# RESEARCHING THE WORLD'S BEADS: AN ANNOTATED BIBLIOGRAPHY

# **Compiled by Karlis Karklins Society of Bead Researchers**

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# CENTRAL AND SOUTH ASIA

The countries covered in this section include: Afghanistan, Bangladesh, Bhutan, India, Kazakhstan, Kyrgyzstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, and Uzbekistan. See also the two specialized theme bibliographies and the General/Miscellaneous bibliography as they also contain reports dealing with these countries.

#### Abraham, Shinu Anna

In Search of Craft and Society: The Glass Beads of Early Historic Tamil South India. In *Connections and Complexity: New Approaches to the Archaeology of South Asia*, edited by Shinu Anna Abraham, Praveena Gullapalli, Teresa P. Raczek, and Uzma Z. Rizvi, pp. 239-261. Left Coast Press, Walnut Creek, CA.

Concentrates on the beads recovered from Pattanam in southern India.

2016 Glass Beads and Glass Production in Early South India: Contextualizing Indo-Pacific Bead Manufacture. *Archaeological Research in Asia* 6:4-15.

Reviews the available data for glass in pre-modern South India, including recently discovered sites in southern Andhra Pradesh, India, and considers strategies for reconstructing the broader socio-economic settings in which early South Indian Indo-Pacific bead manufacture took place.

# Ahmed, Mukhtar

2014 Ancient Pakistan: An Archaeological History, Vol. III. Harappan Civilization: The Material Culture. Foursome Group, Reidsville, NC.

Chapter 19, Miscellaneous Crafts and Technologies, deals with stone beads.

# Ajithprasad, P. and Marco Madella

2017 Early Harappan Bead Production in Gujarat: Technology, Adaptation and Contacts. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 277-292. Indian Institute of Technology Gandhinagar.

Discusses the stone-bead industry at a site in west-central India including information about the sources of the raw material, drilling techniques, and trade.

#### Allen, Jamey D.

2009 Pumtek – An Introductory Report Upon an Unusual Class of Decorated Stone Beads. *Beads: Journal of the Society of Bead Researchers* 21:5-8. Reprinted from *The Bead Forum* 9:6-13 (1986).

Discusses the "etched" stone beads so prevalent in India and Burma, and illustrates 40 decorative varieties from Mizoram, India.

#### Avanesova, N.A.

Spätbronzezeitliche Kulturkontakte in der baktrischen Flussoase nach den Befunden der Nekropole Bustan 6. Archäologische Mitteilungen aus Iran und Turan 29:147-178.
 Spherical bronze beads and a lapis lazuli pendant were found in one grave within this 2nd-millennium BC cemetery in Southern Uzbekistan; beads of other materials are reported from Andronovo contexts.

#### Ayyar, Sulochana

1987 Costumes and Ornaments as Depicted in the Sculptures of Gwalior Museum. Mittal Publications, Delhi.

Discusses the costumes and ornaments (including beads and pendants) of ancient India.

# Barthélemy de Saizieu, B.

Les perles en roches dures du site de Nausharo (Baluchistan pakistanais), 2800-2000 av. J.-C. In *Cornaline de l'Inde: des pratiques techniques de Cambay aux techno-systèmes de l'Indus*, edited by V. Roux, pp. 439-462. Éditions de la Maison des sciences de l'homme, Paris. http://books.openedition.org/editionsmsh/8736

On hard-stone beads from Nausharo, a Harappan site in Pakistani Baluchistan which was occupied 2800-2000 BC.

2003 Les parures de Mehrgarh: Perles et pendentifs du néolithique précéramique à la période pré-Indus – Fouilles 1974-1985. Éditions Recherche sur les Civilisations, Paris.

Discusses the beads and pendants from the Pre-Ceramic Neolithic site of Mehrgarh in Pakistan.

# Barthélmy de Saizieu, B. and A. Bouquillon

1994 Steatite Working at Mehrgarh During the Neolithic and Chalcolithic Periods: Quantitative Distribution, Characterization of Material and Manufacturing Processes. In South Asian Archaeology 1993, Volume I. Proceedings of the Twelfth International Conference of the European Association of South Asian Archaeologists, Helsinki University 5-9 July 1993, edited by A. Parpola and P. Koskikallio, pp. 47-59.

Stone beadmaking at Neolithic Mehrgarh, Pakistan.

2000 Faience Beads of the Third Millennium BC in the Indus. In Proceedings of the Fourteenth International Conference of the European Association of South Asian Archaeologists, Rome, 7-14 July 1997, edited by M. Taddei and G. De Marco, pp. 17-33. South Asian Archaeology 1997.
Pakistan and India.

# Barthélemy de Saizieu, B. and M. Casanova

1991 Semi-Precious Stones Working at Mundigak: Carnelian and Lapis Lazuli. *Proceedings of South Asian Archaeology* 11:17-30.

On the production of stone beads at a 5th-2nd-century site in Kandahar, Afghanistan.

#### Basa, Kishor K.

1990-1991 Beads and their Importance in Archaeology. *Man in Society* 5:94-102.

The Westerly Trade of Southeast Asia from c. 400 BC to AD 500 with Special Reference to Glass Beads. Ph.D. dissertation. University of London.

A comprehensive listing of early glass beads from India and Southeast Asia related to theories of early exchange systems.

- 1992 Early Glass Beads in India. South Asian Studies 8:91-104.
- Small is Useful: Importance of Bead Studies in South Asian Archaeology. *In Prehistory:* Archaeology of South Asia, edited by S. Settar and Ravi Korisettar, pp. 389-418. *Indian Archaeology in Retrospect* 1. Manohar, New Delhi.

Surveys bead research in South Asia prior to 1947, and then discusses such aspects of bead study as chronology, chronology, typology, technology, trade, and symbolic value.

Small Find, Immense Impact: Importance of Bead Studies. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 1-14. Indian Institute of Technology Gandhinagar.

Discusses the advances made in bead research over the years and stresses its importance in understanding past cultures.

# Bednarik, Robert G.

About Palaeolithic Ostrich Eggshell in India. *Bulletin of the Indo-Pacific Prehistory Association* 13:34-43.

A review is presented on the evidence for Late Pleistocene ostrich eggshell engraving and shaping in India. The engraved specimen from Patne, dated to c. 25,000 years ago, is considered authentic, as are some specimens of ostrich eggshell beads. All other examples of putative carving on ostrich eggshell from India are considered to be probably of natural origin.

The Role of Pleistocene Beads in Documenting Hominid Cognition. *Rock Art Research* 14:27-43. The Upper Palaeolithic of India has yielded three ostrich eggshell beads, two from Bhimbetka III A-28 and one from Patne.

# Begley, V. and R.D. De Puma

1991 Rome and India: The Ancient Sea Trade. University of Wisconsin Press, Madison.

See K.V. Raman's section on the bead trade of Tamil Nadu, India (pp. 131-133).

# Behera, Pradeep K. and Sakir Hussain

Early Historic Gemstone Bead Manufacturing Centre at Bhutiapali, the Middle Mahanadi Valley, Odisha. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 5:269 282.

Reports on the stone beads and production waste found at a site in east-central India attributed to the latter part of the 4th and 3rd centuries BC.

#### Bellina, Bérénice

Beads, Social Change and Interaction between India and South-East Asia. *Antiquity* 77(296):285-297

Agate and carnelian beads are used to examine early exchange between India and Southeast Asia.

# Bhan, Kuldeep K.

2017 Stone Bead Production through the Ages in Gujarat. In *Stone Beads of South and Southeast Asia:*Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo, pp. 255276. Indian Institute of Technology Gandhinagar.

An overview of the bead industry at a site in west-central India with stress on the Harappan period.

#### Bhan, Kuldeep K., Jonathan Mark Kenoyer, and Massimo Vidale

Living Tradition: Stone Bead Production in Khambhat – An Ethnoarchaeological Approach. In Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo, pp. 167-190. Indian Institute of Technology Gandhinagar.

Documents the existing traditional Khambhat stone-bead industry – the largest in the world – which is on the threshold of being transformed by modern technology and socio-economic change.

# Bisht, R.S.

Jewels and Jewellery in Early Indian Archaeology and Literature. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 15-40. Indian Institute of Technology Gandhinagar.

Relates the history of bead jewelry in India, emphasizing the Harappan Culture, using both literary and archaeological sources. The article also discusses the various stones and other materials utilized in bead production.

# Bopearachchi, O.

1999 Sites portuaires et emporia d l'ancien Sri Lanka: nouvelles données archéologiques. *Arts Asiatiques* 54:5-23.

Summary of five years research on trade ports on the south and west coast of Sri Lanka. *See* p. 16 and fig. 17 for beads of carnelian, lapis lazuli, amethyst, quartz, coral, glass, bone, and terra cotta from Ridiyagama and Giribawa amongst which glass dominates. Sodium, potassium, and mixed alkali glasses are all present.

# Bopearachchi, O. And R.M. Wickremesinhe

1999 Ruhuna, An Ancient Civilisation Re-visited: Numismatic and Archaeological Evidence on Inland and Maritime Trade. Raja, Nugegoda, Sri Lanka.

Discusses glass and stone beads from several sites in Sri Lanka and South India with a catalog of representative types.

# Bouquillon, A., B. Barthelemy de Saizieu, and A. Duval

1995 Glazed Steatite Beads from Mehrgarh and Nausharo (Pakistani Balochistan). In *Materials Issues* in *Art and Archaeology IV*, edited by P.B. Vandiver, J.R. Druzik, J.L.G. Madrid, I.C. Freestone, and G.S. Wheeler), pp. 527-538. Materials Research Society Symposium Proceedings 352.

Research reveals that the emergence of the first glazed beads goes back to the ancient Chalcolithic period (around 4000 BC) and that this use of glaze has undergone some changes during the following two millennia.

#### Boussac, Marie-Françoise and M. Shafiqul Alam

2001 Beads. In First Interim Report 1993-1999: France-Bangladesh Joint Venture Excavations at Mahasthangarh, edited by S. Alam and J.-F. Salles, pp. 427-476. DAM, Dhaka, Bangladesh. Excavations at the earliest urban center in Bengal, Bangladesh, yielded beads of glass and semi-precious stones.

