed old habitations and created new areas of prosperity. Moenjo-daro is an ideal instance of cities that have appeared and disappeared with the vagaries of the Indus.

There are so many sites of archaeological interest to explore in Pakistan. The North West Frontier — the province of the Khyber Pass, Swat, Hunza and Gilgit and a number of other areas of interest — proclaims the extent and influence of the Buddhist power, for which there is abundant archaeological evidence all over the country. The Punjab, ravaged by wars and troops marching back and forth, has Harappa, the splendid Mughal monuments of Lahore, and the relics of the Ismaili settlements in Multan. Sind is famous all over the world with sites like Moenjo-daro, Amri, Kot Diji and Debal. Baluchistan has already produced marvellous results at sites like Mehrgarh, Quetta, Nal, Anjira. But much is still to be done; a study of Turbat, Khuzdar, or Chamman, for instance, might yield interesting results. All in all, the possibilities for archaeological research are enormous. What we present here in this modest volume is merely a glimpse of what has been discovered and salvaged so far. What remains underground can only be guessed.

The marvellous archaeological finds in Pakistan till today make us realise how much more can be done and achieved, also in the fields of cultural anthropology and linguistics. We wish research had more funds and facilities to carry out such work of inestimable value. There is a tremendous scope for further study, exploration and discovery in Pakistan and thus for the enrichment of human knowledge.

The increasing interest of the world community in old civilizations and history of cultures is reflected in the association of Unesco with the present volume. We hope that the present work, which collects a wealth of material until now widely scattered and even unknown, will stir new interest in experts and laymen alike.

Islamabad, August 1989.

SAYID GHULAM MUSTAFA SHAH

Federal Minister of Education
Government of Pakistan.
Foreword

The romance of the Indus seals and so-called decipherment of the script engraved on them is now more than a century old. The 'credit' for the discovery of the seals goes to a British civil engineer who ruthlessly dug the archaeological site of Harappa for bricks to be used as railroad ballast. The inscription first published was 'read' in 1877 by Sir Alexander Cunningham who estimated the characters to be archaic Indian letters of an early age, not later than 500 or 400 B.C. Since then both Harappa and Moenjodaro and, later, other sites of the Indus Civilization have yielded thousands of such seals, and a number of archaeologists and epigraphists like J.F. Fleet, C.J. Gadd, John Marshall, L.A. Waddell, C. Autran, S. Langdon, G.R. Hunter, Pran Nath, Sidney Smith, P. Meriggi, Swami Sankarananda, B.M. Barua, Father Heras, Abu Jalal Nadvi, A.H. Dani, S.K. Ray, A.R.K. Zide, Walter A. Fairbanks, John Newberry and many others have worked on them to decipher the script. However, their constant efforts have not met with a recognized success. In effect, every new attempt has either contradicted the previous effort or further complicated it.

After the invention of computer and its utilization to solve other auxiliary problems, some specialists have tried to use the device for reading the Indus script. The first attempt of this kind was made by Russian experts of the Institute of Ethnology in the Academy of Sciences (USSR) in 1964. The matter was also taken up by some Scandinavian scholars who likewise began their work in 1964. Later on, similar work has been done by Iravatham Mahadevan in India. These attempts are yet to bear fruits. However, it is important that the riddle is solved as it may throw light on many a hitherto unknown and unsolved question concerning this ancient civilization of Pakistan.

It has long been felt that a compilation of a corpus of all the inscriptions on the seals and other scribblings on a variety of related material is imperative to know the extent, nature and variety of their symbols. In the past, some attempts were made, but rather incomprehensively. The task has been taken up by the editors of the present work. The volume already published, in 1987, is concerned with the material now lying in India, while this volume deals with the collections housed in various museums in Pakistan. The task undertaken by Professor Sayid Ghulam Mustafa Shah and Professor Asko Parpola has indeed been tremendous. I am sure that the book will provide basic information to all those who are trying to solve the problem.


AHMAD NABI KHAN

Director of Archaeology and Museums,
Government of Pakistan.
Preface

We are happy to be able to bring out the present volume which contains 5417 black-and-white photographs and 36 colour photographs of altogether 2138 objects belonging to collections in Pakistan. More than 500 of these objects are published in this way for the first time here.

This is the second of the three volumes planned, for the time being, to complete the photographic Corpus of Indus Seals and Inscriptions. The Corpus will document the literary and sphragistic remains of the Indus Civilization, which flourished in Pakistan and Western India in the second half of the third millennium B.C. Related objects representing both earlier and slightly later cultural phases in the same area are also included. The Corpus will provide a basic tool for research on the enigmatic Indus script and language, on religion in early South Asia, and on the administrative organization and external cultural contacts of the Harappans.

The publication of such a work in international collaboration was proposed by one of us to the 29th International Congress of Orientalists meeting in Paris in 1973. The proposal was accepted in a unanimous resolution. After the Archaeological Survey of India (ASI) and the Department of Archaeology and Museums, Government of Pakistan (DAMGP) had agreed to collaborate with the University of Helsinki in bringing out the Corpus, after the Finnish Academy of Sciences and Letters had agreed to publish it in its Annales, and after distinguished experts from many countries had supported the scheme, an application for financial assistance was submitted to the International Council for Philosophy and Humanistic Studies (CIPSH) through the International Union of Oriental and Asian Studies. The General Assembly of UNESCO meeting at Nairobi in 1976 agreed to support the Corpus as a scholarly project of a confirmed international character and of major importance.

With the financial assistance of UNESCO, granted through the CIPSH in 1978-80, it was possible to start preparing new photographs of the Indus seals and inscriptions for the Corpus and to reproduce old ones. In Pakistan, the work was initially co-ordinated by the then Director General of the DAMGP, Mr M. Ishtiaq Khan, and directed by Dr M. Rafique Mughal, then Director of the Excavations Branch, DAMGP. Altogether 1341 objects, belonging to the collections of the National Museum in Karachi, the Moenjo-daro Museum, the Harappa Museum and the Lahore Museum, were photographed by Mr S. M. Ilyas, a senior photographer of the DAMGP. The actual number of photographs taken was much larger, however, because each side of every object was to be documented. Moreover, an impression of most of the objects was taken in plasticine for photography. This work was discontinued in 1980, when Dr Mughal left for Bahrain to spend the following two years there in archaeological research. Prints of the objects numbered 1-350 were received in Helsinki in 1980, and those of nos. 351-1341 in the beginning of 1982. A list of photographs to be retaken as well as of objects yet to be photographed was sent to Dr Mughal in the summer of 1983.

In September-October 1983, Professor Asko Parpola participated in the International Conference on Karakorum Culture, organized by Professor Ahmad Hasan Dani in Gilgit. He wanted to check if any Indus inscriptions were to be found among the petroglyphs newly discovered in large quantities by the joint German-Pakistani research team led by Professor Karl Jetmar and Professor Dani. While this inquiry regrettably yielded negative results, the conference gave Dr Parpola an opportunity to discuss the CISI project with Dr M. Ishtiaq Khan and with Dr M. Rafique Mughal, both of whom participated in the conference. After his return from Bahrain, Dr Mughal had been appointed Director of the Northern Circle of the DAMGP based in Lahore. Dr Parpola proposed to send a Finnish photographer to complete the remaining documentation. Dr Mughal insisted on the follow-up of photography of the Indus seals and inscriptions in Pakistan by the DAMGP. Mr S.M.
Ilyas, the photographer of the DAMGP who had been employed in the work, was also present in Gilgit and expressed his willingness to carry out this task. Dr Mughal was afraid, however, that the DAMGP might not have the necessary funds for the work. Therefore, in February 1984, Dr Parpola sent to the DAMGP a sum granted by the University of Helsinki for this purpose.

During the years 1983-1987, the Corpus project of the University of Helsinki concentrated on publishing the relevant material in Indian collections. As the work in Pakistan was still unfinished in 1986, new negotiations were opened with the then Director General of the DAMGP, Dr Khurshid Hasan. The Corpus project wanted to document all objects not only by means of photography but also by taking impressions of them in silicone rubber, which yields reproductions of a very high quality. Concerned with the preservation of the fragile objects, Dr Hasan could not allow any more impressions to be taken, but he granted the University of Helsinki permission to document the objects photographically.

As can be seen from the photographs of the fresh impressions published in this volume, all of which have been taken by Mr Ilyas, the quality of Mr Ilyas's photography is excellent on the whole. Only his photographs taken in the Harappa Museum and the Lahore Museum give rise to serious dissatisfaction. Yet Dr Parpola proposed that in addition to the objects of these particular museums and objects or sides of objects not photographed at all, the Finnish photographer should cover all other collections as well. The main reason for this was the consideration that the possibility of a choice between two distinct sets of photographs of each object would guarantee a higher and more even quality to the publication than the existence of a single set of photographs. It would also be more practical for the Finnish photographer to take new pictures of the entire material rather than first go through an elaborate process of identifying a large number of objects in order to make the required search for rephotography. Furthermore, a double set of negatives was to be taken for comprehensive photo archives that were to be established for research purposes in both Pakistan and Finland after the model of the Indo-Finnish collaboration.

In 1986-87, then, Mr Jyrki Lyytikkä photographed 1378 Indus seals and inscriptions available in the National Museum of Pakistan and the Excavations Branch of the DAMGP in Karachi, the Moenjo-daro Museum, the Bahawalpur Museum and the Khairpur University, and the Department of Archaeology, University of Peshawar. Before the collections of the Lahore Museum, the Harappa Museum and the DAMGP Museum at the Old Fort of Lahore were photographed, however, Mr Lyytikkä had to stop his work. According to Dr M. Rafique Mughal and the new Director General of the DAMGP, Dr Ahmad Nabi Khan, who had been appointed during Mr Lyytikkä's expedition, the permission granted to the University of Helsinki did not entail the rephotography of the entire material but only of objects that had not been photographed at all. They expressed concern for a possible improper financial exploitation of the national treasures of Pakistan sometime in the future if negatives of the Indus seals and inscriptions in the Pakistani collections were not in the control of the DAMGP. To dissolve this fear, the University of Helsinki was willing to renounce the copyright of the photographs outside the CISI volumes in favour of the owners of the original objects. All the same, Mr Lyytikkä was not allowed to continue with the photography, but the DAMGP undertook to complete the remaining work by the end of 1987.

The second volume of CISI was supposed to come out soon after the appearance of the first volume, as early as 1988. But as the situation with regard to the extensive collections of the Harappa and Lahore Museums and the missing material remained the same in 1988, it did not seem appropriate to publish this expensive book before every effort had been made to improve its quality. After new negotiations had been taken up with the Government of Pakistan in 1989, the Prime Minister, Mrs. Benazir Bhutto, appointed the Federal Minister of Education, Professor Sayid Ghulam Mustafa Shah, to supervise the project in Pakistan and see it to a satisfactory completion. With the kind mediation of Dr Shahid Hosain, Secretary, Ministry of Culture, a formal agreement was drawn up between the DAMGP and the Department of Asian and African Studies, University of Helsinki. Already before this agreement was finalized and signed in December 1989, the University of Hel-
sinki could send Mr Arto Vuohelainen to finish the photographic work. His mission covered mainly
the Excavations Branch in Karachi, the Harappa Museum, the Lahore Museum and the office of the
DAMGP at the Old Fort of Lahore; some additional photography was done also at the National

A detailed list of objects to be photographed by Mr Vuohelainen had been compiled by Pro-
fessor Parpola, but unfortunately the DAMGP could not locate all of them at short notice. However,
in the agreement the DAMGP has undertaken to collect and photograph all the still remaining objects
for the C1SI project (with duplicate negatives for the archives in Finland and Pakistan) so that they
can be published in volume 3. We have a good guarantee for this being carried out with maximal
expertise and effectiveness by the appointment of Dr M. Rafique Mughal as the responsible Paki-
stani co-editor of volume 3; as a former long-time Director of the Excavations Branch, Dr Mughal is
undoubtedly the best qualified person to search and find the missing material. We trust to be able to
publish in volume 3 also some important objects from Harappa in colour, for the DAMGP has like-
wise undertaken to provide the C1SI archives at Helsinki University with a complete set of colour
slides of all objects kept at Harappa. These could not be photographed by Mr Vuohelainen, as the
agreement permitting this had not yet been signed during his expedition. The third volume will also
include, we hope, objects that could not be published here on account of the rights of first pub-
lication by the excavators, such as a considerable number of seals from Mehrgarh, as well as objects
coming from fresh excavations, such as those going on at Harappa.

