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.

Rabindra Kumar Mohanty's paper on "Antiquity of Semi-precious Stone Beads from Deccan" covers the period from the earliest beadmakers to the Early Historic Period and encompasses most of central and southern India. In "South Indian Stones Beads: Archaeological, Textual and Ethnographic Approach to Traditional Gemstone Industry," K. Rajan uses 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.

"Early Historic Stone Beads from Ahichhatra," by Bhuvan Vikrama, concentrates on the beads recovered from the Painted Grey Ware levels at this site in northern India, while "Ancient Stone Beads of Southeast Asia and Indian Connection," by Bunchar Pongpanich, briefly surveys beads recovered primarily from Thailand and discusses the bead trade with India.

The final section - Beads: Scientific Studies - contains three articles. "Scientific Analyses and Stone Beads," by Laure Dussubieux and Mark Golitko, explains the different analytical methods used to determine the chemical composition of stone beads, using lapis lazuli from sites around the world as a case study. In "Non-Destructive Identification and Characterization of Ancient Beads: A Case Study from Harappa," Randall Law reveals how X-ray diffraction (XRD) analysis of a small red bead believed to be glass proved it was actually made from indurated hematitic kaolinite. Finally, "Using SEM to Study Stone Bead Technology," by Jonathan Mark Kenoyer, notes how useful a stereoscopic scanning electron microscope is in properly identifying bead manufacturing techniques, colorants, and raw materials.

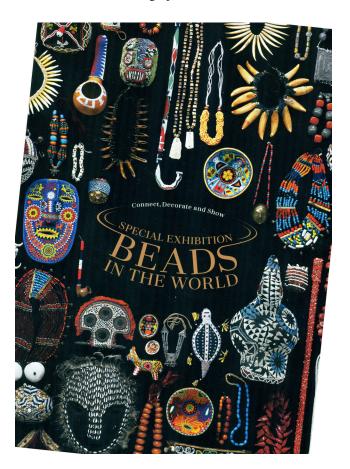
In sum, Stone Beads of South and Southeast Asia contains a wealth of information on the South Asian stonebead industry, from the earliest times to the present day. The last three papers discuss technology that has greatly helped researchers to identify and source bead raw materials, as well as uncover details concerning beadmaking tools and techniques. The book is a welcome addition to the literature.

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Beads in the World.

Kazunobu Ikeya (ed.). National Museum of Ethnology, Osaka, Japan. 2018. 136 pp., numerous color images. ISBN: 978-4-906962-67-9. 2,400 yen (paper).

Beads in the World is the catalog for an exhibition held in 2017 at the National Museum of Ethnology in Osaka, Japan, at the time of the museum's 40th anniversary. The book and exhibition aim to demonstrate the remarkable role beads have played in connecting the world throughout history. This colorful, richly illustrated book shows a wonderfully wide assortment of ethnographic artifacts and beads.



The volume is organized into five sections, each comprised of a series of one- to two-page sub-sections. Twenty-nine Japanese authors, ranging from academics to bead artists, have written text providing a basic overview of each topic. Accompanying images show representative samples of culture-specific adornment, clothing, bead craft, and/or beads, some with explanatory maps and historical or contemporary photos showing cultural items in use. Each

image is meticulously credited, generally including country and region, ethnic group, description, and source. A majority of the items featured appear to be from the collection of the National Museum of Ethnology, with the rest credited to private collections and other Japanese institutions.

The cover and initial pages of the book feature attractive full-page images of beaded artifacts, costumes, and beads from a broad range of cultures. A whimsical introduction encourages the reader to marvel that humans have cherished and used beads as adornment for more than 100,000 years and posits that Beads in the World will reveal bead crafts to be among the best masterpieces of material culture. A two-page world map identifies the location of the 84 ethnic groups featured in the volume with country or region crossreferenced by page number and coded by bead material. Color-coded arrows mark the traditional trade routes for glass and amber beads that have connected bead production and sourcing sites to cultures on all continents.

The first section, What are Beads?, explores the ageold quandary of how to define a bead and presents examples of the wide array of materials that have been used as beads over time with pages devoted to, among others, black coral, iron, faience, human teeth, and hornets! The second section, Human History and Beads, presents a mix of historical periods, civilizations, and bead types. Beginning with the world's oldest beads (perforated shells from archaeological sites in Africa and West Asia), it then presents topics spanning bead use by ancient civilizations in Asia and Africa, historical trade routes for shell, stone, pearl, amber, and glass beads, and beads in modern fashion. The third section, Why do People Wear Beads?, showcases an eclectic range of ways beads have been used in material culture with examples including adornments denoting rights of passage (Zulu beaded marriage cape), wealth (Dinka beaded corset), protective powers (dZi-bead amulet), and religious devotion (prayer beads). The fourth section, A Tour for Beads of the World, features examples of beads, traditional beadwork, and costumes by region or country in every part of the globe. The shorter fifth and final section, Pursuing Beauty of a Global Age, offers examples of contemporary beadmaking, bead craft, and art. An Afterword asks the reader to consider the enduring allure of beads and ponders how their use and distribution routes will continue to evolve in the future. A bibliography lists reference books by Japanese authors and 18 Japanese museums and galleries.

The text of *Beads in the World* tends to be elementary, quirky, and inconsistent given the imperfect translation, multiple authors, and stated intention to serve as an introduction to world bead culture. Scholars and experienced collectors of beads and ethnographic artifacts may quibble with definitions and facts and will not likely find new information. For the layperson interested in world bead traditions, the book covers similar territory to other introductory books on bead history such as Beadwork: A World Guide by Caroline Crabtree and Pam Stallebrass (2002), Ethnic Jewelry from Africa, Europe and Asia by Sibylle Jargstorf (2000), Beads: An Exploration of Bead Traditions Around the World by Janet Coles and Robert Budwig (1997), and Beads of the World by Peter Francis, Jr. (1994). Although not adding new content to the canon, for those with a love of the humble bead and an appreciation of human ingenuity, and artistic and cultural expression, this book is a delightful mash-up and visual feast showing a cornucopia of beads and bead traditions stretching across cultures, continents, and time.

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Journal: Borneo International Beads Conference 2017.

Heidi Munan and Anita MacGillivray (eds.). Crafthub, Queen's Tower, Unit C, Ground Floor, Lot 10801, Jalan Wan Alwi, 93350 Kuching, Sarawak, Malaysia. 2017. 232 pp., 116 color figs., 55 B&W figs. \$40.00 postpaid (paper). To order, contact crafthub@ gmail.com.

The Journal of the Borneo International Beads Conference 2017 is a volume of proceedings. It reflects the truly international aspect of the conference as well as the rich diversity in expertise on the subject of beads. Coming from almost the four corners of the world, the contributors include an Australian art teacher and an Australian designer; a Dutch researcher; an American artist and two American archaeologists, one based in Singapore; a Nigerian senior lecturer; a Thai independent scholar; a Chinese historian and archaeologist; and, more locally, a museum ethnology curator from Sarawak. The conference was heavy on contributions from the field of archaeology but also included input from artists and researchers which, strung together, make for interesting reading and a fine reference for further study. There are ten papers in all.