# Boussac, Marie-Françoise and Jean-François Salles (eds.)

1995 Athens, Aden, Arikamedu: Essays on the Interrelations between India, Arabia, and the Eastern Mediterranean. Centre de Sciences Humaines, Manohar.

See index for beads, glass bead manufacturing, and glass objects.

#### Brunet, Olivier

Étude morpho-technologique préliminaire des éléments de parure de l'âge du bronze de Sapalli tépé et Dzharkutan (Ouzbékistan). In *L'archéologie française en Asie centrale: Nouvelles recherches et enjeux socioculturels*, edited by Julio Bendezu-Sarmiento, pp. 335-355. Cahiers d'Asie centrale 21/22.

Using a technological and morphological approach, this study attempts to determine the origin of the beads and pendants found at two Bronze Age sites in Uzbekistan: Sapalli tepe and Dzharkutan. Materials include stone (agate, carnelian, jasper, lapis-lazuli, turquoise), synthetics (faience, frit), and metal (gold, copper).

Les perles en pierre de la péninsule omanaise du Néolithique et de l'âge du Bronze : approche synthétique. Les Nouvelles de l'archéologie 139:12-17.

More than 100,000 stone beads (agate, carnelian, lapis lazuli, green softstone, etc.) recovered from a site in Oman occupied from the Neolithic to the Bronze Age are examined from a morphological, dimensional, and especially technological perspective.

# Campbell Cole, Barbie

Heirloom Beads of the Kachin and Naga. Beads: Journal of the Society of Bead Researchers 20:3-25

The heirloom beads, known respectively as *khaji* and *deo moni*, are orange Indo-Pacific beads of a type traded from southeast India (probably Karaikadu) between 200 BC and AD 200. They were found by the Kachin and Naga in ancient graves. The trade that brought these beads to the region operated on a considerable scale. Ivory and fragrant oils destined for the Mediterranean world were exchanged for Indo-Pacific beads, cowries, chank shells, and carnelian beads, ornaments still worn by the Kachin and Naga today. India, Burma.

Heirloom Blue-Glass Melon Beads of the Tani Tribes, Northeast India. *Beads: Journal of the Society of Bead Researchers* 24:7-25.

The Tani tribes wear various heirloom necklaces including those composed of highly distinctive melonshaped beads of wound turquoise-blue glass. These are unique to central Arunachal and were already of considerable age and very highly prized in the early 19th century. Their bubbly opaque blue glass and wound method of production suggest a Chinese origin.

# Carter, Alison Kyra, Barbie Campbell Cole, Quentin Lemasson, and Willemijn van Noord

Tracing the Trade of Heirloom Beads across Zomia: A Preliminary Analysis of Beads from the Upland Regions of Northeast India and Mainland Southeast Asia. In *The Archaeology of Portable Art: Southeast Asian, Pacific, and Australian Perspectives*, edited by Michelle Langley, Mirani Litster, Duncan Wright, and Sally K. May. Routledge, London.

# Chakraborty, Sharmi

1995-1996 Beads from Chandraketugarh. *Pratna Samiksha* 4/5:32-53.

A site of the Early Historic Period (500 BC-AD 300) in West Bengal, India, yielded a wide variety of beads of terra cotta, stone, bone, faience, glass, and metal.

Exploring the Pattern of Distribution of Beads of Early Historic Period of South Asia. *Pratna Samiksha* N.S. 2:15-29.

The bead assemblage was generally found to be quite homogenous throughout the study area with no strict regional patterning.

# Charpentier, Vincent, Olivier Brunet, Sophie Méry, and Christian Velde

2017 Carnelian, Agate, and Other Types of Chalcedony: The Prehistory of Jebel al-Ma'taradh and its Semi-Precious Stones, Emirate of Ra's al-Khaimah. Arabian Archaeology and Epigraphy 28:175-189.

A section of the article is devoted to a discussion of the carnelian and agate beads in the region and how they may relate to the lithic deposits at Jebel al-Ma'taradh.

# Chudjakov, Jurij S.

Hunnenzeitliche Tracht einer Nomadin aus dem Hochaltai. *Eurasia Antiqua* 3:581-594. A Hunnish woman's outfit includes chalcedony, glass, and coral beads of several shapes, probably imported from Central Asia or East Turkestan (p. 591, fig. 6).

# Coningham, R.A.E.

1990 Anuradhapura Citadel Archaeological Project: Preliminary Report of the First Season. *Ancient Ceylon* 9:23-48.

A large tell at the early historic capital Anuradhapura in Sri Lanka has produced artifacts from the Balangoda Mesolithic to the 13th century AD. Numerous beads of glass and various other materials have been found.

Anuradhapura Citadel Archaeological Project: Preliminary Report of the Second Season. *South Asian Studies* 7:167-175.

As for Coningham (1990).

# Dandwate, Pramod, Gurudas Shete, and Maya Patil

2014 Excavation at Shiur, an Early Historic Site: A Preliminary Report. *Bulletin of the Deccan College Post-Graduate and Research Institute* 72/73:285-296.

Excavations at Shiur in the Maharashtra state of India produced beads of glass, shell, and various stones, as well as areca-nut-shaped beads of terra cotta.

# Dangi, Vivek

2016 Miscellaneous Finds from Madina. In *Excavations at Madina District, Rohtak, Haryana*, edited by Manmohan Kumar, Akinori Uesugi, and Vivek Dangi, pp. 162-208. South Asian Archaeology Series 1; https://www.academia.edu/29363172/

Artifacts recovered from an ancient site in norther India include beads of terra-cotta and semi-precious stones.

#### Dehigama, Kanchana

2016 Bead Making in Southern Sri Lanka: Some Observations. *Narrations* 1(2):6-29. Summarizes what is known about the production of stone and glass beads in ancient Sri Lanka.

## Deo, S.B.

2000 Indian Beads: A Cultural and Technological Study. Deccan College Postgraduate and Research Institute, Pune, India.

Presents the results of Prof. Deo's extensive research on beads and pendants from archaeological sites and historical documents in India. See Kenoyer (2000-2001) for a review.

# Derevyanko, A.P. and D. Dorj

1999 Neolithic Tribes in Northern Parts of Central Asia. In *History of Civilizations of Central Asia.*Vol. I: The Dawn of Civilization: Earliest Times to 700 B.C., edited by A.H. Dani and V.M.

Masson, pp. 169-189. Motilal Banarsidass Publishers, Delhi.

Presents an overview of early cultures in Kazakhstan, southern Siberia, and Mongolia. Beads and pendants of shell, bone, perforated teeth, and ostrich eggshell from selected sites are discussed.

#### Deshpande-Mukherjee, Arati and Vasant Shinde

2014 Evaluating the Role of the Molluscan Shell Assemblage Recovered from Padri, A Coastal Harappan Settlement in Gujarat, India. In *Archaeomalacology: Shells in the Archaeological Record*, edited by Katherine Szabó, Catherine Dupont, Vesna Dimitrijević, Luis Gómez Gastélum, and Nathalie Serrand, pp. 19-32. BAR International Series 2666.

Beads of various shell species were found in Early Historic (1st century BCE to 1st century CE) and Harappan (3300 to 2000 BCE) contexts.

# Durani, F.A, I. Ali, and G. Erdosy

1994 The Beads of Rehman Dheri. Ancient Pakistan 10:15-81.

Describes the material from this important Early Harappan urban site in the Gomal Plain, northwestern Pakistan.

# Durante, Silvio

1979 Marine Shells from Balakot, Shahr-i-Sokhta and Tepe Yahy: Their Significance for Trade and Technology in Ancient Indo-Iran. In *South Asian Archaeology 1977, Vol. 1*, edited by M. Taddei, pp. 317-344.

Shell beads from sites in Iran and Pakistan: the species used, manufacturing methods, and trade routes.

# Francfort, H.-P.

1984 Fouilles d'Ai Khanoum, III: Le sanctuaire du temple à niches indentées, 2 - Les trouvailles.

Mémoires de la Délégation Archaeologique Française en Afghanistan 27. Diffusion de Baccard,
Paris.

Beads of various materials from a Hellenistic settlement reflect links with East and West.

#### Francis, M.P.D.L. and P.G.R Dharmaratne

An Unusual Gem Deposit (Man-Made) at Pallebedda, Sri Lanka. *Journal of Gemmology* 28(1):15-31.

A deposit of abandoned beads, intaglios, glass, coins, etc., in the *bund* (retaining bank) of a disused reservoir. Many objects are of precious and semi-precious stones, some abandoned partly made.

# Francis, Peter, Jr.

1986 Baba Ghor and the Ratanpur Rakshisha. *Journal of the Economic and Social History of the Orient* 29:198-205.

An exploration of the history and myth of the patron saint of the western Indian agate bead industry.

1986 Bead Report XVII: The Asian Bead Study Tour, Part 3: A Tale of Two Bead Making Cities. *Ornament* 9(3): 53-58.

Discusses the stone beadmaking industries at the ancient sites of Kotalingala and Arikamedu in South India.

Bead Report XVIII: The Asian Bead Study Tour, Part 4: A Little Tube of Glass. *Ornament* 10(1):54-57, 74-78.

On Indo-Pacific beads and their manufacture.

1986 Collar Beads: A New Typology and a New Perspective on Ancient Indian Beadmaking. *Bulletin, Deccan College Postgraduate and Research Institution* 45:117-121.

1986 Indian Antiquity. Lapidary Journal 39(12):45-55.

A comparison of the amethyst and citrine beadmaking processes in South India at Kotalingala (Andhra Pradesh) and Arikmedu (Pondicherry) over the last four centuries BC.

1986 Land of Beads. *Craft International* (April/May/June):22, 36. Summary of beadmaking of various materials in India.

1987 Bead Emporium: A Guide to the Beads from Arikamedu in the Pondicherry Museum. Pondicherry Museum Publication 2.

Southeastern India.

1988 The Beads of India. *Arts of Asia* 18(2):102-110.

A survey of beads made in India in both ancient and modern times.