One category of objects missing from this volume demands special mention. When the material
housed at the Moenjo-daro Museum was being photographed by Mr S.M. Ilyas in 1978-80, Dr
Mughal noted that as many as 171 objects which had previously belonged to this collection (and had
been seen there by Dr Parpola in 1971) could no longer be found in the museum. However, some
of them were later photographed at the Moenjo-daro Museum itself by Mr Lyytikkä and Mr
Vuohelainen (these are mainly unfinished and uninscribed seals). But most of these objects have
disappeared without a trace. One hint to their possible fate is provided by an Indus seal auctioned
by Christie's Amsterdam on the 20th of November 1990. This seal has been officially excavated at
Mohenjo-daro (its impression was published in Marshall 1931: III, pl. cxv, no. 549) and a museum
number reading 55.35 is clearly inscribed on its back. The seal was not to be found in the Moenjo-
daro Museum in 1971 or later, but all other Indus seals having a known location and a museum
number that begins with 55 come from the Moenjo-daro Museum. Whether this particular seal, too,
has once been there can be checked from the list of the 1955 accessions in the register of the
National Museum of Pakistan. The DAMGP has kindly provided the Corpus project of the Univer-
sity of Helsinki with xerox copies of most of the relevant parts of museum accession registers in
Pakistan (they are needed for the detailed catalogue of C1SI 3) but this particular register is not
among them. Nor is the old register of the Moenjo-daro Museum accessible, for in 1980 it was re-
placed with a new register that in no way mentions the missing objects. Another peculiar circum-
cstance is that the museum registration number of some objects kept at the Moenjo-daro Museum
were changed in the 1970's. The present location of the seals discovered by Sir Mortimer Wheeler
in his excavations at Mohenjo-daro in 1950 is a similar problem: only one of them is now available
(M-977 here), being kept at the Moenjo-daro Museum (50.217 = MD 559); some years ago, another
one was in a private collection in Monaco. The Government of Pakistan will undoubtedly institute a
thorough investigation of this matter, and we expect to be able to report results in volume three.

The printing of the many thousands of new photographs and their preparation for publication
were time-consuming tasks that caused further delay in the appearance of this volume. After his
return from Pakistan in 1987, Mr Lyytikkä made enlarged prints of the new negatives which he had
taken, concentrating on the inscribed sides. Supplementary printing of Mr Lyytikkä's negatives was
done by Miss Merja Heinonen in 1988, by Mrs Maija Ylä-Outinen in 1989-1990, and by Ms Erja
Lahdenperä in 1991. Mrs Ylä-Outinen and Ms Lahdenperä also printed the pictures taken by Mr
Vuohelainen in 1989. The old photographs of the objects included in this volume have been repro-
duced either from the published excavation reports or from the largely unpublished prints in the Sind and Punjab series of the Archaeological Survey of India. The latter were photographically copied by Ms Erja Lahdenperä in Delhi in 1985 and printed by Jyrki Lyytikäinen in 1986. The photographs in the Sind and Punjab series were identified by Dr Parpola in 1975 and, from time to time, later on, as well as by the research assistants of the CISI project, Mrs Virpi Hämeen-Anttila (in 1986-87), and by Mr Petteri Koskikallio (in 1988-90). The photo archive of the University of Helsinki has been arranged and looked after by these three persons.

The photographs reproduced in this volume were selected, arranged and prepared for the press by Asko Parpola with the assistance of Petteri Koskikallio in 1988-1991. The layout of the photographs was planned by Virpi Hämeen-Anttila (pp. 1-314) and by Asko Parpola (pp. 315-432) in 1990-91, while the list of basic data for the objects illustrated was prepared by Petteri Koskikallio under the supervision of Asko Parpola. The preface was drafted during Minister Sayid Ghulam Mustafa Shah's official visit to Helsinki in August 1989 and finalized by Asko Parpola in August 1991. The preface and introduction as well as the the principles of selecting and presenting the photographs in this volume follow the pattern of the first volume of this Corpus. The map, table 1, as well as the symbols in the page captions and table 2 were planned by Asko Parpola and drawn by Mrs Hämeen-Anttila. The introduction was written by Asko Parpola.

As all users of the present book cannot be expected to consult volume one, it was deemed necessary to repeat most of its introduction here, though of course with appropriate omissions, changes and modifications. As already noted in volume one, the introduction pretends to be nothing but just an introduction. Its aim is to place the objects illustrated in their historical context, to hint at the various aspects involved in their study, with select references to the existing literature, and to explain the principles and conventions of their publication in the Corpus.

* * *

The publication of this volume would not have been possible without the generous help, support, and collaboration of the Governments of Pakistan and Finland and of many persons and institutions to whom we extend our cordial thanks.

The late Professor Jean Filliozat of the Collège de France, Vice-President of the Congress, took personal interest in passing the resolution in favour of the Corpus at the 29th International Congress of Orientalists. Professor Louis Bazin, Secretary General, International Union of Oriental and Asian Studies, and Professor Jean d'Ormesson, Secretary General, International Council for Philosophy and Humanistic Studies, were most helpful in securing the UNESCO support and in administering the grant. We are much obliged also to Professor R.N. Dandekar of the Bhandarkar Oriental Research Institute, Pune, the President of the International Union of Oriental and Asian Studies, for his personal interest and kind help, as well as to the numerous scholars (mentioned by name in volume one) who supported the scheme.

We are deeply grateful to the former Prime Minister of Pakistan, Dr Benazir Bhutto, who took great personal interest in the project and entrusted it to the care of Professor Sayid Ghulam Mustafa Shah, then Federal Minister of Education, Government of Pakistan, the Pakistani editor of the present volume. We also thank Dr K. Shahid Hosain, Secretary, Ministry of Culture and Tourism, Government of Pakistan, for all his efficient administrative help. His Excellency, the former Ambassador of Pakistan to India, Minister Riaz Hussain Khokhar, and the former Ambassador of Pakistan to Finland (and later Ambassador of Pakistan to France), Minister Shahid M. Amin, have also kindly promoted the project.

Through the good offices and kind help of Mr Muhammad Ishtiaq Khan, former Director General, the project had the support of the DAMGP from the beginning. After him, the project has been coordinated by the successive Directors General, Dr Shaikh Khurshid Hasan (in 1986), and Dr
Ahmad Nabi Khan (since December 1986). Among the other officers of the DAMGP, we feel much obliged to Dr M. Rafique Mughal, formerly Director of Explorations and since 1983 Director of the Northern Circle, who spent a lot of time in supervising the photography of the objects by Mr S.M. Ilyas, Senior Photographer of the DAMGP, whom we also cordially thank for his patient and skilful labours. Dr Mughal kindly located many of the graffiti that were excavated by Sir Mortimer Wheeler at Harappa in 1946 and are now kept in the godowns of Dr Mughal's office in Lahore. Mr S. Hakim Ali Shah Bokhari, Assistant Director, also rendered valuable assistance. Dr Ahmad Nabi Khan and Dr M. Rafique Mughal have further permitted us to include the seal coming from their unpublished excavations carried out in 1973-75 at Jhukar.

Our collaborator, Professor Farzand Ali Durrani, Head of the Department of Archaeology, Peshawar University, has put us under a very special debt by allowing us to publish here an extensive collection of potter's marks from his excavations at Rahman-dheri. This material is of particular interest for the vexed problem concerning the origin and creation of the Indus script. Professor Farid Khan of the same Department has also been most helpful. We further thank Mr Muhammad Nazim Khan and Mr Muhammad Daut Kamal, senior draughtsman, as well as Mr Hideaki Shudai and Mrs Fukiko Shudai, who all helped Jyrki Lyytikkä in the sorting and cleaning of the potsherds at the University of Peshawar.

At the National Museum of Pakistan, we have been afforded all possible help by the Director, Dr M. Abdul Halim. The Lahore Museum, the Bahawalpur Museum, and the Department of Archaeology, University of Khairpur (where we thank especially Professor M. Mukhtiar Kazi) have also kindly made their material available and given valuable help.

Good friends who have rendered much appreciated assistance and inspiration include Mr Sirajul Haque Memon (Karachi), who has long entertained an active interest in the Indus script and written a book on it in Sindi, Professor Ahmad Hasan Dani (Islamabad), likewise an expert on the Indus script and the Grand Old Man of Pakistani archaeology, as well as Professor N.A. Baloch, former Vice Chancellor of the University of Sind. We pay our respects also to the memory of the late Justice Ferooz Nana (Karachi), who as early as 1971 kindly drew Dr Parpola's attention to Q.M. Moneer's unpublished report on his excavations at Mohenjo-daro (1933-34), now in the process of publication by Dr Michael Jansen. Nana also indicated that there would be some private collections of Indus seals in Hyderabad, Sind, a clue yet to be followed up.

The directors and members of the foreign archaeological missions to Pakistan have been most liberal and cooperative, and we cordially thank them. The following have allowed us to include in the Corpus even their relevant unpublished finds: Professor George F. Dales (Department of South and Southeast Asian Studies, University of California, Berkeley), director of the excavations at Mohenjo-daro (1964-65), at Bala-kot (1973-76), and at Harappa (since 1986, still going on), and Professor Jonathan Mark Kenoyer (University of Wisconsin, Madison), assistant director, excavations at Harappa (since 1987); Professor Walter A. Fairservis (Vassar College, Poughkeepsie), director of the excavations at Allahdino (1973-1976); Dr Michael Jansen (Forschungsprojekt Mohenjo-daro, Lehrstuhl für Baugeschichte und Denkmalpflege, Rheinisch-Westfälische Technische Hochschule Aachen) and Professor Maurizio Tosi (Istituto Italiano per il Medio ed Estremo Oriente, Rome), directors of the Aachen-IsMEO expedition to Mohenjo-daro (1982-1988); Dr Massimo Vidale (IsMEO) and Dr Ute Franke-Vogt (Institut für Vorderasiatische Altertumskunde, Freie Universität, Berlin), both of whom participated in the Aachen-IsMEO expeditions, have kindly sent us photographs and slides of seals and inscriptions, including one discovered personally by Dr Vidale; Professor Giorgio Stacul (Università di Trieste), director of the excavations at Loebnir III and Kalako-deray. Dr Raymond Allechin (Faculty of Oriental Studies, University of Cambridge) and Dr Robert Knox (Department of Oriental Antiquities, British Museum), successive British directors of the joint Pakistani-British Mission to the Bannu Valley, have kindly provided us with photographs of seals and seal impressions from Lewan-dheri and Taraqai Qila.
With the kind permission of Dr Jean-François Jarrige, director of the French archaeological mission to the Indus, Dr Catherine Jarrige has kindly sent us excellent photographs of objects found at Nausharo (excavated since 1986) that have been published, or have been submitted for publication, in *Pakistan Archaeology*. Dr Paul Yule (formerly of the Kommission für Allgemeine und Vergleichende Archäologie des Deutschen Archäologischen Instituts, Bonn, and now in charge of the Corpus of Prehistoric Asian Metal Finds) has kindly supplied us with photos and information on copper and bronze objects (especially copper tablets) in the museums of Lahore, Mohenjo-daro and Karachi.

Dr Michael Jansen and Dr Alexandra Ardeleanu-Jansen (Aachen) have further given us access to the unpublished original archaeological field books of the excavators of Mohenjo-daro, discovered by them in Pakistan. Dr Ute Franke-Vogt has sent us a copy of her unpublished doctoral thesis including lists of data relating to the seals and inscriptions from Mohenjo-daro and informed us about the results of her visits to various Pakistani museums.

Passing from Pakistan to Finland, we should first like to thank the persons "in between". Mr Ahmed Jamil Ansari, Honorary Consul of Finland in Pakistan, Islamabad, has greatly obliged us by providing the project free airfreight service through the company he represents, Interlake Commerce Pakistan (Pvt.) Ltd., Islamabad and Karachi. Kemira Oy has also generously sponsored us with free airfreight; in Kemira, we would like to thank specifically Mr Seppo Viitanen and his successor, Mr Seppo Turunen. Mr Ahmed Mahmud, Honorary Consul General of Finland, Karachi, has also been of great service. Mr Heikki Timonen, Managing Director of Machinery Oy, Helsinki, and Honorary Consul General of Pakistan in Finland, has over many years extended all possible help to the project, not least in taking care of the freight of the presentation copies of this volume to Pakistan. For their precious help, we are much indebted also to the Finnish Ministry of External Affairs, and specifically to Mr Tapani Brotherus, Ambassador of Finland to Pakistan (stationed in Teheran), as well as Mr Kimmo Pulkkinen, Chargé d’Affaires at the Embassy of Finland in Islamabad since 1989.

In Finland, the generous financial support of the Ministry of Education has been indispensable to the project. Our very special thanks go to the Director of International Affairs, Mr Kalerio Siikala, and to Counsellor Ritva Kaipio, both of whom have taken a great personal interest in the publication of the Corpus.

Our grateful thanks for its generous support and encouragement go also to the University of Helsinki. The former Chancellor, Professor Nils Oker-Blom; the former Rector and present Chancellor, Academician Olli Lehto; the present Rector, Professor Päävö Tommila; the Vice Rector, Professor Risto Ihamuotila; the former Dean of the Faculty of Humanities, Professor Yrjö Blomstedt; and the present Dean, Professor Arto Mustajoki, have all done everything in their power to further the project. The University was the main sponsor of the project during the preparation of the first volume, and while the second volume was being prepared, it gave a research grant that covered most of the expenses caused by Mr Arto Vuohelainen’s expedition. We would also like to mention Ms Marja Nikkarinen of the University administration, Professor Heikki Palva, Professor Simo Parpola and Mr Harry Halén, Lic.Ph., of the Department of Asian and African Studies, and Mr Mauri Laakso and other staff of the Department of Photography for all possible assistance. Professor Rauno Ruuhijärvi has again kindly allowed the Corpus project to use the photo laboratory of the Department of Botany for several years.

We cordially thank the Finnish Academy of Sciences and Letters and its office holders for kindly accepting the Corpus for publication and for procuring the major part of the very considerable printing expenses. In his capacity as the former editor of the *Annales Academiae Scientiarum Fennicae, Series B*, we would like to mention here first of all Professor Yrjö Blomstedt, who has been an indispensable and ever obliging supporter of the project from the very beginning. We have received very warm support also from the former president of the Academy,
Professor Lauri Honko, and from the present editor of AASF-B, Professor Pekka Suvanto, and from Dr Hannu Heikkilä.