1989 Mantai: Bead Crossroads of the Medieval World. Ornament 12(3):82-91.

Important Sri Lankan emporium site of the 1st millennium AD. Discusses its bead trade connections from Rome to China, and manufacturing techniques of "Indo-Pacific" and other local types of bead.

- Bead Making at Arikamedu and Beyond. *World Archaeology* 23(1):28-43. Glass and stone bead production at ancient Arikamedu, India, and associated sites.
- 1993 Common Intrigue. *Lapidary Journal* 47(3):41-44, 96, 98.

An account of Pumtek beads, their history and manufacture, including how to distinguish modern from ancient ones.

- 1994 Review of Glass, Glass Beads and Glassmakers in Northern India, by Jan Kock and Torben Sode (1995). Beads: Journal of the Society of Bead Researchers 6:87-88.
- Beads and Selected Small Finds from the 1989-92 Excavations. In *The Ancient Port of Arikamedu: New Excavations and Researches 1989-1992, Vol. 2*, edited by Vimala Begley. École française d'Extrême-Orient, Centre d'histoire et d'archéologie, Mémoires Archéologiques 22. Pondicherry.

India.

1996 Change as Constant. Ornament 20(2):80-81.

Describes the changes in conch bangle production, the modern bead industry of Gujarat, and the polishing methods used for stone beads in Khambat (Cambay), India.

1996 South Indian Stone. Ornament 20(1)78-79.

The stone beadmaking industry of South India from ca. 1000 BC to the beginning of the 20th century.

The Stone Bead Industry of Southern India. *Beads: Journal of the Society of Bead Researchers* 12-13:49-62.

Using ancient sources and more recent findings, Francis points out the importance of southern India as an area where stone beads were made, despite being overshadowed by the Cambay area.

- A book with a broad scope. In addition to the production, use, and provenance of beads involved in Asian maritime commerce, this book examines the importance of the bead trade for the economies of the countries involved and provides insights into the lives of its many participants: artisans, mariners, and merchants.
- Early Historic South India and the International Maritime Trade. *Man and Environment* 27(1):153-160.

Summarizes the role of South India in the international trade in precious and semiprecious gem stones from early times.

- 2004 Beads and Small Finds from the 1989-92 Excavations. In *The Ancient Port of Arikamedu: New Excavations and Researches 1989-1992*, edited by V. Begley, N. Karashima, K.V. Raman, S.E. Sidebotham, and E.L. Will, pp. 447-604. École Française d'Extrême Orient, Paris.
  South India.
- The Beads. In *Mantai: City by the Sea*, edited by John Carswell, Siran Deraniyagala, and Alan Graham, pp. 349-366. Linden Soft Verlag, Aichwald.

Presents a very useful and impressive catalog of the beads recovered from this important Sri Lankan emporium site of the 1st millennium AD. *See also* Hannibal-Deraniyagala 2013.

# Francis, Peter, Jr. and G.L. Badam

Molluscan Shell Beads from Inamgaon. In *Excavations at Inamgaon, Vol. I, Part II*, edited by M.K. Dhavalikar, H.D. Sankalia, and Z.D. Ansari, pp. 665-669. Deccan College, Poona. Shell bead sources and production at a Chalcolithic village in Maharashtra, western India.

# Frenez, Dennys, Michele Degli Esposti, Sophie Méry, and J.M. Kenoyer

2016 Bronze Age Salut (ST1) and the Indus Civilization: Recent Discoveries and New Insights on Regional Interaction. *Proceedings of the Seminar for Arabian Studies* 46:107-124.

Discusses large fragments of three, almost identical, long biconical Indus-style beads made from a deep red-orange carnelian with notes on the drilling technique and origins.

# Gadzhiev, Magomed G., Philip L. Kohl, David Stronach, Ana María Arnanz, and Arturo Morales Muñiz

1997 The 1995 Daghestan-American Velikent Expedition. Eurasia Antiqua 3:181-222.

Carnelian disc beads and tubular "paste" beads with a Caspian shell ornament were found in an Early Bronze Age (Kura-Araxes) burned building (p. 148, fig. 7). Daghestan, Russia.

# Gaur, A.S., Sundaresh, and Vardhan Patankar

2005 Ancient Shell Industry at Bet Dwarka Island. Current Science 89(6):941-946.

Beads were among the items produced at this site in northwestern India.  $^{14}$ C dates the material between  $3470 \pm 80$  (cal. 3830-3640) and  $1910 \pm 80$  (cal. 1950-1730) yrs BP.

#### Ghilzai, Shazia Akbar and Asma Kanwal

Semiotic Analysis of Evil Eye Beliefs among Pakistani Cultures and their Predetermined Behavior. *Research Issues in Social Sciences* 1:47-67.

Seeks to analyze the evil eye construct semiotically and its intricate relationship with fate and destiny within sociocultural value systems in Pakistan.

# Guillaume, O. and A. Rougeulle

1987 Fouilles d'Aï Khanoum, VII: Les petits objets. Mémoires de la Délégation Arch. Franç. en Afghanistan XXXI.

Describes 43 beads in glass, resin, bronze, and many kinds of stone from a Hellenistic city in northern Afghanistan (pp. 56-58, pl.18, XV).

# Gupta, S.P., Tejas Garge, Sonali Gupta, and Anuja Geetali

2004 Antiquities from Kamrej Excavations – 2003. *Journal of Indian Ocean Archaeology* 1:67-77. Located in Gujarat State, India, the site yielded beads in a variety of materials including stone, terra cotta, glass, copper, and arecanuts. Cowries were also found, as was refuse from the production of stone beads.

# Hanlon, Julie A.

The Gilund Antiquities. In *Excavations at Gilund: The Artifacts and Other Studies*, edited by Vasant Shinde, Teresa P. Raczek, and Gregory L. Possehl, pp. 89-156. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Occupied during the Chalcolithic and Early Historic periods, the ancient site of Gilund in the Mewar region of Rajasthan, India, yielded beads of terra cotta, shell, carnelian, and other semi-precious stones. Two bead polishers were also encountered.

# Hannibal-Deraniyagala, Anne S.

Beads from Tissamaharama: A Typology of Sri Lankan Glass and Semi-Precious Stone Beads. In Ancient Ruhuna: Sri Lankan-German Archaeological Project in the Southern Province, Vol. 1, edited by H.-J. Weisshaar, H. Roth, and W. Wijeyapala, pp. 203-226. Materialien Allgemeine und Vergleichende Archäologie 58.

Presents a summary of early glassmaking with descriptions of over 5,000 glass and 47 beads of rock crystal, amethyst, garnet, agate, and carnelian from Tissamaharama and the Akurugoda citadel site of an early historic Buddhist kingdom in southern Sri Lanka. Some beads made of shell and horn were also found.

- 2005 Beads from Anuradhapura and Tissamaharama, Sri Lanka: Trade Contacts in the Early Historic Period. *Journal of Indian Ocean Archaeology* 2:21-24.
- The Beads: Addendum 2. In Mantai: City by the Sea, edited by John Carswell, Siran Deraniyagala, and Alan Graham, pp. 370-373. Linden Soft Verlag, Aichwald.
   Provides more bead data for this 1st-millennium site in Sri Lanka. See also Francis 2013.

#### Haque, Enamul (ed.)

2001 Excavation at Wari-Bateshwar: A Preliminary Study. The International Center for Study of Bengal Art, Dhaka. Studies in Bengal Art Series 5.

Several articles mention beads of semi-precious stone and glass from this site in Bangladesh occupied from ca. 200 BC onward.

# Heit, Ilia

The Bead Workshop at Site MPS4, Mil Plain, Azerbaijan: Craft Specialization and the Manufacture of Shell Jewelry in the Neolithic. In *Beyond Ornamentation*. *Jewelry as an Aspect of Material Culture in the Ancient Near East*, edited by Amir Golani and Zuzanna Wygnańska, pp. 21-39. Polish Archaeology in the Mediterranean, Special Studies 23(2).

The archaeological remains indicate production of a distinct type of disc bead from one species of the genus *Didacna*. They also allow a closer look at manufacturing techniques and raise questions about craft specialization as well as the presence of a long tradition of shell jewelry in the Circumcaspian region.

# Herrmann, Georgina, K. Kurbansakhatov, and St John Simpson

The International Merv Project. Preliminary Report on the Sixth Season (1997). *Iran* 36:53-75. A small number of carnelian, unidentified green and white stone beads, and a blue glass bead were recovered from 4th-5th-centuries Sasanian occupation contexts in Turkmenistan. Extensive sieving has failed to significantly affect bead recovery rates.

# Hodjash, Svetlana

Ancient Egyptian Objects Discovered on the Territory of the USSR. In VI. Congresso Internazionale di Egittologia: Atti, Vol. 1, pp. 265-272. Turin.

Some beads are included in this useful survey of surprisingly far-flung discoveries in Russia. Extensive bibliography.

# Insoll, Timothy, David A. Polya, Kuldeep Bhan, Duncan Irving, and Kym Jarvis

2004 Towards an Understanding of the Carnelian Bead Trade from Western India to Sub-Saharan Africa: The Application of UV-LA-ICP-MS to Carnelian from Gujarat, India, and West Africa. *Journal of Archaeological Science* 31:1161-1173.

Outlines the results of chemical analysis and subsequent principal component analysis undertaken in an attempt to differentiate Gujarati and West African carnelian samples, and thus begins to allow inferences to be made regarding a possible trade in carnelian between these two regions primarily in the medieval period, based upon more objective data.

# Isakov, A.I. and T.M. Potemkina

1989 A Burial Ground of a Steppe Tribe of the Bronze Age in Tajikistan. *Sovietskaya Arkheologia* 1:145-167.

Beads, probably 13th-11th centuries BC (figs. 4, 5, 8). In Russian with English summary.

# Jahan, Shahnaj Husne

2010 Archaeology of Wari-Bateshwar. *Ancient Asia* 2:135-146. DOI: http://dx.doi.org/10.5334/aa.10210.

This site in Bangladesh was a production center for semi-precious stone beads as indicated by the recovery of a large quantity of core and waste materials such as stone blocks, flakes and chips, non-perforated, semi-perforated, and broken pieces of stone beads. The recovered beads are described briefly and include those of glass and terra cotta.

#### Jamal Hasan, S.

The Distribution and Types of Beads in the Gangetic Valley. *Puratattva: Bulletin of the Indian Archaeological Society* 11:131-140.

India.

# Jayakumar, P.

2001 Carnelian Beads from the Kodumanal Megaliths. In *Kaveri: Studies in Epigraphy Archaeology* and History (Professor Y. Subbarayalu Felicitation Volume), edited by S. Rajagopal. Panpattu Veliyiittakam, Chennai.

South India.

# Kanungo, Alok Kumar

1996-1997 Beads among the Juang of India. *Beads: Journal of the Society of Bead Researchers* 8-9:3-10.

Investigates traditional bead use among the Juang of Orissa State, going back 130 years, and examining the bead types and the changes in bead use.

2001-2002 Glass Beads in Indian Archaeology: An Ethnoarchaeological Approach. *Bulletin of the Deccan College* 60-61:337-53 (Diamond Jubilee Volume).

Presents an overview of the history of glass in India and its origins, including Indo-Pacific bead production. Also provides a description of present-day bead production at Panaidupet, and the Bondo people of Orissa as bead-users.

Bondo Beads: An Ethnoarchaeological Approach. *South Asian Studies* 18:121-128. The Bondo are a small isolated Austro-Asiatic linguistic group in Orissa, eastern India. Woven clothing is minimal but they wear abundant beads, mainly glass which are bought in weekly markets from itinerant traders. The beads themselves are for the most part made at Renigunta in Andhra Pradesh some 400 km to the south.

2004 Glass Beads in Ancient India: An Ethnoarchaeological Approach. British Archaeological Reports S1242.

Glassmaking and bead production were small-scale industries in India, originating some time in the 1st millennium BC. Although evidence from 212 ancient sites, 36 of which are claimed to be manufacturing sites, provides some insight into the context and date of the industry, issues concerning manufacturing methods, function, and symbolic value seem only to be accessible through ethnographic analogy. This study combines both archaeological and ethnographic data, as well as literary evidence, to create a history of the bead industry in India.

2004 Glass Beads in Ancient India and Furnace-Wound Beads at Purdalpur: An Ethnoarchaeological Approach. Asian Perspectives: Journal of Archaeology for Asia and the Pacific 43(1):123-150. An ancient and important technique of bead manufacture still used today is the "furnace-winding" tmethod. Beads produced by this technique have been found in large numbers at various archaeological sites. This paper discusses the details of beads and bead waste produced by the technique and the specific criteria of production.

2007 Impact of Social and Political Change on the Use of Beads among the Konyaks. In *International Bead & Beadwork Conference*, edited by Jamey D. Allen and Valerie Hector. Rezan Has Museum, Istanbul.

The Konyaks, one of the major Naga tribes in Nagaland, northeastern India, are one of the most complexly ornamented peoples in the world. Bead materials include glass, shell, stone, teeth and tusks, claws/horns, metal, bone, woods, seeds, hair, and fiber. Spacers are used such that all ornaments rest flat on the body. The spacer are predominantly made of bone, ivory, wood, bamboo, and recently also metal.

2009 Sacred Palm-Leaf Beads. *Beads: Journal of the Society of Bead Researchers* 21:55-60. Reprinted from *The Bead Forum* 37:9-15 (2000).

These beads each consist of 31 discoid, centrally punched palm leaflets, 29 of which are inscribed with Hindu religious texts. The author discusses four strings and one pendant composed of such beads, the texts found on them, their antiquity, the technique of making them, and their rosary-like function. India.

Ornaments of the Dead among the Nagas. In *Journal: Borneo International Beads Conference* 2011, edited by Heidi Munan and Freya Martin, pp. 75-104. Crafthub, Kuching, Sarawak, Malaysia.

Despite intense cultural pressures from Sanskritization and Westernization, customs associated with death are extremely slow to change because death carries high emotional value and is tied to deeply held

afterlife beliefs. The study of death rituals, burial practices, and grave goods may identify persisting ancient traditions that might help determine the origins of the Naga. India.

2013 Glass in Ancient India: Excavations at Kopia. Kerala Council for Historical Research, Triruvananthapuram.

Major report on the findings, including beads and pendants, at Kopia in Uttar Pradesh, a site that was occupied from the 8th century BC to the 4th century AD.

- 2014 Indian Glass Beads: Archaeology to Ethnography. Research India Press, New Delhi. An updated Indian printing of Glass Beads in Ancient India (Kanungo 2004).
- 2015 Mapping Indo-Pacific Beads vis-à-vis Papanaidupet. Aryan Books International, New Delhi. The only surviving traditional Indo-Pacific bead industry for at least the last two hundred year is at Papanaidupet, Andhra Pradesh, India. Having retained many traditional production methods, it has been crucial in answering many archaeological questions relating to glass in general and glass beads in particular.
- Transitions in the Stone Beadmaking at Khambhat: An Ethnohistorical Survey. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 191-222. Indian Institute of Technology Gandhinagar.

Reports on the changes that have occurred in the Khambat (Cambay) bead industry, with emphasis on the source of the raw material, technology, organization, and commerce.

#### Kanungo, Alok Kumar (ed.)

2017 Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections. Indian Institute of Technology Gandhinagar.

This is the most comprehensive book on stone beads. With contributions from 25 leading scholars, the book dwells on related matter from ancient as well as modern India and other regions of Asia. The individual papers are listed elsewhere in this bibliography. Reviewed by Karklins (2018).

# Kanungo, A.K. and V.N. Misra

2004 Excavations at Kopia: A Preliminary Report. Puratattva 34:116-126.

Kopia is a pre Indo-Roman contact glass manufacturing site in Uttar Pradesh, northern India. Relevant finds include 24 glass beads, tubes of Indo-Pacific glass, 2 glass collar beads, 1 millefiori bead, and 2 quartz, and 2 banded agate beads. Two crucibles and much glass waste, crucible fragments, and many lumps of glass all show that Kopia was a major glass-manufacturing site during the early historic Buddhist period.

# Kanungo, Alok Kumar, Virendra Nath Misra, and Vasant Shinde

Western Indian (Mewar) Chalcolithic Beads with Special Reference to Balathal. *Beads: Journal of the Society of Bead Researchers* 19:42-57.

Discusses the beads recovered from a number of Chalcolithic sites in western India, with emphasis on the oldest village in India: Balathal. Materials include various crystalline and cryptocrystalline stones, glass, faience, bone, ivory, shell, coral, terra cotta, and steatite; 3rd-2nd millennia BC.

# Karanth, R.V.

- 1988 Silica Bead Industry in Cambay, Gujarat State, India. *Journal of the Geological Society of India* 31:426-431.
- 1992 The Ancient Gem Industry in Cambay. *Man and Environment* 17(2):62-70. Discusses basic Cambay (India) stone beadmaking techniques with clear line drawings of the processes.

# Karklins, Karlis

2018 Review of Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo. Beads: Journal of the Society of Bead Researchers 30:80-82.

# Kelly, Gwendolyn O.

- 2007 Report on the Stone Beads, Debitage and Raw Materials from the 2007 and 2008 Excavation Seasons at Pattanam, Kerala. In *Interim Report of Pattanam Excavations 2007*, by P.J. Cherian, V. Selvakumar, and K.P. Shajan, pp. 1-28. Kerala Council for Historic Research, Trivandrum. Stone ornament production and trade in these objects were important aspects of economic life during the Early Historic period in South India (300 BCE-400 CE). This report focuses on the stone beads and bead blanks recovered from Pattanam. It appears that the local craftspeople focused on the production of carnelian and agate beads. To a lesser extent, they were also working locally available semi-precious stones such as quartz, citrine, and garnet.
- 2009 Craft Production and Technology During the Iron Age to Early Historic Transition at Kodumanal, Tamil Nadu. *Tamil Civilization* 23:1-14.

Among the various crafts practiced at Kodumanal (400 BCE-400 CE) in South India was stone beadmaking. Numerous spindle whorls represent textile production.

2013 Craft Specialization, Technology and Social Change: A Study of Material Culture in Iron Age and Early Historic South India (c. 1200 BCE - 400 CE). Ph.D. dissertation. University of Wisconsin, Madison.

An in-depth study of stone bead and ornament production and technology in South India.

Meaning in Context in the Iron Age: Beads and Ornaments in Megaliths, Ritual and Daily Life at Kadebakele, Karnataka (1200-300 BCE). In South Asian Archaeology and Art 2012, Vol. 1: Man and Environment in Prehistoric and Protohistoric South Asia: New Perspectives, edited by Vincent Lefèvre, Aurore Didier, and Benjamin Mutin, pp. 129-142. Indicopleustoi: Archaeologies of the Indian Ocean 12.

Argues that trade during the Iron Age in South India was not systematic, but rather opportunistic and adhoc, primarily down-the-line trade, without regular access to specific non-local resources, with the possible exception of carnelian and steatite.

Heterodoxy, Orthodoxy and Communities of Practice: Stone Bead and Ornament Production in Early Historic South India (c. 400 BCE-400 CE). *Archaeological Research in Asia* 6:30-50, doi:10.1016/j.ara.2016.03.001.

Argues that the South Indian producers of stone beads and ornaments should be considered as a single community of practice, not as distinct ethnic groups, as Francis (2002, 2004) suggested. The community

of practice in question, that of lapidary workers, was not homogeneous or rigidly bounded, but rather, was a community with members distributed across many sites in the region, connected by their shared practices and knowledge, and a heterodox acceptance of diverse ways of engaging in that practice.

#### Kenover, J. Mark

- 1984 Shell Working Industries of the Indus Civilization: A Summary. *Paléorient* 10(1):49-63. The production and use of marine shell objects during the Mature Indus Civilization (2500-1700 BC) are used as a framework within which to analyze developments in technology, regional variation, and the stratification of socio-economic systems.
- Ornament Styles of the Indus Valley Tradition: Evidence from Recent Excavations at Harappa, Pakistan. *Paleorient* 17:79-98.