The devoted and skilful assistance of the project assistants has been a most fundamental asset. We are greatly obliged to the photographers, Mr Jyrki Lyytikkä, Mr Arto Vuohelainen and Ms Erja Lahdenperä, to the research assistants, Mr Petteri Koskikallio and Mrs Virpi Häämeen-Anttila, as well as to the photographic laborants, Miss Merja Heinonen and Mrs Maija Ylä-Outinen.

We thank Dr Robert Whiting for kindly checking our English.

The very high technical level of the photo repro masters prepared by Offset-Kopio Oy is certainly difficult to surpass: if a photograph does not look perfect, the fault lies with the original. We particularly thank the sales director, Mr Kristen Sande, and Mr Pekka Keskinen who supervised the work, for pleasant collaboration. Our printers, Karisto Oy, have done an excellent job.

Last but not least, our profound thanks go to the Academy of Finland for taking over the financial responsibility of the project at a crucial stage.

* * *

We trust that the time, labour and money invested in the publication will have been worthwhile and that this book will promote research on the difficult but fascinating problems of the Indus Civilization. Finally, we appeal to private persons as well as to institutions owning Indus seals and inscriptions that may be unknown to us to make these objects available to research: kindly send photographs (together with other available data, such as measurements, museum numbers, provenance) to Professor Asko Parpola, Department of Asian and African Studies, University of Helsinki, Finland, for their inclusion in the third volume of this Corpus.


ASKO PARPOLA

SAYID GHULAM MUSTAFA SHAH
Introduction

1. Indus seals and inscriptions and the archaeological sites in Pakistan

The first known example of the enigmatic Indus script was published in 1875, carved on a distinctive stamp seal from Harappa, the largest ruin mound of the Punjab. In 1886 and 1912, it was followed by two more seals found at Harappa. But the full implication of these finds was not realized before excavations were started in 1920 at Harappa, and, by chance almost simultaneously, in 1922, at Mohenjo-daro in Sind, some 600 km south in the Indus valley. More seals of the same type were immediately found at both of these sites, and it became evident that an entirely unknown Bronze Age civilization had come to light. This led to large-scale excavations at Mohenjo-daro and Harappa and more limited digs and explorations elsewhere. The bulk of the Harappan or Indus seals and inscriptions available to research comes from these excavations in the 1920's and 1930's.

In the partition of British India in 1947, all the major sites of the Indus civilization known at that time became part of Pakistan, but the Harappan antiquities were divided between India and Pakistan. Since then, more than 862 Early, Mature, and Late Harappan sites have been discovered

4 John Marshall (ed.), Mohenjo-daro and the Indus Civilization, I-III, London 1931; Ernest Mackay, Further Excavations at Mohenjo-daro, I-II, New Delhi 1938; M.S. Vats, Excavations at Harappa, I-II, New Delhi 1940. A most important supplement to the excavation reports of Mohenjo-daro and Harappa are the Photo Albums of the Sind and Punjab series in the archives of the Director General, Archaeological Survey of India; they contain in large numbers photographs that were taken of the antiquities as and when they had been recovered; many of them have never been published. Another indispensable help is provided by the original field registers of the excavators of Mohenjo-daro, rediscovered by Dr Michael Jansen, who has also started their publication: Michael Jansen and Günter Urban (eds.), Mohenjo-daro: Report of the Aachen University Mission 1979-1983. Section One: Data Collection, Vol. I: Catalogue and Concordance of the Field Registers 1924-1938. Part One: The IHR-Area Field Register 1925-1927. Leiden 1985. Five further parts of Vol. I are to follow. Both the Photo archives and the field registers have been utilised in CISI, and by Dr. Ute Franke-Vogt in her doctoral thesis, Die Glyptik aus Mohenjo-daro I-III, Berlin 1990, a useful and many-sided examination of the seals and inscriptions from Mohenjo-Daro.
6 Many Indus seals and inscriptions were excavated by the custodians of the local site museums in the 1930's after the official excavations had been closed. This material was not properly published; only very brief and general references to the finds are made in the Annual Report of the Archaeological Survey of India, 1930-31, 1931-32, 1932-33 & 1933-34, Calcutta 1936, 70-72; 1924-35, Calcutta 1937, 31-33 & pl. X; 1935-36, Calcutta 1938, 35-36; 1926-37, Calcutta 1940, 39-41. Forgotten in the museums, most of these objects are published in photographs for the first time in the present Corpus.
7 Most of the Indus seals and tablets in Indian collections are well preserved and they represent many different types, while those in Pakistan are often broken and stereo-type. The latter, however, are more numerous.
in the Indian Union.\textsuperscript{8} At the same time, archaeological exploration and excavation has continued to be carried out in Pakistan.\textsuperscript{9}

The following is a brief alphabetical catalogue of prehistoric sites in Pakistan that are known to have produced seals, inscriptions or graffiti kept in Pakistani collections. For their location, see the map at the end of the book (p. 448); for the chronological terms Pre-, Early Mature, Late and Post-Harappan, see chapter 8.

\textit{Allahdino} (alias Nel Bazaar): This Mature Harappan village site near Karachi in Sind was excavated by Professor Walter A. Fairservis in 1973-1977.\textsuperscript{10}

\textit{Amri} in southern Sind was discovered by N.G. Majumdar in 1929 and excavated by Dr Jean-Marie Casal in 1959-1962. Periods: Pre- to Late Harappan.\textsuperscript{11}

\textit{Bala-kot}, situated near the coast in the Las Bela district of South Baluchistan, was excavated by Professor George F. Dales in 1973-76. There are two periods, A and B, Pre-/Early Harappan (with numerous "potter's marks") and Mature Harappan (with Indus seals).\textsuperscript{12}

\textit{Damb Sadat}: The Pre- and Early Harappan layers of this site in the Quetta Valley in Central Baluchistan have yielded sherds with incised "potter's marks".\textsuperscript{13}

\textit{Ghoro Bhiro} (Nuhato) in Sind: One Mature Harappan seal coming from the surface of this site was discovered by Dr N.A. Baloch; it is reproduced in this volume from his report.\textsuperscript{14}

\textit{Gumla}: This Early and Mature Harappan site in the Gomal Valley, North-West Frontier Province, was discovered by Professor Ahmad Hasan Dani in 1967 and excavated by him in 1971. We reproduce one button seal and one potsherd with a painted design from the excavation report\textsuperscript{15} and several unpublished graffiti.

\textit{Harappa}: In 1946, Sir Mortimer Wheeler excavated at Harappa;\textsuperscript{16} his finds including material relevant to CSI are kept at the office of the Northern Circle of the DAMGP in the Old Fort of Lahore.\textsuperscript{17} No seals or inscriptions were found by Dr M. Rafique Mughal in his excavations at cemetery R 37 in 1966.\textsuperscript{18} A number of new seals, tablets and graffiti come from the new excavations carried out since 1986 by the University of California, Berkeley, and the University of Wisconsin at Madison in collaboration with the Department of Archaeology, Government of


11 See Jean-Marie Casal, \textit{Fouilles d'Amri} I-II, Paris 1964. Only part of the numerous graffiti and few seals found at Amri could be located for photography for this volume.

12 See George F. Dales, \textit{Excavations at Bala kot, Pakistan}, 1973, \textit{Journal of Field Archaeology} 1 (1974), 3-22; id., \textit{The Balakot project: Summary of four years excavations in Pakistan}, in: Maurizio Taddei (ed.), \textit{South Asian Archaeology 1977}, Naples 1979, 1, 241-274. The graffiti of period A (28 are published in drawings by Dales 1974, 16 fig. 11) could not be located for photography, but we are happy to be able to illustrate in CSI the Mature Harappan seals from Bala-kot and the unique painted bangle, which has not been published so far.


17 All of the relevant objects could not be located for photography for the present volume.

18 Cf. \textit{Pakistan Archaeology} 5 (1968), 63-68.
Pakistan, under the direction of Professors George F. Dales and J. Mark Kenoyer.  

**Hissam-dheri** situated very close to Rahman-dheri is a small site representing the Mature Harappan period.

**Jallipur:** This Early Harappan site in Central Punjab was excavated by Dr M. Rafique Mughal in 1971 and 1974.

**Jhukar** is a Mature and Late Harappan site 25 km northwest of Mohenjo-daro in Sind. It has been excavated by R.D. Banerji in 1918, by N.G. Majumdar in 1928 and by Dr Ahmad Nabi Khan and Dr M. Rafique Mughal in 1973-74.

**Kalako-deray** is a Post-Harappan site between Buner and Indus Kohistan, excavated by Professor Giorgio Stacul. The first protohistorical stamp seal so far discovered in the Swat Valley (our KI-1) was found in 1989; its period (KI III) corresponds to Ghalewag IV, c. 1700-1400 B.C.

**Kile Gui Mohammad:** Period IV (c. 3600-2600 B.C.) of this site in the Quetta Valley of Central Baluchistan has yielded sherds with "potter's marks".

**Kot-Diji** is an Early and Mature Harappan site in Sind excavated by Dr F.A. Khan in 1957-58. All relevant material coming from Kot-Diji that has been published so far is illustrated in this volume, and seven previously unpublished graffiti in addition.

**Lewan-dheri** (alias Dar Dariz) in the Bannu District of the NWFP was excavated in 1977-78 by the Cambridge-Peshawar Universities Joint Expedition under the direction of Dr F.R. Alchin. The Early Harappan layers produced our Lw-1, "a clay fragment (45 x 30 x 15 mm) with two impressions of one and the same seal on the obverse side and impressions of the string and matting or fabric cover on the reverse."  

---


20 Cf. A.H. Dani, Excavations in the Gomal Valley, Ancient Pakistan 5, Peshawar 1971. 31. The graffiti from Hissam-dheri illustrated in this volume have not been published before.

21 See M. Rafique Mughal, Excavation at Jallipur, Pakistan Archaeology 8 (1972): 117-124; idem. New evidence of the Early Harappan culture from Jallipur, Pakistan Archaeology 27.2, April 1974, 106-113 (with graffiti painted on pottery on p. 110f.; cf. also Pakistan Archaeology 4, 1967, 8f., fig. 2.5). So far, the material found at Jallipur could not be photographed for CSI.

22 See M. Rafique Mughal, Jhukar and the Late Harappan cultural mosaic of the Greater Indus Valley, in: Jean-François Jarrige and Catherine Jarrige (eds.), South Asian Archaeology 1989 (in press). The two Indus seals (K-1 and 2 in CSI 1) were discovered by N.G. Majumdar and reported by him in the Annual Report of the Archaeological Survey of India for 1927-28 (1931), 76-83 & pl. XXVII-XXX (Excavations at Jhukar) and in his Explorations in Sind. Memoirs of the Archaeological Survey of India 48, Delhi 1934, 5-18. The previously unpublished Late Harappan stamp seal illustrated here (K-3) comes from the 1973-74 excavations.


26 Some are unfortunately only reproductions as the original objects could not be located for photography.


28 F.R. Alchin et al. 1986 (see the preceding note), 179. As the original could not be traced for our photographer, Mr Lyyvikki, we can illustrate only the obverse, in a photograph kindly supplied by Dr F.R. Alchin that is clearer than the published one (ibid., fig. 4.9.2 on page 178). For the same reason we cannot publish photographs of three painted bowls
Loehanr III: This Post-Harappan site representing the Ghaleghai IV period (c. 1700-1400 B.C.) is situated east of the town of Mingora in the Swat Valley and has been excavated by Professor Giorgio Stacul in 1975-76 and 1979. 29

Mehrgarh: This most important Pre- and Early Harappan site, situated at the foot of the Bolan pass to the highlands of Baluchistan in the Kachi Plain, was excavated by the French Archaeological Mission to the Indus under the direction of Dr Jean-François Jarrige in 1974-1986. 30 Mehrgarh has for the first time provided an unbroken stratigraphic sequence from the 7th to the 3rd millennium B.C., and the nearby sites of Nausharo, Sibri and Pirak extend this to the first millennium, with just a small gap in the early second millennium B.C. 31

Mohenjo-daro: Limited excavations were carried out at the principal Mature Harappan site by Sir Mortimer Wheeler in 1950, 32 and by George F. Dales in 1964-65. 33 Between 1979 and 1986, the Mohenjo-daro Research Project of the Technical University of Aachen, directed by Dr Michael Jansen, has done much documentation work at Mohenjo-daro and collaborated on an extensive surface survey with a team of the Istituto Italiano per il Medio ed Estremo Oriente led by Professor Maurizio Tosi. 34

Naru-Waro-dharo: This Mature Harappan site in Sind was reported to have produced "pottery with important iconographic motifs; see ibid., p. 110 and fig. on pp. 215-216 (fish motif); p. 228f with sheet 8: 24 (a herded deity); and p. 110-112 and fig. 4.2.1 (heads of a bull and a buffalo plus a complete goat); according to Dr F.R. Allchin, the fragments of the last-mentioned bowl have not been pieced together."


30 Cf. Les cités oubliées de l’Indus, Paris 1988, 17-128, with further references, and chapters 2-3 below. Save for one (which could not be located for photography at the Excavations Branch), all the published seals from Mehrgarh are included in our volume. The definitive report on the excavations at Mehrgarh, which is forthcoming, will contain many more. A collection of almost 850 incised ‘potter’s marks’ from the first four season of excavations at Mehrgarh have been analysed and published in an exemplary manner by Gonzague Quirixon, Les marques incisées sur les poteries de Mehrgarh au Baluchistan, du milieu du IVᵉ millénaire à la première moitié du IIIᵉ millénaire, Paksorien 6 (1980), 269-280 (ten sheets are illustrated photographically, otherwise the marks only are shown in drawings); none of this material is included in CISI 2.