On the materials, manufacture, mode of wearing, and social significance of beads from the Neolithic to the Harappan period. A major study, illustrated.

Shell Trade and Shell Working during the Neolithic and Early Chalcolithic at Mehrgarh,
Pakistan. In *Mehrgarh Field Reports 1975 to 1985, From Neolithic Times to the Indus*Civilization, edited by C. Jarrige, J.-F. Jarrige, R. H. Meadow, and G. Quivron, pp. 566-581.
Department of Culture and Tourism, Government of Sindh, and French Ministry of Foreign Affairs, Karachi.

Various forms of beads and pendants are discussed.

- 1996 Bead Replicas: An alternative to Antique Bead Collecting. *Ornament* 20(12):68-71. Describes how the increased demand for antique beads has led to the wholesale destruction of ancient sites and is now seriously threatening the archaeological record of past cultures. The author considers replicas will satisfy the demand for antique-looking beads and provide income for traditional, non-mechanized, craftsmen. Describes and shows replica stone beads from India.
- 1997 Trade and Technology of the Indus Valley: New Insights from Harappa, Pakistan. *World Archaeology* 29(7):262-280.

Extracts maximum information through the close study of beads from many angles (e.g., the perforations of long carnelian beads reveals drill types which may be evidence for Sumer-Indus links).

- 2000-2001 Review of Indian Beads: A Cultural and Technological Study, by S.B. Deo (2000).

  Beads: Journal of the Society of Bead Researchers 12-13:77-79.
- 2002 Review of Amulets and Pendants in Ancient Maharashtra, by Jyotsna Maurya (2000). Beads: Journal of the Society of Bead Researchers 14:77-78.
- 2003 Beads (pp. 54-55), Faience (p. 187), Bangles (pp. 51-52), Glass (pp. 251-252), Jewelry and Ornament (pp. 308-309), Material Culture (pp. 391-393), Metal and Metalworking (pp. 398-402), Pottery (pp. 481-483), Tiles and Tile making, Terra-Cotta (pp. 606-607). In South Asian Folklore: An Encyclopedia Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka, edited by Margaret A. Mills, Peter J. Claus, and Sarah Diamond. Routledge, New York.

2005 Bead Technologies at Harappa, 3300-1900 BC: A Comparative Summary. In *South Asian Archaeology 2001*, edited by C. Jarrige and V. Lefèvre, pp. 157-170. Éditions Recherche sur les Civilisations, Paris.

Presents an excellent overview of the different materials and technologies used to produce beads of various materials at Harappa, Pakistan. Stone, shell, terra cotta, faience, glass, metal, and seeds are covered.

- Stone Beads in Ancient South Asia 7000 to 600 BC. In *International Bead & Beadwork Conference*, edited by Jamey D. Allen and Valerie Hector. Rezan Has Museum, Istanbul.
   Focuses on the northwestern regions of the Indian subcontinent with special emphasis on the urban phase of the Indus Tradition. Basic technologies for the production of stone beads are presented with detailed discussions of shaping and drilling techniques. Pakistan.
- Indus and Mesopotamian Trade Networks: New Insights from Shell and Carnelian Artifacts. In Intercultural Relations between South and Southwest Asia. Studies in Commemoration of E.C.L. During Caspers (1934-1996), edited by E. Olijdam and R.H. Spoor, pp. 19-28. BAR International Series 1826.

Reviews some of the evidence for Indus internal and external trade and presents some new information based on comparative analysis of shell artifacts and beads from the Indus Valley and the Royal Cemetery at Ur.

Measuring the Harappan World: Insights into the Indus Order and Cosmology. In The Archaeology of Measurement: Comprehending Heaven, Earth and Time in Ancient Societies, edited by Iain Morley and Colin Renfrew, pp. 106-122. Cambridge University Press.
 Presents an overview of the types of artifacts that inform us about ancient Harappan measurement

systems, in order to gain insight into their concepts of order and cosmology. Beads of terra-cotta and stone are discussed. Pakistan.

- Eye Beads from the Indus Tradition: Technology, Style and Chronology. *Journal of Asian Civilizations* 36(2):1-23.
- 2017 History of Stone Beads and Drilling: South Asia. In *Stone Beads of South and Southeast Asia:*Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo, pp. 127-150. Indian Institute of Technology Gandhinagar.

Provides an excellent overview of stone beadmaking with emphasis on the drilling aspect.

2017 Stone Beads of the Indus Tradition: New Perspectives on Harappan Bead Typology, Technology and Documentation. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 151-166. Indian Institute of Technology Gandhinagar.

Presents a new approach to the identification, documentation, and interpretation of Harappan stone beads, and itemizes what information needs to be documented and how.

# Kenoyer, J.M. and K.K. Bhan

Sidis in the Agate Bead Industry of Western India. In *Sidis and Scholars*, edited by Amy Catlin-Jairazbhoy and Edward A. Alpers, pp. 42-61. Rainbow Publishers, Noida, India.

Discusses the role of African Indians in the stone beadmaking industry.

# Kenoyer, J.M., M. Vidale, and K.K. Bhan

1991 Contemporary Stone Beadmaking in Khambhat, India: Patterns of Craft Specialisation and Organisation of Production as Reflected in the Archaeological Record. *World Archaeology* 23(1):44-63.

Compares current beadmaking in Khambhat (Cambay) with Harappa, Pakistan, and other ancient sites.

1995 Carnelian Bead Production in Khambat, India: An Ethnoarchaeological Study. In *Living Traditions: Studies in the Ethnoarchaeology of South Asia*, edited by B. Allchin. Oxford and IBH. New Delhi.

# Kharakwal, J.S., Y.S. Rawat, T. Osada, L.C. Patel, Hansmukh Seth, Rajesh Meena, S. Meena, K.P. Singh, and A. Hussain

2011 Kanmer: A Multicultural Site in Kachchh, Gujarat, India. In Changing Perceptions of Japan in South Asia in the New Asian Era: The State of Japanese Studies in India and other SAARC Countries, edited by Takao Uno, pp. 355-376. International Research Center for Japanese Studies, Kyoto.

Provides a brief overview of the beads recovered from this site in western India.

# Khlopin, Igor N.

1997 Eneolithic Period of South-Western Turkmenistan. Russian Academy of Sciences, Institute of History and Material Culture, St. Petersburg.

Final report on the cemetery of Parkhai II in the Sumbar Valley. Copper, agate, calcite, carnelian, hematite, lapis lazuli, steatite, turquoise, "plaster" (gypsum?), mother-of-pearl, and bone beads are reported, many of which appear to have been worn as bracelets (pp. 135-136, 150, 162-163). Also drill fragments. Russian and English text.

## Kock, Jan and Torben Sode

1995 Glass, Glass Beads and Glassmakers in Northern India. THOT, Vanlose, Denmark. Presents a wealth of information on the modern glass bead and bangle industry of northern India. Numerous color photographs and b&w drawings. See Francis (1994) for a review.

# Koiso, Manabu, Hitoshi Endo, and Ayumu Konasukawa

2017 Stone Bead Users – Symbolic Value and Trade: The Nagas. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 223-232. Indian Institute of Technology Gandhinagar.

Provides ethnographic details about the beads and necklaces used by the Nagas of northeastern India.

# Konasukawa, Ayumu, Hitoshi Endo, and Akinori Uesugi

2011 Chapter 7. Minor Objects from the Settlement Area. In Excavations at Farmana: District Rohtak, Haryana, India, 2006-08, edited by V. Shinde, T. Osada, and M. Kumar, pp. 369-526. Indus Project, Research Institute for Humanity and Nature, Kyoto.

The site yielded a wide variety of beads but especially those of terra cotta and various types of stone. They are attributed to the Harappan and Historical periods. Includes information regarding the drilling technology used based on silicone casts of the perforations.

#### Law, Randall

The Art of the Harappan Microbead - Revisited. In Walking with the Unicorn: Social Organization and Material Culture in Ancient South Asia. Jonathan Mark Kenoyer Felicitation Volume, edited by Dennys Frenez, Gregg M. Jamison, Randall W. Law, Massimo Vidale, and Richard H. Meadow, pp. 327-342. Archaeopress, Summertown, Oxford, UK.

New observations of steatite microbeads from Zhekhada in northern Gujarat, India, strongly suggests that Harappan craftspeople made the beads by cutting, drilling, and grinding solid steatite rock rather than by forming them from a ground steatite paste as was previously thought.

# Ludvik, Geoffrey

2012 Stone Beads of Ancient Afghanistan: Stylistic and Technical Analysis. Field Notes: A Journal of Collegiate Anthropology 3(1):1-8.

This study addresses antique stone beads made of agate, carnelian, turquoise, jasper, and lapis lazuli, and focuses on stylistic and morphological features as well as manufacturing techniques, specifically the nature of drilling used to perforate the beads.

# Lukpanova, Ya.A.

2017 Реконструкция женского костюма из элитного погребения Таксай-1: взгляд археолога (Reconstruction of Female Costume From the Elite Burial Ground Taksay-I: A View of the Archaeologist). *Povolzhskaya Arkheologiya* 1(19):145-156.

Reconstructs the costume (dress, kaftan, and headdress) of a woman buried in an early Sarmatian burial ground in western Kazakhstan. Key decorative elements include small sewn-on metal badges, biconic metal beads, and pendant amulets of wolf fangs and teeth clad in gold. English abstract.

# Mahroof, M.M.M.

1995 The Story of the Sri Lankan Pearl. *Journal of Gemmology* 24(5):337-348. A history of pearl fishing in Sri Lanka and the associated pearl trade over the last 2,000 years, written from the Sri Lankan point of view.

# Manamendra-Arachchi, Kelum, Thusitha Mendis, K.H.S.R. Premarathne, and Anslem de Silva

2013 Discovery of a 4th Century AD Perforated Crocodile Tooth Ornaments from Sri Lanka. In Crocodiles: Proceedings of the World Crocodile Conference 22nd Working Meeting of the Species Survival Commission IUCN convened at Negombo, Sri Lanka, 21-23 May 2013, pp. 243-245. International Union for Conservation of Nature, Gland, Switzerland.

On the discovery of perforated crocodile tooth ornaments among 41 drilled tooth artifacts belonging to eight vertebrate species uncovered during archeological excavations at the Jethawanarama monastic site, Anuradhapura.

# Matarasso, P. and V. Roux

Le système techno-économique des perles de cornaline. Modélisation de systèmes complexes de production par l'analyse d'activités. In *Cornaline de L'Inde: Des pratiques techniques de Cambay aux technosystèmes de l'Indus*, edited by V. Roux, pp. 333-412. Éditions de la Maison des sciences de l'homme, Paris.

A quantitative model has been designed based on Cambay data to ascertain an indication of annual Harappan bead production and the number of workers involved, based on the number of beads found at different sites.

#### Matveyeva, N.P.

A Rare Case of an Hierarchical Arrangement of Burials in an Early Iron Age Burial Ground, Siberia. In *New Archaeological Discoveries in Asiatic Russia and Central Asia*, edited by A.G. Kozintsev et al., pp. 58-63. Russian Academy of Sciences, Institute of History of Material Culture. Archaeological Studies 16. St. Petersburg.

A western Siberian site of the Sargat Culture, 1st-3rd centuries AD, yielded cylindrical beads of "white and blue opal glass or jet, gilded truncated biconical ones, flat and composite," and a small green cylindrical (segmented?) type "imitating Egyptian faience."

# Maurya, Jyotsna

2000 Amulets and Pendants in Ancient Maharashtra. D.K. Printworld, New Delhi.

Examines the different types of ancient amulets and pendants excavated in Maharashtra in western India, the techniques used in making them, their parallels in literary and sculptural representations, and Buddhist influence on them. Giving insights into the sources of raw materials used in these charms, the author takes up in detail the trade relations of a specific site with other contemporary sites. A major focus is on the Mauryan (ca. 322-183 BC) and Satavahana (50 BC to AD 250) periods. See Kenoyer (2002) for a review.

2000 Distinctive Beads in Ancient India: Amulets, Pendants, Eye-Beads and Etched Beads from the Prehistoric to Medieval Periods in India. British Archaeological Reports S864.

Besides being used for decoration, distinctive beads also have religious, therapeutic, and superstitious reasons behind their use. Many of the beads under study have come from archaeological excavations.

#### Meadow, Richard H.

The Chronological and Cultural Significance of a Steatite Wig from Harappa. *Iranica Antiqua* 37:191-202.

Steatite beads with trefoil decoration figure in a discussion of the foreign objects rarely found in Harappan contexts; early 2nd millennium (pp. 197-199, fig. 4). Pakistan.

# Mei, J. and C. Shell

The Iron Age Cultures in Xinjiang and their Steppe Connections. In *Ancient Interactions: East and West in Eurasia*, edited by K. Boyle, C. Renfrew, and M. Levine, pp. 213-234. McDonald Institute for Archaeological Research, Cambridge.

Agate, glass, and etched carnelian beads figure in the cultural attribution of a late-1st-millennium tomb (p. 218, fig. 14.5). Mentions stone, bone, and carnelian beads from a site in the Eastern pamirs (p. 223) and a carnelian bead from a site in the northern foothills of the Tian Shan (p. 227, fig. 14.18).

# Miller, Heather M.-L.

Issues in the Determination of Ancient Value Systems: The Role of Talc (Steatite) and Faience in the Indus Civilization. In *Intercultural Relations Between South and Southwest Asia*, edited by Eric Olijdam and Richard H. Spoor, pp. 145-157. BAR International Series S1826.

Concentrates on beads of the 3rd millenium BC. Pakistan.

# Minyaev, S.S.

The Hsiung-Nu: New Discoveries in Archaeology and Art. In New Archaeological Discoveries in Asiatic Russia and Central Asia, edited by A.G. Kozintsev et al., pp. 64-66. Russian Academy of Sciences, Institute of History of Material Culture. Archaeological Studies 16. St. Petersburg.

Glass and stone beads are mentioned among grave goods of pastoral tribes in Siberia, 3rd century BC onwards, which cast light on the Huns. The archaeological evidence so far does not agree with Chinese written sources.

#### Mohanty, Rabindra Kumar

- 1999 Significance of a Bead Manufacturing Centre at Mahurjhari, District Nagpur, Maharashtra, India. *Man and Environment* (24):79-89.
- 2008 Mahurjhari: A Bead Manufacturing Centre in Central India. In *Archaeology of Early Historic South Asia*, edited by Gautam Sengupta and Sharmi Chakraborty. Pragati Publication & Centre for Archaeological Studies and Training, New Delhi.
- Antiquity of Semi-precious Stone Beads from Deccan. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 317-346. Indian Institute of Technology, Gandhinagar.

Covers the period from the earliest beadmakers to the Early Historic Period and the study area encompasses most of central and southern India.

# Mohanty, R.K. and Tilok Thakuria

2016 Indian Beads: History and Technology. Pentagon Press, New Delhi.

Provides a detailed account of non-glass bead manufacture and trade in India from the upper paleolithic to early history. Includes information about manufacturing techniques, raw materials, and manufacturing centers in ancient India, as well as traditional bead manufacturing at Khambat, Gujarat.

# Moulherat, Christophe, Margareta Tengberg, Jérôme-F. Haquet, and Benoît Mille

First Evidence of Cotton at Neolithic Mehrgarh, Pakistan: Analysis of Mineralized Fibres from a Copper Bead. *Journal of Archaeological Science* 29(12):1393-1401.

Analysis of a copper bead from a Neolithic burial (6th millennium BC) at Mehrgarh allowed the recovery of several threads, preserved by mineralization. They were characterized according to new procedure, combining the use of a reflected-light microscope and a scanning electron microscope, and identified as cotton (*Gossypium* sp.). The Mehrgarh fibers constitute the earliest known example of cotton in the Old World and put the date of the first use of this textile plant back by more than a millennium.

#### Nath, Amarendra

2014 Excavations at Rakhigarhi [1997-98 to 1999-2000]. Archaeological Survey of India, New Delhi. Thorough analysis of the recovered beads of stone, faience, bone, shell, metal, and terra cotta. Also includes a lengthy discussion of the Harappan stone bead industry.

#### Niharika

1993 A Study of Stone Bead from Ancient India. Bharatiya Kala Prakashan Prasad, New Delhi.

# Paech, Hans-Jürgen

1993 Beads. In Excavations at Sonkh: 2500 Years of a Town in Mathura District, by Herbert Härtel, pp. 298-302. Monographien zur indischen Archäologie, Kunst und Philologie 9.

Beads from an important ancient site in northern India.

# Parmar, Narender

2009 Recent Explorations in the Bhiwani Block, District Bhiwani (Haryana). Bulletin of the Deccan College Post-Graduate and Research Institute 68/69:95-112.

A village-to-village survey in the Bhiwani district of India located 66 sites, placing 40 of them on the archaeological map of India for the first time. The sites range in date from the early Harappan through the medieval period. Steatite, faience, and terra cotta beads were recovered.

# Peyronel, L.

2000 Sigilli harappani e dilmunite. Vicino Oriente 12:175-240.

Some remarks on Harappan etched carnelian and segmented faience beads (pp. 209f.), Pakistan.

#### Pongpanich, Bunchar

Ancient Stone Beads of Southeast Asia and Indian Connection. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 373-388. Indian Institute of Technology Gandhinagar.

Briefly surveys beads recovered from sites in Southeast Asia, primarily in Thailand, and discusses the bead trade with India.

# Prabhakar, V.N.

India.

2017 Documentation and Analysis of Stone Drills from Dholavira. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 293-316. Indian Institute of Technology Gandhinagar.

Reports on the microscopic and statistical analysis of the large number of Ernestite drills recovered from the Harappan site of Dholavira in Gujarat, India. This has led to a better understanding of the different drill types and sub-types, and their attributes.

Decorated Carnelian Beads from the Indus Civilization Site of Dholavira (Great Rann of Kachchha, Gujarat. In Walking with the Unicorn: Social Organization and Material Culture in Ancient South Asia. Jonathan Mark Kenoyer Felicitation Volume, edited by Dennys Frenez, Gregg M. Jamison, Randall W. Law, Massimo Vidale, and Richard H. Meadow, pp. 475-485. Archaeopress, Summertown, Oxford, UK.

# Prabhakar, V.N., R.S. Bisht, R.W. Law, and J.M. Kenoyer

2012 Stone Drill Bits from Dholavira – A Multi-faceted Analysis. *Man and Environment* XXXVII(1): 8-25.

Analyzes a large collection of Ernestite drill bits associated with the beadmaking industry at Dholavira, a site of the Harappan Culture in Gujarat, India.

# Prasad, Ravi, V.N. Prabhakar, and Vikrant Jain

2017 Geological Aspects of Raw Materials for Stone Beads. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 115-126. Indian Institute of Technology Gandhinagar.

Aims to assess the geological and chemical properties of the various types of stone used to manufacture beads at Dholavira, a Harappan Culture site in Gujarat state, India, with an eye to determining their origins. It also delves into how the different stones are affected by physical and chemical weathering.

# Rahman, Shah Sufi Mostafizur

1997 The Semi-Precious Stone Beads from Mahasthangarh: A Preliminary Study. *Journal of Bengal Art* 2.

Discusses stone beads recovered from one of the earliest urban archaeological sites so far discovered in Bangladesh.

1999 Recent Discovery of Glass Beads from Mahasthangarh: An Archaeological Perspective. *Journal of Bengal Art* 4:67-76.

On the glass beads excavated at an early urban site in Bangladesh.

2001 Glass Beads from Wari-Bateshwar, Bangladesh: A Preliminary Archaeological Analysis. *Journal of Bengal Art* 6:201-209.

The beads date to the period from the 3rd century BC to the 3rd century AD. Discusses the role the site may have played in the long-distance maritime trade.

# Rajagopalan, Ashvin and Darshini Sundar

2015 Tamilakkam: A Multi-Cultural Centre for Bead Trade. In *Journal: Borneo International Beads Conference 2015*, edited by Heidi Munan and Anita MacGillivray. Crafthub, Kuching, Sarawak, Malaysia.