34 See especially M. Jansen and G. Urban (eds.), Interim Reports Vol. 1: Reports on field work carried out at Mohenjo-Daro Pakistan 1982-83 by the ISMEO-Aachen University Mission, Aachen & Roma 1984; id. (eds.), Interim Reports Vol. 2: Reports on field work carried out at Mohenjo-Daro Pakistan 1983-84 by the ISMEO-Aachen University Mission, Aachen & Roma 1987. Most of the new Indus seals and inscriptions discovered by the German-Italian team have been published in these reports, but some unpublished ones are included in CISI 2. — A detailed and many-sided archaeological assessment of the seals and inscriptions from Mohenjo-daro is given by Ute Franke-Vogt in her still unpublished doctoral thesis, Die Glyptik aus Mohenjo-daro 1-III, Berlin 1990.
sherd inscribed with the Indus script, but nothing more has been made known of these. Three such potsherds are published here for the first time.

*Nausharo:* This Early to Late Harappan site in the Kachi plain has been excavated by the French Mission led by Dr Jean-François Jarrige since 1986.

*Nindowari-damb:* This highly interesting site is situated in the Ornach Valley of South Baluchistan and, representing the local Kulli culture, dates to the Early and Mature Harappan periods. It was excavated for three seasons in 1962-65 by Dr Jean-Marie Casal.

*Periano-gundai:* This site in Northern Baluchistan is (at least partly) Early Harappan. Only small excavations have been carried out by Professor Walter A. Fairservis and Dr M. Rafique Mughal.

*Pirak:* This Post-Harappan site, situated in the Kachi plain that connects the Indus Valley with Baluchistan, was excavated under the direction of Dr Jean-Marie Casal and Dr Jean-François Jarrige in 1967-1974. In addition to seals representing the Post-Harappan period, three Mature Harappan period seals were found on the surface.

*Rahman-dheri:* This Pre- and Early Harappan site was excavated by Professor Farzand Ali Durrani of the University of Peshawar in 1976-1982; he has resumed the work in collaboration with Dr George Erdosy in 1991. Six small seals with script-like signs are said to come from this site. In addition to the well known bone seal representing the earliest period (Rhd-I), we publish, for the first time in photographs, a large number of Early Harappan graffiti here.

*Saraik Khola:* Altogether 68 graffiti on potsherds, constituting "potter's marks", were discovered from the Early Harappan occupation of Period II. This site near Taxila in the North-West Frontier Province was excavated by Dr F.A. Khan and Dr M.Abdul Halim in 1968-71.

---

35 Pakistan Archaeology 1 (1964), 44.
37 See Jean-Marie Casal, Nindowari: A chalcolithic site in South Baluchistan, *Pakistan Archaeology* 3 (1966), 10-21 & pl. v-xvi; id., Nindo-damb, *Pakistan Archaeology* 5 (1968), 51-55; Gregory L. Possehl, Kulli: An exploration of an ancient civilization in South Asia, *Centers of Civilization I*, Durham, North Carolina, 1986, 51-55. Dr Jean-François Jarrige is preparing a full report on Nindowari for publication. C1 IS 2 includes all the three seals discovered in the granaries of area B (only two have been published previously), but the important painted graffito have to be left for C1 IS 3.
38 See Walter A. Fairservis, *Archaeological surveys in the Zhob and Lorhal Districts, West Pakistan*, Anthropological Papers of the American Museum of Natural History 47.2, New York 1959, 404. Fairservis (ibid., 359 and fig. 59) records sherd in with "potter's marks" as surface finds.
41 Sixteen of the published seals could not be located for the Corpus photographers. One of the Pirak seals published here (Pk-42) seems to have been omitted in the excavation report.
43 Cf. the forthcoming paper by George Erdosy in: Adalber J. Gall (ed.), *South Asian Archaeology* 1901, Berlin.
45 The provenance of most of potsherds with graffito said to come from Rahman-dheri is confirmed by the markings painted on the sherds. It should be noted, however, that some of them had no identification mark whatsoever (see the data list).
46 See M. Abdul Halim, The pottery of periods IA and II with incised potter's or graffito marks, *Pakistan Archaeology* 8 (1972), 95-99 & pl. xxii A & B. Only a small part of these 68 incised sherd, now scattered in various museums, could be traced for photography and included in the present volume. It seems that our Skh-10 has not been published before.
Sibri-damb: This is a Late Harappan site, clearly affiliated with Central Asia, situated 8 km south of Mehrgarh and 2 km west of Nausharo in the Kachi plain, excavated by the French Archaeological Mission to the Indus under the direction of Jean-François Jarrige in 1981-82. 48

Tarakai Qila, an Early Harappan site in the Bannu District, NWFP, was excavated in 1978-79 by the Cambridge-Peshawar Universities Joint Expedition under the direction of Dr F.R. Allchin. 49

In addition to excavations of individual sites, extensive archaeological surveys have been carried out in different parts of Pakistan. Thus Baluchistan has been explored by Dr Beatrice de Cardi in 1948 and 1957 (in Kalat), 50 by Professor Walter A. Fairbairns in the early 1950's (Zhob, Loralai and Quetta Valleys) 51 and in 1959-60 (in Las Bela), 52 by Professor George F. Dales in 1960 (Makran coast), 53 Robert L Raikes (in the Ornach and Jhalawan Valleys) 54 and by Dr M. Rafique Mughal in 1962 (Las Bela and the coast) and in 1972 (Central and Northern Baluchistan). 55 With the exception of the two sherds from Periano-gundai, however, no material from these surveys is included in this volume. The same applies to the surveys in Sind by Dr Muhammad Shari 56 and by Dr Louis Flam in the 1970's. 57

The Cholistan Desert, or the area of the former Bahawalpur State, was surveyed in 1974-77 by Dr M. Rafique Mughal, who identified 264 sites belonging to Early, Mature and Late Harappan periods. 58 Nine sherds with graffiti coming from the 166 Mature Harappan sites covered by this survey have been published in a preliminary way, 59 and graffiti with Indus script are reported to come also from the 72 Cemetery-H culture sites. 60 So far this and other relevant material from the Cholistan surveys could not be published in the Corpus.

---


49 See F.R. Allchin and J.R. Knox, Preliminary report on excavation at Tarakai Qila (1978-79), in: Herbert Härtle (ed.), South Asian Archaeology 1979, Berlin 1981, 245-250. We are glad to be able to publish all the four seals discovered at this site (described but not illustrated i.e., 249f.) plus some unpublished graffiti.

50 Beatrice De Cardi, Excavation and reconnaissance in Kalat, West Pakistan: The prehistoric sequence in the Surab region, Pakistan Archaeology 2 (1964), 86-182.

51 Cf. Walter A. Fairbairns, Jr., Excavations in the Quetta Valley, West Pakistan, Anthropological Papers of the American Museum of Natural History 45.2, New York 1956; id., Archaeological surveys in the Zhob and Loralai Districts, West Pakistan, Ibid. 47.2, New York 1959. Fairbairns has recorded altogether 362 Pre- and Early Harappan graffiti on potsherds (with about 50 different marks, 18 of them made with the finger nail) as coming from Damb Sadaat I-III, Kile Gul Mohammad IV and other sites in the Quetta Valley (1956, 328-335 and pl. 14) and others from Kalat and Chagai regions (1956, pl. 31 and pl. 30: 2). These could not be included in CII 2.

52 Cf. Walter A. Fairbairns, Jr., The roots of ancient India. 2 ed., Chicago 1975, 189-205.


56 Cf. Pakistan Archaeology 8 (1972), 133-137.


59 See Mughal 1981 (cited in the preceding note), pl. 13. The quality of this photograph does not allow reproduction.

60 See ibid., p. 37.
2. Indus seals and the external contacts of the Indus Civilization

Immediately after the first news about the discovery of the Indus Civilization was published in 1924, it became apparent that the Harappans had been in contact with the ancient Western Asiatic cultures. Evidence for this was Indus seals coming from Susa, Ur, and other Mesopotamian sites; among these were both square stamp seals of a purely native Harappan type and seals combining Harappan and local elements such as the cylinder form.

Later, a few round Indus seals (a type rarely found in the Indus Valley) were discovered along with a large number of local round stamp seals on the islands of Failaka and Bahrain in the Gulf, where excavations since the 1950’s have revealed a flourishing "Dilmun Civilization”. When furthermore one purely "Dilmun-type" seal (L-123 in CISI 1) was found at Lothal, attention concentrated on cuneiform sources dealing with the early maritime trade of Mesopotamia. Three foreign countries are referred to as participants of the sea trade: Dilmun (closest to Mesopotamia), Magan and (farthest away) Meluhha. Magan is now widely identified with Oman and the opposite coast of Makran, and Meluhha with the Harappan realm.61

The relationship of the Pre-, Early and Mature Harappan cultures of the Indo-Iranian borderlands with those of the Iranian Plateau and Central Asia have begun to be properly understood only during the past decades. The French excavations in the Kachi Plain (Mehrgarh, Nausharo, Sibri and Pirak); the Italian excavations at Shah-i-Sokhta in Seistan,62 the American excavations at Tepe Yahya in Southeastern Iran,63 and the Soviet excavations in Central Asia64 are among the most crucial archaeological research projects of recent times which have created a veritable explosion of knowledge. These and other researches have also illuminated the important role played by the Proto-Elamites and their successors in the increasing cultural interaction in the Iranian Plateau in the third millennium B.C.65

During the last part of the third millennium B.C. and the beginning of the second millennium, interconnected Bronze Age cultures flourished in different parts of the Iranian Plateau and southern Central Asia: in the Gorgan plain (Tepe Hissar III and related sites), in Southern Turkmenia (Namazga V and related sites), in Kerman (Shahdad), and in ancient Margiana (Gonur, Togolok, Taip) and Bactria (Dashly and Sapalli in Northern Afghanistan). The excavations of Mehrgarh VIII and Sibri in the Kachi plain and the "treasury of Quetta" found in 1985, and the Late Harappan "Jhukar" culture of Chanhu-daro, especially the stamp seals, along with those found at Shahi-Tump (Sht-1) and Mehi (Mehi-1) in southern Baluchistan,66 suggest that immigrants from Eastern Iran and Central Asia (Bactria and Margiana) reached Baluchistan and the lower Indus valley around 2000 B.C., and gradually adopted the waning traditions of the Indus Civilization.67

61 For references to these first two paragraphs, see CISI 1, xii-xiii, n. 9-14.
66 Cf. C.41 to 50, Sht-1 and Mehi-1 in CISI 1; V. Sarianidi, South-west Asia: Migrations, the Aryans and Zoroastrians, International Association for the study of the cultures of Central Asia, Information Bulletin 13 (1987), 44-56, esp. fig. 2.
Distant interaction between Central Asia and the Indus Civilization is evidenced earlier during the Mature Harappan period. In the late third millennium B.C., there was a Harappan settlement at Shortughai on the Oxus in Northern Afghanistan. Two Harappan seals have been unearthed at Altit Tepe in southern Turkmenia, and one clearly Bactria-Margiana type stepped seal comes from Harappa (H-166). The few cylinder seals found at the Indus sites have so far been thought to indicate connections with Mesopotamia, where this seal type is most characteristic. However, we now know that the late Bronze Age cultures of Central Asia, for example, also used cylinder seals, and the cylinder seals from Sibri (our Sb-2 & 3) are closely parallel to them, as is one cylinder seal from Mohenjo-daro (M-419 in C1SI 1).

Thus the seals have played a leading role in the discovery of not only the Indus Civilization but also of its external relations.

3. The function and iconography of the Indus seals and tablets

Preserved ancient seal impressions prove that the Indus seals have served as instruments of control in administration and trade, as in ancient Western Asia. Some seal impressions have been made on wet clay pots before firing. Other impressions have survived on clay tags, once attached to bales of goods whose integrity they thus guaranteed. The study of the seals and seal impressions in combination with their archaeological contexts and details of style and manufacture can significantly contribute to the understanding of economic and administrative practices.

The quality of an Indus seal increases with its size, and the largest and most expensive seals must have belonged to important persons or institutions. Since the seals were probably worn in a visible fashion by their owners, as is suggested by the cord holes, they are likely to have secondarily functioned as indicators of the wearers’ rank, seen at a distance by the size of the seal.

A few Indus seals are carved hollow and provided with a lid so that something – most probably a magic charm – could be kept inside. This has generally been taken to support the old hypothesis that the seals, besides their primary function as administrative instruments, also served as protective amulets. In addition to the script, the majority of the Indus seals contain iconographic motifs, whose clearly religious nature has suggested an amulet function. The pictorial motifs not only rank among the very best preserved examples of Harappan artistic expressions but also provide some of the most important clues to the Harappan religion and to the accompanying inscriptions.