Outlines a study that aims to understand the bead trade in Tamil Nadu, India, from 400 BCE to the present day.

# Rajan, K.

South Indian Stones Beads: Archaeological, Textual and Ethnographic Approach to Traditional Gemstone Industry. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 347-366. Indian Institute of Technology Gandhinagar.

Utilizes information gathered from present-day gem cutters in Kangayam, central India, to better understand the technology used to produce beads recovered from excavations at nearby Early-Historic Kodumanal.

# Ratnagar, Shereen

2008 Materials Used in the Bronze Age. In *Intercultural Relations between South and Southwest Asia.* Studies in Commemoration of E.C.L. During Caspers (1934-1996), edited by E. Olijdam and R.H. Spoor, pp. 56-60. BAR International Series 1826.

Discusses possible Indian sources (pp. 57-58) of the carnelian used in the production of long beads and etched varieties by Harappan artisans.

# Ray, Sikhasree, Tilok Thakuria, and Santanu Vaidya

2014 Early Historic Beads from Recent Excavations in Odisha. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 2:802-809.

Focuses on the beads found in excavations at two major sites in Odisha, India: Sisupalgarh and Manikpatna. Materials include semiprecious stones, terracotta, glass, and organic.

#### Rossi-Osmida, Gabriele (ed.)

2002 Margiana Gonur-depe Necropolis: 10 years of Excavations by Ligabue Study and Research Centre. Edizioni Il Punto, Vicenza.

A Bronze Age necropolis in Turkmenistan with some bead-rich burials.

# Roux, Valentine (ed.)

2000 Cornaline de l'Inde: Des pratiques techniques de Cambay aux techno-systèmes de l'Indus. Éditions de la Maison des sciences de l'homme, Paris.

Contains nine articles on various aspects of beadmaking technology in the Indus Valley of India and Pakistan, as well as related topics. The articles are listed individually in the respective sections of this bibliography.

# Roux, V., B. Bril, and G. Dietrich

1995 Skills and Learning Difficulties Involved in Stone Knapping: The Case of Stone-Bead Knapping in Khambat, India. *World Archaeology* 27(1):63-87.

Skills involved in knapping Harappan long carnelian beads are studied based on present-day bead knapping in Khambhat in order to assess their value as well as the knappers' socio-economic status.

# Roux, Valentine and Pierre Matarasso

1999 Les perles de cornaline harrapéennes: données ethno-archéologiques. In *Cornaline et pierres* précieuses: la Méditerranée de l'Antiquité à l'Islam, edited by Annie Caubet, pp. 139-173. Musée du Louvre Editions, Paris.

Presents ethno-archaeological data on Harappan carnelian beads in Pakistan and India.

2000 Les perles en cornaline harappéennes: Pratiques techniques et techno-système. In *Cornaline de l'inde: Des pratiques techniques de Cambay aux techno-systèmes de l'Indus*, edited by Valentine Roux, pp. 417-438. Éditions de la Maison des sciences de l'homme, Paris. http://books.openedition.org/editionsmsh/8734?lang=fr

Aims to characterize the organization of the Harappan carnelian beadmakers in order to examine the relationship between artisans and elite, and the destination of beads.

# Roux, V, and J. Pelegrin

1988-1989 Knapping Techniques and Craft Specialisation: An Ethnoarchaeological Investigation in Gujarat. *Puratattva* 19:50-59.

Preliminary results of a detailed study of Cambay beadmakers and their relative level of competence as may be expressed in archaeological contexts. India.

# Ruikar, Tejal N., Prabodh Shirvalkar, Y.S. Rawat, and Satish Naik

A Preliminary Study of the Beads from Harappan Site of Kotada Bhadli, Kachchh, Gujarat. Heritage: Journal of Multidisciplinary Studies in Archaeology 1:486-499.

This paper is intended to provide an insight into the economic condition of the people at a rural Harappan site in India based on the study of the beads. Materials include various stones, terra cotta, bone, shell, and faience.

#### Salvatori, S., M. Vidale, G. Guida, and E. Masioli

2009 Ilgynly-Depe (Turkmenistan) and the 4th Millennium BC Metallurgy of Central Asia. *Paléorient* 35(1):47-67.

Surface finds include a number of copper beads as well as a silver example. Their production and composition are discussed.

#### Sarianidi, Viktor

1985 L'or de la Bactriane: fouilles de la nécropole de Tillia-Tépé en Afghanistan septentrional. Éditions d'art Aurora, Leningrad.

Sumptuously illustrated volume of treasures from a Bactrian cemetery in Afghanisatn, including fine decorated gold beads and beads made from various stones.

1986 Die Kunst des alten Afghanistan. Seemann, Leipzig.

Mentions flat plaster beads, 3rd millennium (pp. 161f., fig. 54); bicones with dot-in-circle decoration, 2nd millennium (fig. 55); gold with enamel, 1st century AD (fig. 169).

1990 The Golden Hoard of Bactria. *National Geographic* 177(3):50-75 (March).

Graves at the Graeco-Bactrian site of Tillya Tepe, Afghanistan, yielded sumptuous gold jewelry including faceted and granulated gold beads.

1993 Reperti inediti da tombe battriane depredate. Mesopotamia 28:5-20.

Beads of many types and interesting shapes contribute to a picture of a high and distinctive culture in northern Afghanistan during the Bronze Age (2nd millennium). Some beads are hard to date and may be later (pp. 9-16, figs. 9-16).

#### Sedov, A.V.

1987 Kobadian: na Poroge Rannego Srednevekoviya (Kobadian: Facing the Dark Ages). Academy of Sciences of Tadjik S.S.R., Moscow.

Stone, bone, shell, coral, and glass paste beads of various shapes are illustrated; 4th-5th centuries AD. In Tadjikstan. In Russian with brief English summary.

# Selvakumar, V.

2017 Beads and Ornaments in Early Tamizh Texts. In *Stone Beads of South and Southeast Asia:*Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo, pp. 41-48.
Indian Institute of Technology Gandhinagar.

Presents excerpts from early Tamil texts that mention beads and other ornaments; southern India.

2017 Ratnattin Tiruvābharanangal (Sacred Gemstone Ornaments) in the Inscriptions of Brihatīswarā Temple, Tañcāvūr. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 49-114. Indian Institute of Technology Gandhinagar.

Provides a detailed statistical report on the ornaments donated to the various deities as recorded in ancient temple engravings in southern India.

#### Sharma, D.V., V.N. Prabhakar, R. Tewari, and R.K. Srivastava

1999-2000 Harappan Jewellery Hoard from Mandi, Puratattva. *Bulletin of the Indian Archaeological Society* 30:36-41.

10 kg of mainly gold and silver jewelry were recovered from a looted hoard at Mandi, northern India. Two periods are represented at the site: Harappan (ca. 2000 BC) and Kushan (from AD 100). The hoard is thought to be Harappan. There are beads of gold, banded agate, onyx, copper, and many etched beads with trefoil and eye designs.

# Shinde, Vasant, Shreekant Jadhav, Prabodh Shirvalkar, Amol Kulkarni, Abhijit Dandekar, Shrikant Ganvir, P.P. Joglekar, Girish Mandke, Arati Deshpande-Mukherjee, Sushama G. Deo, S.N. Rajaguru, M.D. Kajale, and Satish Naik

A Report on the Recent Archaeological Investigations at Junnar, Maharashtra (2005-2007).

Bulletin of the Deccan College Post-Graduate and Research Institute 66-67:113-134.

Excavations in the Junnar region of India yielded beads of semi-precious stone, faience, glass, gold, and terra cotta, along with rings, bracelets, and other ornaments.

# Simons, Angela

1996 Das Kollektivgrab Mebrak 63 im Mustang-Distrikt, Nepal. *Eurasia Antiqua* 2:383-395. A 4th-century-BC grave with 30 or more partly mummified individuals. Necklaces of seeds, shell discs, carnelian, and also glass of several colors are present. Some bead types are among the indicators of contact with Central Asian steppe cultures (p. 390).

# Simons, Angela, Werner Schön, and Sukra Sagar Shresta

The Prehistoric Settlement of Mustang: First Results of the 1993 Archaeological Investigations in Cave Systems and Connected Ruined Sites. *Ancient Nepal* 137:93-129; https://www.academia.edu/13408003/

Burials in Chokhopani South Face localities were accompanied by small glass beads and tubes of brass and copper that either comprised necklaces or were braided onto garments. They date to the Licchavi or early Malla period.

Archaeological Research in Mustang: Report on the Field Work of the Years 1994 and 1995 Done by the Cologne University Team. *Ancient Nepal* 140:65-77.

Necklaces composed of glass, carnelian, shell, and seeds accompanied the individuals in Mebrak Collective Burial 63. Radiocarbon dating places the burials between 400 calBC-50 calAD.

#### Simpson, St John

Glass and Small Finds from Sasanian Contexts at the Ancient City-Site of Merv. In Central Asia from the Achaemenids to the Timurids: Archaeology, History, Ethnology, Culture. Materials of an International Scientific Conference Dedicated to the Centenary of Aleksandr Markovich Belenitsky, St. Petersburg, November 2-5, 2004, edited by V.P. Nikonorov, pp. 232-238. Institute of the History of Material Culture of the Russian Academy of Sciences and State Hermitage, St. Petersburg.

Discusses the possible reasons for the survival and non-survival of several categories of small finds, including beads, at multi-period urban sites in Turkmenistan.

# Singh, R.N.

1988 The Technology of Glass Beads and Rings in Raihat. *Sovietskaya Arkheologia* 3:251f. The site is in the Benares (Varanasi) region of India, ca. 400-200 BC. In Russian.

#### Smagulov, E.A.

1996 Finds of Sasanian Gems in the Otrar Oasis. Ancient Civilizations from Scythia to Siberia: An International Journal of Comparative Studies in History and Archaeology 3(2-3):253-259. A woman's burial in southern Kazakhstan included beads of carnelian, coral, glass, and amber, and bracelets of large amber beads, all described in some detail but not illustrated. Some perhaps came from Iran by trade or as booty.