Iconographic motifs are found on "tablets" as well. An important general characteristic of this category of objects is that they comprise many identical duplicates. The incised "miniature tablets" from the lower levels of Harappa are considered to be the earliest known examples of the fully preserved ancient seal impressions.
developed Indus script. Later, incised tablets give way to embossed ones, often massproduced in moulds. Sometimes great numbers of similar tablets (especially H-859 ff.) have been found together, or their find places are very close to each other. This has suggested that most of the tablets, both the embossed and the engraved ones, may have functioned as tokens of votive offerings or of visits to temples.75

The engraved copper tablets of Mohenjo-daro form an unusual class of inscribed objects, in that their inscriptions and iconographic motifs are clearly interrelated; this is not so obvious in other classes of Indus inscriptions, although some exceptional cases may occasionally be found.76

The interpretation of the iconography of the Indus seals and tablets constitutes a major scholarly challenge. Various comparisons have been made with the ancient West Asian glyptics as well as with the later art of classical India.77

4. The enigma of the Indus script

From the very beginning, the enigmatic Indus script has been the most tantalizing one among the many problems presented by the Harappan culture. The short inscriptions hold an answer to the most debated question concerning this early urban culture, that concerning its language. Many attempts at deciphering this unknown writing system have been made ever since the first specimen was published in 1875, and all sorts of 'solutions' have been proposed. But no unanimity has been reached even on the basic issues. On one point, however, most scholars agree: the direction of writing usually is from right to left (but in the seal stamps, engraved in mirror image, from left to right).

Unfortunately space does not allow us to enter into a detailed discussion of the Indus script and its study here. For this, the reader is referred to literature published elsewhere.78

5. Earlier documentation of the Indus seals and inscriptions

There is little to be added to this chapter and its notes as it is found in CISI 1. Because the chapter is not indispensable to CISI 2, it is omitted here and reference is made to volume 1, which discusses, among other things, the computer-drawn editions of the Indus inscriptions and indexes or concordances to them, compiled by Mr I. Mahadevan79 and by a Finnish team of scholars.80

75 Cf. E. Mackay, Further Excavations at Mohenjo-daro, Delhi 1938. Vol. I, 349-351. For inscriptive and iconographic evidence supporting this conclusion, see CISI 1, xvi.
77 Recent attempts at interpretation include A. Parpola, On the iconography and inscription of the "fig deity" seal from Mohenjo-daro, in: Jean-François Jarrige and Catherine Jarrige (eds.), South Asian Archaeology 1989, Paris (in press). For further references, see CISI 1, xvii. The most comprehensive and most recent descriptive account of the Indus iconography is the as yet unpublished doctoral thesis of Ute Franke-Voigt, Die Glyptik aus Mohenjo-Daro I-II, Berlin 1990.
Such standardized text editions and indexes remain a necessary complement to the photographic Corpus.\textsuperscript{81}

6. The purpose and scope of the Corpus

The texts in standardized editions and concordances are based upon the subjective judgements of individual scholars, and they do not display all the intricacies of the originals. Moreover, they contain numerous admittedly doubtful readings. Objective photographic documentation of the original inscriptions thus is a necessary complement to such textual studies. Photographs of the original objects are equally indispensable tools for the historians of art and religion studying the iconographic motifs and for archaeologists engaged in a comparative study of the objects. In short, there is no replacement for good photographs of all the Indus seals and inscriptions.

A major part of the material has been published in photographs in the excavation reports of Mohenjo-daro and Harappa: they illustrate altogether roughly 2500 objects. These publications have long been out of print and difficult to procure. It is true that they have been reprinted in recent years, but the quality of the photographs in the reprints is so low that they are practically unusable. The published photographs of the rest of the material, on the other hand, are scattered in a number of publications, and their mere collection involves great difficulties for persons without access to specialized libraries.

It would have been simple enough to collect and reproduce the old photographs of the earlier publications. Such a procedure, however, would have resulted in a book that would not have fully satisfied the serious student of the Indus script and iconography. The size and quality of the illustrations, even in the original reports, is not always sufficient. Moreover, the available material is documented incompletely, for, as pointed out above, there are many hundreds of unpublished objects: objects coming from excavations conducted at Mohenjo-daro and Harappa after the conclusion of the official excavations; a large number of duplicate and broken or indistinct objects, especially from Harappa; and objects from excavations and explorations carried out in India and Pakistan during the past few decades but not yet published in full.

Apart from their inscriptions and iconography, the seals form an important category of artifacts in their own right, which we have seen to have much relevance for the study of the external relations of a culture as well as of its internal processes. Therefore, in addition to all the inscriptions in the Indus script, this Corpus will contain all the Harappan seals, including those without any inscription. In the case of other object types, 'inscription' has occasionally been understood rather liberally so as to include, for example, sherds whose incised or painted motifs may rather be considered as art. Such motifs, however, may be important for understanding the form of the signs of the Indus script.

Moreover, the concept of 'Indus seals' is to be understood in its widest meaning. In addition to the Indus Civilization proper, the Corpus will, with certain restrictions, cover the Early and Late Harappan periods as well and also include all the imported seals of foreign types coming from Harappan sites.\textsuperscript{82} Furthermore, 'Harappan' is understood to include closely related cultures such as that of Kulli in Baluchistan. Thus, for example, the Central Asian type compartmented metal seal coming from the Kulli site of Mehi was included in CISI 1.

The relatively few seals and clearly Harappan-type inscriptions from the Late Harappan period have been included in the Corpus, but Late Harappan graffiti have been excluded, with a few

\textsuperscript{81} After the completion of CISI 3, additions and revisions will be made in the Finnish computer corpus (the new photographs published in CISI were not available at the time when the current version was compiled), and the reference numbers of the inscriptions will be replaced by those of the Corpus, so as to ease comparison with the photographs. The typological and iconographical classifications will be revised as well.

\textsuperscript{82} Cf. chapter 2. In the past, some clearly imported seals have often been treated as Harappan; in order to prevent this from happening in the future, the word "foreign" or "intrusive" has, space permitting, been put in the page caption for such seals.
exceptions. These graffiti are short and appear to be just "pot-marks" rather than real writing. Still, they are potentially interesting to the student of the Indus script, even though not to the same extent as the Early Harappan pot-marks. The problem is their great number, coupled with the difficulties of drawing a line between Late Harappan and Post-Harappan and of finding the original potsherds.

7. The documentation of the objects

Original objects and their present-day impressions

Because the texts carved in mirror image on the seals are to be read as they appear in the impression, the reports of the excavations at Mohenjo-daro and Harappa published just the impressions. However, the impression may not faithfully reproduce all the features of the original, and the original always remains the ultimate authority. On the other hand, the impression is needed not only because it shows the inscription in its proper form but also because it sometimes reveals details not immediately visible by the inspection of the original. For example, it is harder to see an inscription on a rough or transparent or multicoloured surface than in an impression taken on a neutral and unweathered material. Thus the original and its impression complement each other and make double checking possible.

We have endeavoured to publish an impression of an object in this Corpus whenever the object was originally meant to produce one, as is the case with the stamp seals. An impression is published exceptionally if an object meant to be read directly is obscure and the impression clearly helps in understanding the text or iconography involved.

The DAMGP has taken upon itself the responsibility for making new impressions of the often rather fragile objects. Unfortunately, there was no provision for impressions in the later phases of photography. This means that no new impression is available for a large number of objects, and for the rest, there is no option between alternative pictures. The use of silicone rubber was also suggested at one point, but the Department came to the conclusion that the condition of the objects does not permit this material to be used. Plasticine is not that sensitive, so in the case of large seals especially, it is difficult to obtain a good impression in which all parts of the inscription and the device are perfect. Usually, however, the new impression is much better than the old one. If no new impression was available or if its quality was not good, recourse was taken to old impressions made soon after the excavations, either those published in the excavation reports or, if better, those available in the Photo Archives of the Archaeological Survey of India.

It would have been possible to replace missing or bad impressions by reversed prints of the original seals, but this procedure was strictly refrained from; it could have lead to serious misunderstandings, for some seals have a reversed direction of writing.

Broken objects

Many seals and tablets have crumbled into two or more pieces after they were excavated, and such broken off pieces are also often lost.\(^3\) Old photographs have been published besides the new if they clearly complement each other and whenever they show an object in a state of preservation that is better than its present state. A broken object may have been restored afterwards, and in some cases the impression taken nowadays of the object may be quite misleading.

The excavation reports sometimes left one wondering whether the object depicted is complete,

\(^3\) It is extremely rare that an object broken in antiquity and excavated in two separate pieces can be reliably put together again. We must therefore record here one such miracle, which took place when Mr. S.M. Ilyas was photographing the collection of the Mohenjo-daro Museum. The two parts of M.1323 which were successfully joined have the excavation numbers DK 10887 and DK 12286, and they were found on the 18th of December 1930 and on the 11th February 1931 at different levels (-3.22 and -8.88).
and if not, how much is missing. This can be checked by examining its back or sides. In the case of the regular square seals, this is often superfluous, because the estimate can be made from the front side itself, but for the rectangular seals without iconography it is indispensable to see the flank side and the position of the cord hole that is usually pierced through its centre.84

The different sides of the objects and their specification

Many of the objects have two or more sides with inscriptions, pictures or engravings of one kind or another. It is clear that all such sides had to be photographed and published. But the photography carried out for the Corpus was extended to comprise even the empty sides. This procedure made it possible to verify afterwards whether a given side of a specific object really is empty. Another reason for documenting all the sides of the objects was the need to check the excavation number (and often the museum number as well), which has usually been painted on the object.85

Originally the publication of all the sides of all the objects was contemplated, but this would have been too expensive, and for most of the users of the Corpus, the sides now left out are of little interest. So only a selection of the uninscribed sides is published in the Corpus: they are shown when needed to give an idea of the shape of the object, especially if a divergent type of seal is concerned.

The different sides of the objects are indicated in the Corpus by means of capital letters, which normally have the following significance: A = the obverse (which is taken as the point of reference for the other sides) / B = the reverse / C = the upper side / D = the right side / E = the lower side / F = the left side. The principal (rectangular) sides of the three-sided prisms are numbered A, B, and C and their (triangular) ends D and F.

The corresponding lower case letter is used to refer to the impression taken of any of the sides, for instance, a = impression of A. Correspondingly, aa = impression of (impression) a, implying a modern copy of the original object (e.g., Ad-8).

Different inscriptions (for instance, impressions made with separate seals) on any one side of an object have been numbered with Arabic numerals following the letter for the side, and usually the corresponding numbers have been marked beside the respective inscriptions alongside the photograph. The order is, conventionally, from left to right and from top to bottom.

If two or three different photographs of the same side are published, the code number for the second, third, fourth and fifth photograph is followed by the Latin words bis, ter, quater and quinquies respectively. Such photographs are usually arranged in the temporal order, from the oldest (first) to the latest (last). If different parts of the same side are shown in several photographs (as in the case of the cylinder seals), these are given a separate Arabic numeral put within parentheses after the letter indicating the side: M-418 A (1), M-418 A (2), etc. The same is done if one picture gives a general view of a side and another an enlargement of its inscription (as in stamped pots and earthenware bangles).

The aim of these conventions is to make each photograph and the reference to it unambiguous.

The scaling and printing of the photographs

In the excavation reports, the seals are normally depicted in their natural size, but this scale has proved to be too small for a clear recognition of all details of the inscriptions and iconographic motifs. The policy adopted in this Corpus is to print all the sides of all objects bearing either inscriptions or any kind of iconography in double size (2:1, or 200%) whenever possible, and their

84 This can sometimes be tricky. For example, the hole going through the middle of the rectangular seal H-639 is not visible because it has been filled with chalk as part of the conservation measures.

85 In some cases the excavation number painted on the object differs from that assigned to it in the lists of the excavation reports; sometimes the difference is likely to be due to a mistake in the report; sometimes the number painted on the object has become obliterated and has been erroneously restored.
uninscribed sides (if illustrated at all) either in the natural size (1:1, or 100%) or in the double size (200%). All exceptions to this rule will be specifically indicated in each case. Most of the seals from Pirak are shown in their natural size (100%)—this percentage is given in the page caption—and exceptions to it in casu.

As the great majority of the photographs are in the same scale, one will have an idea of the relative size of the different objects. This is important, because in the case of the seals, for instance, the relative size seems to convey information of its own.

The major part of the prints were made on plastic in order to avoid the distortions due to the stretching of wet paper. Moreover, the original objects were measured during the photography, and most of the prints have been enlarged by using these measurements. As the actual measures of the objects will be listed separately in the third volume and are partly available even now in the published reports, the reader will be able to check the size of the photographs.

In this volume, deep etching has been used rather more extensively than in volume one, with due awareness of its dangers.

8. The criteria of arrangement and related conventions of the Corpus

General considerations

Theoretically, the Indus seals and inscriptions could be classified in several ways. For example, the inscriptions could be arranged according to the pictographic sequences they contain. However, this arrangement would only serve the needs of scholars interested in the script and is better left to the concordances of the script. If the concordances are keyed to the Corpus, cross-reference and verification will be easy, whatever the principles of arrangement.

Ernest Mackay, in *Further Excavations at Mohenjo-daro*, arranged the objects coming from Mohenjo-daro according to the different areas of the site and the absolute depth of the finding place from the surface. He wished to control the data from the point of view of archaeological distribution, looking for evolutionary and other trends. The result was chaotic: objects of different types and sizes are mixed with each other. Unless one knows the number of the object, it is impossible to locate it without scanning through the entire material. In the present Corpus, the archaeological context is taken into account in the arrangement of the objects when it is feasible and useful, by subdividing the objects coming from a given site into separate sections corresponding to the established stratigraphy.

The aim of the classification must be efficiency in placing and locating any given object within the whole. The present owner of the object, its provenance, type, form, material, iconographic motif, size, style and state of preservation have been chosen as parameters in the Corpus, in this order. A solution of this kind, which makes a neat layout possible, was followed by Sir John Marshall in *Mohenjo-daro and the Indus Civilization* and, less successfully, by M.S. Vats in *Excavations at Harappa*.

The Ist criterion: the owners of the objects; and the overall publication plan

Ideally, of course, one would like to see all the objects coming from a single site, for example Mohenjo-daro, neatly arranged into one single sequence. There are, however, other considerations and realities, which have made it impracticable to realize this ideal. Instead, the Corpus is divided...
into three volumes according to the first criterion of physical location and ownership of the original objects. In this the *Corpus of Indus Seals and Inscriptions* follows the example of the *Corpus of Minoan and Mycenaean Seals*, for instance, which is divided into different volumes according to the museums in which seals are preserved. Thus the first volume of the Corpus presents the collections housed in the museums of India, the second volume the collections in the museums of Pakistan.  

The third volume will contain the relatively few objects known to exist in collections outside India and Pakistan and the large number of lost objects, which are not directly documentable but must be published as old photographs only. Besides addenda to the previous volumes, this third (and for the time being last) volume will also contain a detailed catalogue of all the objects of the Corpus, documenting (in addition to the excavation and museum numbers, which are given provisionally in the first two volumes as well) such matters as the archaeological context, measures, notes on the material, manufacture, text and iconography, and published references. Furthermore this information will be fully indexed.  

This second volume, then, contains 2138 Indus seals and inscriptions physically existing in public and private collections in Pakistan. As far as possible, we have tried not to publish old photographs, but to procure new, better ones. When originals almost certainly existing in Pakistani collections could not be located, however, we have resorted to reproductions: this is the case with the graffiti discovered by Sir Mortimer Wheeler at Mohenjo-daro. If better pictures of such objects are obtained later, they will be published in the third volume.  

The 2nd criterion: the provenance of the objects; and their numbering system  

It is clearly undesirable to lose control over the sitewise distribution of the objects; a purely typological arrangement mixing objects from all sites would be inadvisable. The site from which the object comes has to be a primary parameter of the classification.  

Now that seals and inscriptions coming from one and the same site will be distributed in several volumes, a flexible new numbering system is required which will both allow additions at will and make it easy to place the object in its proper context. The *Corpus of Indus Seals and Inscriptions* employs a separate consecutive numbering for each site, prefixed by a letter code which is more easily remembered than a numerical code. The major sites have a short, one-letter code. These sites are, moreover, arranged in each volume according to the total number of seals and inscriptions found at them, in descending order. The sites which are "smaller" (in respect to the number of seals and inscriptions found at them) have a two-, three- or four-lettered code as far as possible corresponding to their standard archaeological abbreviations, and they are arranged at the end in alphabetical order for easy reference. (See the table of contents.) The letter prefix for the site is followed by a dash and the number of the object assigned to it by its place within the classification sequence in each volume.

---

89 We want to emphasize that the order of the volumes is due simply to the fact that the Indian material first reached the stage when publication could be begun and has no political implications. In fact, the possibility of leaving out the volume numbers altogether in order to avoid the issue was considered, but then dropped as impractical.

90 This arrangement has practical reasons. The third volume will contain a smaller number of photographs than the first two. Therefore, it has more space to accommodate both the lengthy catalogue and the indexes, which naturally should be cumulative.

91 In the recent editions and concordances, the Indus inscriptions from Mohenjo-daro and Harappa were keyed to the published excavation reports. For this system and its limitations, see CISI 1, p. xxvi, n. 71.

92 The sections of Mohenjo-daro and Harappa in CISI 2 begin with M-595 and H-266 to H-275. These numbers, which are out of the sequence here, are used in order to "fill" the "empty" numbers due to unavoidable omissions in CISI 1. Similarly, H-356* fills the void created by the fact that H-356 in fact is the same as H-354; the asterism keeps the new H-356* apart from the deleted H-356.
The 3rd criterion: The stratigraphy of the site

After the site, the next criterion of organization of the photographs in the Corpus is the stratigraphical context of the object. If known with certainty, the objects coming from any given site are arranged in separate sequences corresponding to the stratigraphically established periods of habitation. At Mohenjo-daro and Harappa, for example, the stratigraphic context of the vast majority of the objects is suspect and there is no possibility at this stage of even attempting such a subdivision. No subtitles are given if only one period is distinguished and this is Mature Harappan; otherwise the one period is specified within parentheses after the site name.

At Rahman-dheri, again, most of the graffiti (being surface finds) can be only generally ascribed to the Early Harappan period, though this consists of Period II and Period III stratigraphically established at this site.

The label "Early Harappan" is used in this volume in its now widely current conventional sense first suggested in 1970 by Dr M. Rafique Mughal, i.e. as corresponding to "Kot Dijian" and dated to c. 3000-2500 B.C. The term implies that there is an unbroken cultural continuity between this "Early Harappan" phase and the following "Mature Harappan" phase dated to c. 2500-2000 B.C. While "Mature Harappan" is usually understood to be a synonym for the fully urbanized Indus Civilization possessed of the Indus script, in the sites of the Northwestern Frontier Province like Hissam-dheri or Gumla it is rather a temporal designation of the cultural phase, which in many respects remains similar to the "Early Harappan" phase. Thus most of the graffiti coming from Hissam-dheri and Gumla seem to represent "potter's marks" rather than the Indus script.

The phases preceding the "Early Harappan" are conventionally labeled "Pre-Harappan", though there is a similar cultural continuity between "Pre-Harappan" and "Early Harappan". "Late Harappan" refers to the last phase of Mature Harappan with some admixture of traits of non-Harappan origin or to the post-urban phase of the Harappan culture in the beginning of the second millennium B.C., and "Post-Harappan" to cultures of the second millennium B.C. with considerably fewer traits of Harappan origin; however, this distinction between "Late Harappan" and "Post-Harappan" is not to be taken too categorically.

The 4th, 5th and 6th criteria: the object type, form and material; and the symbols in the page captions

The next criterion is the type of the object. Table 2 (p. 433) lists in order and explains the simplified symbols for the typological subcategories of the Mature Harappan seals and tablets used in the page captions of volume two. The captions over each page call for some further explanations.

The caption lists in order (1) the full name of the site and the numbers of the objects coming from that site which are illustrated on the page concerned; (2) the principal object type spelled out in letters; (3) simplified symbol(s) specifying the form of the object(s); (4) material (if metal), iconographic motif(s) and size class(es) expressed with Roman numerals. Occasionally, exceptional scaling or archaeological period is mentioned. Only one-line captions are used, and information that

94 In fact Dr Mughal himself now suggests that "Early Harappan" should cover a longer time span, from c. 3400 to c. 2300 B.C., with two sub-phases the latter of which would coincide with the earlier use of this term, and instead of "Pre-Harappan" he speaks of "the Chalcolithic Period", dated to c. 3000-3400 B.C.; cf. M. Rafique Mughal, Further evidence of the Early Harappan culture in the Greater Indus Valley: 1971-90, South Asian Studies 5 (1990), 173-199. We had at first thought to follow this suggestion (and this is reflected in the omission of the two subtitles on both sides of Rhd-1, cf. corrigenda on p. 447), but later canceled this change of terminology as it undoutely would have added to the already prevailing terminological confusion.
95 On "Late Harappan", see especially M. Rafique Mughal, The decline of the Indus Civilization and the Late Harappan period in the Indus Valley, Lahore Museum Bulletin 3.2 (1990), 1-17, figs. 1-8.
cannot be accommodated or that seems superfluous is dropped, starting from the last categories. The order of the subcategories in the captions has been reversed on even-numbered pages, in order to place the first and most needed subcategories closest to the page number on the right.

We have tried to keep the typological classification as simple and unambiguous as possible. Four broad categories are distinguished: (1) seals & seal impressions, (2) tablets, (3) graffiti on pottery and (4) miscellaneous other objects. These main groups, which are functionally different from each other, are subdivided further according to formal criteria. The material of the object is taken into account next, but only in the form of a broad division into non-metal and metal (mainly copper or bronze) objects, which are placed at the end of each class.

Seals are the most important category of Indus inscriptions in terms of frequency, so they are placed at the beginning. The most common basic form of the Indus seals is square, which is placed first, and the next frequent form, rectangular, is placed after it. Within both forms, subcategories are distinguished.

The square seal normally has a perforated boss at the back, which apparently served both for hanging the seal by a cord and as an aid in making the impression. This type is presented first, with the rare example of a metal (silver) seal at the end (M-1199), followed by the exceptional seals of this category: those that have been inscribed on more than one side and those having a case (probably for an amulet) inside them. Next follow the square seals where the boss is absent: first perforated seals with one side inscribed, then perforated seals with two or more sides inscribed, and then the unperforated seals similarly subdivided. These seals without a boss share similar inscriptions and iconographic motifs with the ordinary seals having a boss, so they have been placed after them, before the seals with nothing but a swastika or some other geometric motif, although the reverse of these last-mentioned seals does have a perforated boss (usually smaller than the normal seals and undivided).

The normal type of rectangular seals has a profile that is straight on the front side and convex on the back side with a hole for the suspension cord going through the middle. Whenever the side profile is rectangular, or the back has a boss similar to that of the square seals, this is shown by publishing the relevant side(s).

Other forms of seals are rare, and in most cases these forms have been inspired by foreign models, if the seal itself is not a foreign import (see above, chapter 2). The round seals of the Indus Civilization have a perforated boss of the same type as the square seals and differ in this respect from the contemporary round seals of the "Dilmun" civilization that flourished in the Gulf area. In the Late/Post-Harappan period, round seals become the prevalent type (cf. Pirak), but they were not uncommon in the Pre- and Early Harappan periods either (cf. Mehrgarh). Cylinder seals come next.

The ancient seal impressions stand for the seals they were once made with, so they are placed next to the actual seals. A distinction is made between impressions on pots, which come first, and impressions on clay tags.Unsigned sides of clay tags that have been attached to bales of goods are illustrated, if they bear significant traces of the package material. The tags have been arranged according to the number of seal impressions they contain, those with single impressions being placed first, then according to the iconography and the inscriptions of the seal impressions.

There is a large group of objects which we have lumped together and called, neutrally, tablets. A basic distinction is made between stamped or moulded tablets, whose texts and iconography are in bas-relief, and incised or engraved tablets, whose texts are depressed. The incised copper tablets (placed at the end), so far found at Mohenjo-daro alone, can be divided into three groups according to their shape: square, rectangular and oblong (or long rectangular).

Round tablets in bas-relief often bear a square seal impression on one side and are flat on the other side. These round 'tablets' are placed at the beginning, because they might also be classed as

---

96 The arch of the back is usually smooth, sometimes edged, but as this distinction is often a question of degree, it is not systematically noted in the Corpus.
INTRODUCTION

seal impressions; they may have functioned as tokens of identification, or 'passports' of representatives of the seal owners. Since some of the other tablets in bas-relief also may have been produced with the help of seals, these round tablets have not been separated from the rest.

In both of the main categories, the embossed and the engraved, the tablets are subdivided firstly according to their form (and material) and secondly according to their iconography, size, and condition of preservation. We have tried to avoid form-based classifications that will lead to ambiguous cases and practical difficulties: thus, the class of rectangular shape includes both thin and thick tablets and evenly flat tablets as well as tablets that are slightly thicker at the centre than at the edges. Finer classifications have been proposed, but they are difficult to carry through in practice and would complicate locating a given object in the Corpus.

The term graffito is understood here to mean inscriptions incised on pottery before or after firing and inscriptions painted on pottery. An attempt has been made to place graffiti with similar signs together, and the better preserved and clear inscriptions at the beginning. When the text is very fragmentary, it is often quite uncertain in which direction the potsherd should be read. The reader, therefore, must never take the solution offered in the Corpus for granted, but be prepared to turn the photograph around.

Miscellaneous other objects is a heterogenous category accommodating the few odd objects that fall outside the other typological classes. In this volume, the stoneware bangles are the most important object type here.

The 7th criterion: the iconographic motifs

A detailed analysis of the iconography of the Indus seals and tablets is in preparation and will be published elsewhere. What we offer here is a broad classification of motifs sufficient for organizing the material into coherent classes: 'unicorn' / urus / bison / zebu / buffalo / markhor / goat / deer / rhinoceros / elephant / tiger / hare / snake / gharial / animal group / joined animals / composite animal / anthropomorph / tree / cult object (variously interpreted as a manger, incense burner or filter) / ship / swastika / other geometric design.

The 'unicorn' motif is placed first because it is the most common one of the Indus seals. The style of representing this animal in profile, so that just one single horn is shown, has in all probability been borrowed from the art of the ancient Near East. Although this representation undoubtedly had a mythological explanation and importance in the Harappan religion, the 'unicorn' is likely to be a real animal (probably the urus, or Bos primigenius) which actually had two horns. It is in fact sometimes depicted as having two horns, but for the sake of analysis and classification, these two-horned representations have been separated from the 'unicorns' under the immediately following heading of 'urus'. These two headings are followed by other bovids, these by caprids and other cloven-hoofed ruminants.