#### Sode, Torben

Purdalpur, a Glass Bead-Making Village in Northern India. In *Glass Beads: Cultural History, Technology, Experiment and Analogy,* edited by M. Rasmussen, U.L. Hansen, and U. Näsman, pp. 103-108. Historical-Archaeological Experimental Center, Studies in Technology and Culture 2.

# Somadeva, Raj

2006 Urban Origins in Southern Sri Lanka. Studies in Global Archaeology 5.

Beads of clay, stone, bone, shell, metal, and glass were recovered from several sites occupied during the 1st millennium BCE and the 1st millennium CE.

#### Stern, E. Marianne

1987 The Secret of Papanaidupet. *Glastechnische Berichte* 60(10):346-351. On drawn beadmaking at Papanaidupet, India.

# Strickland, Keir Magalie

2011 The Jungle Tide: "Collapse" in Early Mediaeval Sri Lanka. Ph.D. dissertation. Department of Archaeology, Durham University. Durham E-Theses Online: <a href="http://etheses.dur.ac.uk/893/">http://etheses.dur.ac.uk/893/</a> Discusses the stone and glass beads recovered from Anuradhapura, Sri Lanka's first capital. The beads date from around the 4th century AD to the 11th century.

# Tanabe, K., A. Hori et al.

1997 Excavation at Dalverzin Tepe, 1996. *Bulletin of the Ancient Orient Museum* 17:101-122. Finds from the 6th-8th-centuries levels of the citadel in southern Uzbekistan include a single spherical etched carnelian bead and a small number of other beads (p. 114). In Japanese.

# Thakuria, Tilok

- The Society and Economy During Early Iron Age and Early Historic Period in Deccan with Special Reference to Beads (1000 BC to 500 AD). Ph.D. dissertation. Deccan College Post Graduate and Research Institute, Pune, India.
- Etched Beads and Etched Beads of Early Iron Age and Early Historic Period of Maharashtra, India. In *Asian Art and Culture: Research Volume in Honor of Ananada Kumaraswam*, edited by A. Manatunge, pp. 257-267. Center for Asian Studies, University of Kelaniya, Sri Lanka.

#### Thakuria, T. and R.K. Mohanty

A Stone Bead Manufacturing Centre in Peninsular India: Preliminary Study of Manufacturing Debitage from Trench F of Mahurjhari Excavations, Maharashtra. *Tamil Civilization* 23:15-38.

#### Tissot, Francine

1999 Jewellery in Gandharan Art: Images and Reality. In *Coins, Art, and Chronology: Essays on the Pre-Islamic History of the Indo-Iranian Borderlands,* edited by M. Alram and D. Klimburg-Salter, pp. 399-412. Österreichische Akademie der Wissenschaften, Vienna.

A succinct yet rare attempt to link jewelry depicted in detail on Gandharan sculpture with excavated pieces, notably from contemporary sites in Uzbekistan and the Russian steppe. Pakistan, Afghanistan.

#### Uesugi, Akinori, Manmohan Kumar, and Vivek Dangi

Indus Stone Beads in the Ghaggar Plain with a Focus on the Evidence from Farmana and Mitathal. In Walking with the Unicorn: Social Organization and Material Culture in Ancient South Asia. Jonathan Mark Kenoyer Felicitation Volume, edited by Dennys Frenez, Gregg M. Jamison, Randall W. Law, Massimo Vidale, and Richard H. Meadow, pp. 568-591. Archaeopress, Summertown, Oxford, UK.

Presents a thorough analysis of the stone beads recovered from two Urban Indus sites in northern India, including a reconstruction of the bead production process.

# Uesugi, Akinori, Izumi Nakai, Manmohan Kumar, Kyoko Yamahana, Yoshinari Abe, Junko Shirataki, Kanae Toyama, and Vivek Dangi

A Study on Faience Objects in the Ghaggar Plains during the Urban and Post Urban Indus Periods. Heritage: Journal of Multidisciplinary Studies in Archaeology 5:140-164.

While no clear-cut variation was observed, the results of morphological and compositional studies reveal homogenous features in the styles and production of faience objects (including beads of several forms) that characterize the Urban and Post Urban Indus periods in the Ghaggar Valley of India.

# Uesugi, Akinori and Wannaporn Kay Rienjang

2018 Stone Beads from Stupa Relic Deposits at the Dharmarajika Buddhist Complex, Taxila. Gandhāran Studies 11:53-83.

Silicone casts made of the perforations of stone beads recovered from an early 1st millennium site in northern Pakistan provide information concerning the various drilling techniques used.

#### Urazova, Dinara

2014 2,000 Year Old Burials Discovered in South Kazakhstan. Archaeology News Network, http://archaeologynewsnetwork.blogspot.com.au/2014/07/2000-year-old-burials-discovered-in.html#.VGlBtDTF\_To, accessed 24 November 2014.

Illustrates some of the stone beads found with the burial of a Sarmatian woman.

# Vaidya, Shantanu and R.K. Mohanty

2015 Antiquity of Bead Manufacturing at Mahurjhari and its Relevance in Early Iron Age Megalithic Culture of Vidarbha. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 3:400-409. Discusses the evidence for a small-scale beadmaking industry at a megalithic site in central India that utilized chalcedony, jasper, agate and carnelian as a raw material.

#### Vanzetti, A. and M. Vidale

1994 Formation Processes of Beads: Defining Different Levels of Craft Skill among the Early Beadmakers of Mehrgarh. In South Asian Archaeology 1993, Volume II. Proceedings of the Twelfth International Conference of the European Association of South Asian Archaeologists, Helsinki University 5-9 July 1993, edited by A. Parpola and P. Koskikallio, pp. 763-776. Suomalainen Tiedeakatemia, Helsinki.

Stone beadmaking at Neolithic Mehrgarh, Pakistan.

#### Vidale, Masimo

1989 A Steatite-Cutting Atelier on the Surface of Moenjodaro. *Annali dell'Istituto Universitario Orientale di Napoli* 49(1):29-51.

Reconstructs steatite beadmaking at the ancient Harappan site of Mohenjo Daro, Pakistan.

- Early Harappan Steatite, Faience and Paste Beads in a Necklace from Mehrgarh-Nausharo (Pakistan). East and West n.s. 39(1-4):291-300.
- 1989 Specialized Producers and Urban Elites: On the Role of Craft Industries in Mature Harappan Urban Centres. In *Old Problems and New Perspectives in the Archaeology of South Asia*, edited by J.M. Kenoyer, pp. 171-181. University of Wisconsin, Madison.

Carnelian beadmaking may have been segregated to control the production of status items. Pakistan.

#### Vidale, M., J.M. Kenoyer, and K.K. Bhan

Ethnoarchaeological Excavations of the Bead Making Workshops of Khambhat: A View from Beneath the Floors. In *South Asian Archaeology*, 1991, edited by A.J. Gail and G.J. Mevissen, pp. 273-288. G.J.R. Verlag, Stuttgart.

On contemporary stone (agate) beadmaking at Khambhat (Cambay), India.

# Vidale, Massimo, Maurizio Mariottini, Giancarlo Sidoti, and Muhammad Zahir

2017 Early Evidence of Beadmaking at Mehrgarh, Pakistan: A Tribute to the Scientific Curiosity of Catherine and Jean-François Jarrige. In *Stone Beads of South and Southeast Asia: Archaeology, Ethnography and Global Connections*, edited by Alok Kumar Kanungo, pp. 233-254. Indian Institute of Technology Gandhinagar.

Deals with the archaeological material recovered from a Chalcolihic craft center. The emphasis is on lapis lazuli and chert drill heads.

# Vidale, M. and Heather M.-L. Miller

On the Development of Indus Technical Virtuosity and its Relation to Social Structure. In South Asian Archaeology 1997, Volume I. Proceedings of the Fourteenth International Conference of the European Association of South Asian Archaeologists, Rome, 7-14 July, 1997, edited by Maurizio Taddei and Giuseppe De Marco, pp. 115-132. Istituto Italiano per l'Africa e l'Oriente, Rome.

"Indus technical virtuosity" refers to the distinctive Indus characteristic of inventing and diffusing complex techniques for the production of small, elegant objects such as beads. It is argued that such virtuosity had important implications for the social patterning of Indus period and later communities. The relationship between societal patterning and the types of objects valued over time, particularly rare exotic

materials vs. technologically complex materials, is also examined, both for the Indus case and as a general cross-cultural model.

# Vikrama, Bhuvan

2017 Early Historic Stone Beads from Ahichhatra. In *Stone Beads of South and Southeast Asia:*Archaeology, Ethnography and Global Connections, edited by Alok Kumar Kanungo, pp. 367-372. Indian Institute of Technology Gandhinagar.

Concentrates on the beads recovered from the Painted Grey Ware levels at a site in northern India.

# Vinogradova, N.M. and G. Lombardo

Farming Sites of the Late Bronze and Early Iron Ages in Southern Tajikistan. *East and West* 52:71-125.

A detailed synthesis, with C14 dated chronology, of this region of ancient Bactria during the late 2nd millennium BC. Among the finds from cemeteries are beads of lapis lazuli, carnelian, and paste.

# Wagner, Mayke and Hermann Parzinger

Bemerkungen zur inneren Gliederung der spätbronzezeitlichen Kultur Oberes Xiajiadian und deren Bedeutung für die südsibirische Kulturentwicklung. *Eurasia Antiqua* 4:37-72.

Late Bronze Age site in Chinese Central Asia: bone, stone, and turquoise beads.

# Yablonsky, Leonid T.

The Material Culture of the Saka and Historical Reconstruction. In *Nomads of the Eurasian Steppes in the Early Iron Age*, edited by Jeannine Davis-Kimball, Vladimir A. Bashilov, and Leonid T. Yablonsky, pp. 201-240. Zlnat Press, Berkeley.

Beads and other adornments of a variety of materials are included in the discussion. Kazakhstan, Uzbekistan, and Turkmenistan.

#### Yam, Sheung Cheong

2007 The Mystery of Dzi, Book 1 and Book 2.