---

97 This applies to the sequence at Mohenjo-daro; incised tablets with a round shape have a different place in the sequence of Harappa.
98 Not infrequently, it is difficult to distinguish between a painted inscription on pottery and a painted pot decoration. This applies especially to the Early Harappan 'potter's marks'.
99 Ten years ago this category was almost non-existent, but especially the recent field work at Mohenjo-daro has much increased the number of inscribed stoneware bangles. On this object type, see especially Ute Franke, A selection of inscribed objects recovered from Mohenjo-Daro, in: M. Jansen and G. Urban (eds.), Interim reports vol. 1: Reports on field work carried out at Mohenjo-Daro, Pakistan 1982-83 by the LeMEO-Aachen-University Mission, Aachen & Rome 1984, 117-138; M.A. Halim and Massimo Vidale, Kilas, bangles and coated vessels: Ceramic production in closed containers at Moenjodaro, ibid., 63-97; Ute Franke-Vogt, Inscribed bangles: An enquiry into their relevance, in: Karen Frifelt and Per Svendsen (eds.), South Asian Archaeology 1985, London 1989.
An "animal group" consists of two or more natural animals appearing on one object, either separately or forming one scene like the two confronting bisons. "Joined animals" usually have more than one head (cf. M-1169-1171) or, while composed of two or more animals, may not be complete animals. The "composite animal", again, is a complete beast whose body parts belong to different animals.

Usually only one type of composite animal is represented in the seals. It has the horns of the zebu, the face of man, the tusks and the trunk of the elephant, the neck and front legs of the goat, the middle body of the 'unicorn', the hind legs of the tiger, and the snake for a tail (cf. M-1172 to M-1178). But in the incised copper tablets of Mohenjo-daro, one can distinguish several composite animals. The composite nature of most of the animals depicted on these copper tablets has rarely been recognized so far.\textsuperscript{101} The "mastiff" of the excavation reports, for example, appears to be a composite animal put together of the zebu (horns), tiger (head and front part of the body) and rhinoceros (back part of the body). In this fashion, we distinguish several different composite animals on the copper tablets (given separate Roman numerals when occurring after one another).\textsuperscript{102}

The "anthropomorph" is another broad category, which lumps together almost all the scenes in which any man-like figure is seen.\textsuperscript{103}

The 8th, 9th, and 10th criteria: the size, style, and state of preservation

The size criterion implies that, other things being equal, the larger object comes first. Only in two categories of objects has it seemed necessary to distinguish between several size groups according to their height, for both intrinsic and layout reasons.

The rectangular seals\textsuperscript{104} without iconography have been divided into three classes: (I) Seals more than 4.5 cm long\textsuperscript{105}; the rest classified according to their height: (II) higher than 12.5 mm, and (III) 12.5 mm and less. For the sake of the layout, each of the last two classes is divided into two parts, the intact seals (requiring no photos of the sides other than the obverse) being presented first; within each of these four subgroups, the arrangement is in the order of descending height.

The square 'unicorn' seals have been divided into six groups: (I) 43.5 mm and more, (II) 35 - 43 mm, (III) 29 - 34.5 mm, (IV) 23 - 28.5 mm, (V) 17.5 - 22.5 mm, (VI) 17 mm and less.

Within each size group, the 'unicorn' seals have been further arranged according to stylistic criteria (see table 1, p. 433)\textsuperscript{106}. As in volume one, we have followed the scheme of Paul Rissman by placing first the unicorns with a "collar", then the unicorns with "hatched neck", and finally the unicorns with "hatched face". Each of these groups is hierarchically subdivided according to the details of the "cultic object" in front of the unicorn.\textsuperscript{107}

As a general principle, badly broken objects are placed after the better preserved specimens of their category. The square seals showing broken 'unicorns' and broken 'bovids' (most of the latter being also probably 'unicorns') are placed immediately after the 'unicorn' seals, not at the end of all the well preserved square seals; they comprise, moreover, some seals whose type ("square seal with a boss on the reverse") is uncertain.

\textsuperscript{101} An exception is Paul Yule, \textit{Figuren, Schmuckformen und Tiefelchen der Harappa-Kultur}, Prähistorische Bronzezunde I: 6, München 1985, 32-34. Yule's analysis is somewhat different in detail.

\textsuperscript{102} Cf. C1SI 1, xxxi.

\textsuperscript{103} For details, cf. C1SI 1, xxxi.

\textsuperscript{104} No special type (indicated with a separate symbol) is given for the seal H-656, in which the hole going through the seal is seen exceptionally in the D and F sides (instead of C and E). Two seals which may or may not have had a hole going through the seal are placed without a special symbol before the class "rectangular seals without a hole".

\textsuperscript{105} The explanation given in C1SI 1, p. xxxi, by oversight omits this (first) class based on the length.

\textsuperscript{106} In table 1, each category usually has several variant forms which have an equal value.

In the case of uninscribed seals, e.g. those of Pirak and Mehrgarh, we have tried to keep the orientation of the obverse side the same as in the excavation report, unless there has been some reason to deviate from it.\textsuperscript{108}

9. A note on the material and production of the objects and on the colour photographs

Space forbids discussing the material and production of the Indus seals and inscriptions in any detail here; for this the reader is once again referred to the excavation reports. It can only be noted that the great majority of the Indus seals are made of steatite, generally whitish in colour. The seals were first sawed and cut into their forms and then polished; the subject was outlined with a sharp point and then engraved with a drill. Finally the seal was coated with an alkali and heated. It seems that the alkali coating was applied mainly to dark steatite in order to make it white. Heating hardens the steatite, which is a very soft stone, and thus protects it against wear. The various stages of this process can be seen from different examples, the unfinished ones being particularly instructive.\textsuperscript{109}

The moulded tablets are normally made of terracotta or faience, while the incised tablets usually are of steatite or copper.

Some selected objects are shown in colour at the end of the book, in enlargements as big as the space allows. Pre-, Early and Late/Post-Harappan periods are included, and preference has been given to objects not illustrated in colour elsewhere.\textsuperscript{110} In part, these 36 pictures are aimed at doing justice to the artistic beauty of some superb pieces of Harappan art, and partially they are intended to convey an idea about the colour and material of the objects. Naturally some enlargements, such as that of the "Fig-deity" seal (M-1186), are also meant to help scholars in distinguishing important iconographic details. No scale is given, because the relative and absolute size of the objects may be seen from the black-and-white photographs, to which they are keyed.

\textsuperscript{108} For example, the two perforations for fixing the seals from Mehrgarh seem to be meant to be in a vertical line; this can be deduced from such seals as Mr-15 that have a definite orientation. Yet the orientation assigned by the excavators to Mr-1 and Mr-3 is retained for reasons of space and layout.


\textsuperscript{110} Beautiful colour pictures are to be found in the two recent exhibition catalogues, \textit{Vergessene Städte am Indus}, Mainz 1987, and \textit{Les cités oubliées de l'Indus}, Paris 1988.
Mohenjo-daro

M-595 B

M-595 C

M-595 D

M-595 A

M-595 a
joined animals, composite animal

M-1171 A
M-1171 B
M-1171 C
M-1171 D
M-1171 a
M-1172 A
M-1172 a
M-1173 A
M-1173 A bis
M-1174 A
M-1173 a
MOHENJO-DARO 1187-1189  SEALS
building, no iconography
no iconography III  

SEALS MOHENJO-DARO 1317-1323

M-1317 A
M-1317 E
M-1318 A

M-1317 a
M-1318 a
M-1318 a bis

M-1319 A
M-1319 C
M-1319 E

M-1319 a
M-1320 (2) A
M-1320 A

M-1320 a
M-1321 A
M-1321 C
M-1321 E

M-1321 a
M-1322 C
M-1322 E

M-1322 A
M-1322 a
M-1322 a bis

M-1323 A
M-1323 C

M-1323 a
M-1323 B

M-1323 E
M.1350 A

M.1350 B

M.1350 C

M.1350 D

M.1350 E

M.1350 F

M.1351 A

M.1351 a

M.1351 C

M.1351 E

M.1352 A

M.1352 a

M.1352 B

M.1352 C

M.1352 E

M.1352 A bis
MOHENJO-DARO 1543-1547 TABLETS inc., c. □ indistinct □ geom.; no icon.

M-1543 A

M-1543 B

M-1544 A

M-1544 B

M-1545 A

M-1545 B

M-1546 A

M-1546 B

M-1547 A

M-1547 B
GRAFFITI on pottery, rim; base  MOHENJO-DARO 1588-1593  233

M-1588 A (50 %)
M-1589 A (50 %)
M-1590 A (50 %)
M-1591 A (50 %)
M-1592 A (100 %)
M-1593 A (100 %)
MOHENJO-DARO 1594-1596
GRAFFITI on pottery, base; body

M-1594 A (100 %)

M-1595 A (100 %)

M-1596 A (1) (50 %)

M-1596 A (2) (50 %)

M-1596 A (3) (100 %)
MOHENJO-DARO 1626-1627
GRAFFITI on pottery, moulded

M-1626 A (1) (25 %)
M-1626 B (1) (25 %)
M-1626 A (2) (100 %)
M-1627 A (50 %)
M-1626 B (2) (100 %)
STONEWARE BANGLES; MISCELLANEA shell objects

MOHENJO-DARIO 1645-1648

M-1645 A (1) (200 %)

M-1645 A (2) (400 %)

M-1646 A (1) (200 %)

M-1646 A (2) (400 %)

M-1647 A

M-1647 C

M-1647 B

M-1647 E

M-1648 A
MISCELLANEA  steatite ornament; etched bead

M-1657 A
M-1657 B
M-1657 C
M-1657 D
M-1657 E
M-1658 A
M-1658 A bis
M-1658 B
M-1658 B bis
M-1658 C
M-1658 D
M-1658 E
Harappa

H-266 A

H-267 A

H-266 a

H-267 a
HARAPPA 537-543 | SEALS | broken, bovid II, III, IV

H-537 A
H-538 A
H-537 a
H-538 B
H-539 A
H-539 a
H-540 A
H-540 a
H-541 A
H-541 a
H-542 A
H-543 A
H-543 a
HARAPPA 1005-1007  GRAFFITI  on pottery, body (ext.); moulded (base); painted

H-1005 A (2) (100 %)

H-1005 A (1) (50 %)

H-1006 A (100 %)

H-1007 A (100 %)
Rahman-dheri

Rhd-1 A

Rhd-1 B

Rhd-3 A (100%)

Rhd-2 A (100%)

Rhd-4 A (100%)

Rhd-5 A (100%)
GRAFFITI on pottery, incised (EARLY HARAPPAN) RAHMAN-DHERI 6-13

Rhd-6 A (50%)
Rhd-9 A (100%)
Rhd-7 A (100%)
Rhd-10 A (100%)
Rhd-11 A (100%)
Rhd-13 A (100%)
Rhd-8 A (100%)
GRAFFITI on pottery, incised

(EARLY HARAPPAN)

RAHMAN-DHERI 23-34

Rhd-23 A (100%)
Rhd-24 A (100%)
Rhd-25 A (100%)
Rhd-26 A (100%)
Rhd-27 A (50%)
Rhd-28 A (100%)
Rhd-31 A (50%)
Rhd-29 A (100%)
Rhd-32 A (50%)
Rhd-33 A (50%)
Rhd-30 A (50%)
Rhd-34 A (50%)
GRAFFITI on pottery, incised

Rhd-97 A (50%)
Rhd-98 A (50%)
Rhd-99 A (100%)
Rhd-100 A (100%)
Rhd-101 A (100%)
Rhd-102 A (50%)
Rhd-103 A (50%)
Rhd-105 A (50%)
Rhd-107 A (100%)
Rhd-104 A (100%)
Rhd-106 A (50%)
GRAFFITI on pottery, painted

Rhd-250 A (100 %)

Rhd-253 A (100 %)

Rhd-254 A (100 %)

Rhd-251 A (100 %)

Rhd-252 A (100 %)
Mature Harappan (Surface finds):

- Pk-1 A

Post-Harappan (100%):

Period I A:

- Pk-2 A
- Pk-2 (2) A
- Pk-3 A
- Pk-3 B
- Pk-3 E
Period I B
Period II

Pk-22 A
Pk-22 B
Pk-22 E
Pk-25 A
Pk-25 B
Pk-25 C
Pk-23 A
Pk-23 E
Pk-24 A
Pk-26 A (200%)
Pk-26 B
Pk-26 C
Pk-26 D
Pk-26 E
Period III A

Pk-41 A

Pk-41 C

Pk-42 A

Pk-42 F

Pk-43 C

Pk-43 A

Pk-43 F

Pk-44 E

Pk-44 A

Pk-44 B

Pk-46 F

Pk-45 A

Pk-45 C

Pk-46 B

Pk-46 A
Period III B

Pk-47 A
Pk-47 E
Pk-47 F

Pk-48 A
Pk-48 B
Pk-48 C

Pk-49 A
Pk-49 B
Pk-49 D
Allahdino (Nel Bazaar)

Ad-1 A

Ad-1 A bis

Ad-2 A

Ad-2 a

Ad-3 A

Ad-4 A

Ad-5 A
Amri

Pre-Harappan: Period I B

Ai-3 A (50 %)

Ai-4 A (100 %)

Ai-5 A (100 %)
Mature Harappan: Period III C

Late Harappan:
Period III D
Gharo Bhiro (Nuhato)

Gumla

Early Harappan:

Period II
Period III

Mature Harappan:
Period IV A

Period IV B
Period IV C

Period IV D

Period IV pottery from Period V contexts
Hissam-dheri (Mature Harappan)

Hd-1 A (100 %)

Hd-2 A (50 %)

Hd-3 A (100 %)

Hd-4 A (50 %)

Hd-5 A (100 %)

Hd-6 A (100 %)

Hd-7 A (100 %)
Jhukar  (Late Harappan)

Kalako-deray  (Post-Harappan)

Kot-Diji  
Early Harappan
Mature Harappan

Kd-3 A (100 %)
Kd-4 A (50 %)
Kd-5 A
Kd-6 A
Kd-6 C
Kd-6 F
Kd-6 B
Kd-5 B
Kd-7 A (33 %)
MATURE HARAPPAN + Period? KOT-DJII 12-15

Period?

Kd-12 A+E (100 %)

Kd-13 A+E (50 %)

Kd-13 A (100 %)

Kd-12 A

Kd-14 A+E (50 %)

Kd-14 A (100 %)

Kd-15 A (50 %)

Kd-15 B (50 %)
Lewan-dheri (Dar Dariz)
(Early Harappan)
Loebanr III
(Post-Harappan)

Mehrgarh

Pre-Harappan:

Period II A

Period II B

Mr-4 A

Mr-4 B

Mr-3 A (100 %)

Mr-2 A

Mr-2 B

Mr-1 B

L III-1 A (50 %)
Period IV

Period V

Mr-5 A  Mr-6 B  Mr-7 B  Mr-8 A  Mr-8 B  Mr-7 A

Period VI

Mr-9 B  Mr-9 A
Early Harappan:

Period VII
Naru-Waro-dharo

Nwd-1 A (50 %)

Nwd-2 A (100 %)

Nwd-3 A (100 %)
Early Harappan: Period I B

Mature Harappan:

Period II
Period III

Ns-4 A (1) (30 %)

Ns-4 A (2) (100 %)

Period III B

Ns-5 A

Ns-6 A

Ns-7 A

Ns-8 A

Ns-8 a
Late Harappan:

Period III C

Nindowari-damb
Periano-ghundai  (Early Harappan?)

Sarai Khola  (Early Harappan)
Sibri-damb
(Late Harappan)
Tarakai Qila  (Early Harappan)

Trq-1 A
Trq-1 B
Trq-2 A
Trq-2 B
Trq-2 D
Trq-3 A
Trq-4 A
Trq-5 A (50 %)
Trq-6 A (100 %)
Trq-7 A (100 %)
Trq-8 A (100 %)
Trq-9 A (50 %)
Provenance unknown
Addenda

M-858 C

M-858 F

M-858 B

M-1659 A (1) (100 %)

M-1659 A (2) (400 %)

Rhd-270 A (50 %)
Table 1: The iconographic criteria applied in arranging the 'unicorn' seals

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>no cult object</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>![Icon A]</td>
<td>![Icon B]</td>
<td>![Icon C]</td>
<td>![Icon D]</td>
<td>![Icon E]</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>![Pattern A]</td>
<td>![Pattern B]</td>
<td>![Pattern C]</td>
<td>![Pattern D]</td>
<td>![Pattern E]</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>![Pattern A]</td>
<td>![Pattern B]</td>
<td>![Pattern C]</td>
<td>![Pattern D]</td>
<td>![Pattern E]</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>![Pattern A]</td>
<td>![Pattern B]</td>
<td>![Pattern C]</td>
<td>![Pattern D]</td>
<td>![Pattern E]</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Symbols of the form classes of Indus seals and tablets used in this volume

<table>
<thead>
<tr>
<th>SEALS</th>
<th>TABLETS in low-relief &amp; incised</th>
</tr>
</thead>
<tbody>
<tr>
<td>square with a perforated boss</td>
<td>![Symbol A] - inscribed on one side</td>
</tr>
<tr>
<td></td>
<td>![Symbol B] - inscribed on more than one side</td>
</tr>
<tr>
<td></td>
<td>![Symbol C] - with grooves across each edge</td>
</tr>
<tr>
<td></td>
<td>![Symbol D] - having a case</td>
</tr>
<tr>
<td></td>
<td>![Symbol E] - having a case and inscribed on more than one side</td>
</tr>
<tr>
<td></td>
<td>![Symbol F] - woven into a unique form</td>
</tr>
<tr>
<td></td>
<td>![Symbol G] - with two holes through the face, without a boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol H] - perforated from edge to edge, without a boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol I] - grooved along all edges, without a boss or a hole</td>
</tr>
<tr>
<td></td>
<td>![Symbol J] - unperforated, without a boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol K] - unperforated, with a convex or concave sides of the face</td>
</tr>
<tr>
<td></td>
<td>![Symbol L] - unperforated, with a convex back</td>
</tr>
<tr>
<td></td>
<td>![Symbol M] - with a perforated boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol N] - rectangular (also in section), with a perforated boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol O] - rectangular, perforated in the middle of the long edges</td>
</tr>
<tr>
<td></td>
<td>![Symbol P] - rectangular, perforated through the middle of the short edges</td>
</tr>
<tr>
<td></td>
<td>![Symbol Q] - rectangular, unperforated</td>
</tr>
<tr>
<td></td>
<td>![Symbol R] - rectangular, unperforated, with grooves across the long edges</td>
</tr>
<tr>
<td></td>
<td>![Symbol S] - with a perforated boss</td>
</tr>
<tr>
<td></td>
<td>![Symbol T] - perforated</td>
</tr>
<tr>
<td>round</td>
<td>![Symbol U] - round (placed here in the case of Harappa)</td>
</tr>
<tr>
<td></td>
<td>![Symbol V] - square</td>
</tr>
<tr>
<td></td>
<td>![Symbol W] - rectangular</td>
</tr>
<tr>
<td></td>
<td>![Symbol X] - rectangular, twisted</td>
</tr>
<tr>
<td></td>
<td>![Symbol Y] - long rectangular (distinguished in copper tablets only)</td>
</tr>
<tr>
<td></td>
<td>![Symbol Z] - rectangular, rounded at both ends</td>
</tr>
<tr>
<td></td>
<td>![Symbol AA] - rectangular, rounded at one end</td>
</tr>
<tr>
<td></td>
<td>![Symbol AB] - rectangular, rounded at one end</td>
</tr>
<tr>
<td></td>
<td>![Symbol AC] - lancolate with rounded ends</td>
</tr>
<tr>
<td></td>
<td>![Symbol AD] - lancolate</td>
</tr>
<tr>
<td></td>
<td>![Symbol AE] - crescent</td>
</tr>
</tbody>
</table>
| | ![Symbol AF] - striated-
| | shaped |
| | ![Symbol AG] - crescent-shaped |
| | ![Symbol AH] - heart-shaped |
| | ![Symbol AI] - fish-shaped |
| | ![Symbol AJ] - semicircular |
| | ![Symbol AK] - round (placed here in the case of Harappa) |
| | ![Symbol AL] - triangular pris with rounded top |
| | ![Symbol AM] - triangular prism inscribed on more than one side |
| | ![Symbol AN] - twisted triangular prism inscribed on more than one side |
| | ![Symbol AO] - rectangular bar inscribed on more than one side |
| | ![Symbol AP] - cube inscribed on more than one side |
| | ![Symbol AQ] - unperforated cylinder |

N.B. The table omits the variants of these symbols shown in broken lines. Broken lines indicate uncertainty in assigning an object to the respective typological class.
Basic data for the objects illustrated

Column 1 in the following tabulation gives the CSV numbers assigned to the objects illustrated in the present volume. Numbers (1), (2), and so on, inserted between columns 1 and 2, refer to separate lower pieces of the same broken object if the pieces have different measurements and excavation numbers. (Objects from Harappa that have excavation numbers greater than 1,900 are in some cases appear to be fragments broken off from previously excavated objects; compare H-31.)

Column 2 gives the number of the object in the current version of the FC (Findlist concordance, see below), which is the basis for the arrangement of the material in the CSV archives at the University of Helsinki. This information is useful, even on an interim basis, in that the FC offers help in reading the inscriptions, as does Mahadevan 1977. Many of the FC numbers are identical with those of Mahadevan, but many are different: the numbers of the two concordances are not in a regular order in the column of the FC.

In the following there are some preliminary tabulations, furthermore, the FC numbers replace references to earlier publications, the FC numbers for the objects coming from Mohenjo-Daro and Harappa (which constitute the bulk of the material) are merely keys to the object numbers in the plates of the excavation reports (see introduction). Proper references to all places of publication will be given in the systematic list of CSV 1.

Very few of the objects with FC numbers between 0091-1080 and 3797-4755 (coming from the old excavations of Mohenjo-Daro and Harappa respectively) have been published before in photographs. Numerous objects not previously published in photographic form come from the recent excavations at Harappa (their excavation numbers start with 1486 through 1886). The other sites represented in this volume, excepting Chanh Bhanro, Layan, Luxor, Mohenjo-Daro and Salsib, also include unpublished material.

Column 3 gives the excavation numbers or corresponding data. The abbreviations appearing in this column are not included in the following list of abbreviations (for 1886 etc., see above, on column 2), but they will be explained in CSV 1. It may be mentioned, however, that 2 stands for "surface flint", and numbers within parenthesis usually refer to layers. Some objects are marked with wrong excavation numbers, but a detailed discussion of these cases is postponed in CSV 3. In such cases, the column simply gives ???? which is also not code for cases where the data are altogether missing. As in the next column, bold face indicates that the number so marked is indistinct or uncertain.

Column 4 mentions the museum where the object concerned is kept, and the museum registration number(s). Museum numbers given in italics and beginning with a two-digit number for a year (e.g. 50 = 1930) refer to the accession catalogue of the National Museum of Pakistan, whereas the object has been transferred.

Column 5 gives the sources of the photographs (and the one drawing) published in this volume. The first reference covers all unspecified photographs. Whenever the photographs supplied by individual scholars had a negative number or other corresponding data, these are given after the name of the person who has been our source.

Abbreviations used:

777 = data not available
Aachen = photograph supplied by the Research Project Mohenjo-daro of the Technical University of Aachen
FR = Alkotar photograph supplied by Dr F.R. Alkotar
ASI = Archaeological Survey of India
AV = photograph taken by Mr. A. Van Heukelen for the CSII project of the Department of Asian and African Studies, Helsinki University
Baloch 1973 = N.A. Baloch, In search of the Indus Culture sites in Sind, Bulletin of the Institute of Sindology, University of Sind, 3.2-3 (July 1973): 11-19. 6 pl. and map
Brannsberg = photograph supplied by Mr Robert H. Brannsberg.
Cable 1964 = Jean-Marie Cassil, Fouilles de l'Indus I-III, Paris 1964
CSII = Corpus of Indus Seals and Inscriptions
DKK = George F. Dales & J.M. Kenoyer, Excavations at Mohenjo-Daro, Pakistan: The Pottery, Philadelphia 1986
DMASTER = photograph taken by the Department of Photography, University of Helsinki (from a cast supplied by Prof. Walter A. Fairservis)
ESI = M.S. Van, Excavations at Harappa I-II, Delhi 1940-41
EN = photograph taken by Mr. Eija Lukkarinen for the CSII project of the Department of Asian and African Studies, Helsinki University
ESB = Excavation Branch, Department of Archaeology and Museums, Government of Pakistan, Karachi
Faiservis = photograph supplied by Prof. Walter A. Faiservis
FC = the Finnish concordance: Kimmie Koskeniemi and Asko Parpola, Corpus of texts in the Indus script (Department of Asian and African Studies, University of Helsinki, Research Report 1), Helsinki 1979; id., Documentation and duplicity of the texts in the Indus script (ibid. 2), 1980; id., A concordance to the text in the Indus script (ibid. 3), 1982
Fdp = Fouilles de Pèrak, Vol. I, Texn, by Jean-François Jaye et Martine Samari,
FR = Ernest Mackey, Further Excavations at Mohenjo-daro I-II, Delhi 1938
Hl = Harappa Museum
Jarrige = photograph supplied by Dr C. Jarrige
K = photograph taken by Mr Jyoti Lycsik for the CSII project of the Department of Asian and African Studies, Helsinki University
Khan = T.A. Khan, Preliminary report on Kan Dehl excavations 1957-58, Karachi n.d. (c.1959)
KHP = Khapur University
Kn = photograph supplied by Dr J. Robert Knos
L = Lahore Museum
LLC = Office of the Norvik Circle, Department of Archaeology and Museums, Government of Pakistan, Old Fort, Lahore
Mahadevan 1977 = Brahmatan Mahadevan, The Indus script: Text, concordance and tables (Memoirs of the Archaeological Survey of India 77), New Delhi 1977
MD = Mohenjo-Daro Museum (with old accession numbers)
MM = Mohenjo-Daro Museum (with new accession numbers)
MNP = National Museum of Pakistan, Karachi
P = Department of Archaeology and Museums, Government of Pakistan, photograph taken by Mr S.M. Syed for the CSII project
PA = Pakistan Archaeology, Karachi
PC = private collection
PSW = Department of Archaeology, University of Peshawar
PS = Punjab Series, Photo Archive of the Director General, ASI, Jartugh, New Delhi
SLS = Sindh Series, Photo Archive of the Director General, ASI, Jartugh, New Delhi
SMSS = Sindh Museum (Sudas Shah)
Stucal = photograph supplied by Prof. Giorgio Stucal
Vdl = photograph supplied by Mr. Massimo Vitali
VSL = Vergeteseal Salsib am Indus, Mainz 1987
DATA H-989 to Rhd-156
Call No. R 913.03
P.D.A. Shah & Parpola
Author—Shah & Parpola
Title—Corpus Indus Seals & Inscriptions Vol. 2
Borrower No. Date of Issue Date of Return
Ajay Kumar 24/9/78 13/10/78

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT. OF INDIA
Department of Archaeology
NEW DELHI.

Please help us to keep the book clean and moving.