In sum, this booklet attempts a great deal, but succeeds only occasionally in achieving it. A little time and a lot more attention to detail would have made this useful publication a much more valuable one.

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James W. Bradley R.S. Peabody Museum of Archaeology Phillips Academy Andover, MA 01810 Beads from the West African Trade Series.

Volume V, "Russian Blues, Faceted and Fancy Beads from the West African Trade," 1989. 10 pp. of text, 34 pp. of color plates. \$15.00 (paper).

Volume VI, "Millefiori Beads from the West African Trade," 1991. 20 pp. of text, 68 pp. of color plates. \$25.00 (paper).

John Picard and Ruth Picard. Picard African Imports, 9310 Los Prados, Carmel, California 93923.

These are the two latest volumes in the spectacular series on *Beads from the West African Trade* by the Picards. They are the largest volumes to date and the most informative. There is little question that they present the best color photography in the bead field, showing beads singly or in strands in full size and often enlarged.

Those who have been following this series can only be pleased that it gets better all the time. More information is presented, more details on the beads given, and guest authors (Elizabeth Harris for Volume V, and Jamey Allen for Volume VI) are being invited to provide historical or technical details about the beads.

As impressive as these works are, however, there are a few points which this reviewer believes would make them even more valuable as research tools without sacrificing any of their sumptuous format. In these remarks it is necessary to consider four separate works: the work in the two volumes by the Picards, and the essays by Harris and Allen.

The first point is that there is a responsibility inherent in publishing the names of beads which inevitably become part of the nomenclature. Where there is no historical justification for a name and where it can be misleading, it should be avoided. Though the weak foundations of these names were noted in the text, it would be best to expunge "French Ambassador Bead" and "Lewis and Clark Bead," for example.

This is especially true in the case of "Russian beads." A term apparently coined by Alaskan collectors, it is most confusing to neophytes who naturally assume that the beads were made in Russia. Not only were they not, but there is no evidence for them being brought to Alaska by the Russians. They were not introduced until well after the Russians began getting their stocks of beads from Yankee skippers and the Hudson's Bay Company.

Harris' essay, while quite good on most manufacturing points, loses much of its value by devoting nearly half its length to a short history of Alaska — far from the West African focus of the series — apparently in a vain attempt to justify the name "Russian bead." There were also several historical inaccuracies. Cook did not turn south soon after Nookta Sound, but sailed all the way north through the Bering Strait and explored some of the Alaskan north coast before he was forced to leave. English participation in the trade did not end with the War of 1812; as Harris herself admits, the Hudson's Bay Company was a major participant in the trade it was an English concern. As for company names, it was the Russian-American Company, not the Russian American Fur Company.

A few things may also be noted in Harris' essay in regard to "Vaseline" beads. Czech tong molds were invented in the early 1700s, not 1800s. While she identified why collectors call these beads "Vaseline," she ought to have mentioned that uranium was discovered in Bohemia, soon tried in glass and was a major ingredient of many Czech beads for a long time. Yes, the beads do fluoresce. There were also several variations re the placement of the mold seam, and the numbers, types and position of the facets.

A second point it that the value of each volume would be enhanced if it were limited to the confines of the title. In the millefiori volume, for example, there are quite a number of beads which are neither millefioris, nor have any mosaic elements on them. I see no justification for the various trail-decorated beads being included (#682 is not trail decorated but of swirled glass, a product of the 1930s).

Additionally, beads not in the West African trade ought not to be included. If the volumes are going to serve as reference points for particular beads in this trade, the inclusion of other types of beads or beads from other sources is confusing. The Picards do give

us this information, but many casual and even some studious readers will not plow through their long and complex captions to find this out.

Concerning the ancient beads from West Africa decorated with mosaic chips, the Picards are rightly skeptical of Dubin's ascription to Roman or Ptolemaic times, but have made a serious error in tentatively ascribing them to "middle-to-late Islamic dating from 300 to 600 AD" (p. 8). The Islamic period did not commence until the Hegira in A.D. 622. These beads are Early Islamic from the time the trans-Saharan trade was opened about the 9th century until the destruction of the major Middle Eastern glass beadmaking centers in the 12th and 13th centuries.

Allen's essay on manufacturing mosaic elements is generally good but for two points. I hope no one attempts to follow his instructions of "joining together cold preformed units with a hot and molten quantity of glass" (p. 6) or they will be in for a nasty surprise. When glass is fused to glass both pieces must be hot (not molten or liquid, but semi-viscous). This includes the placing of murrine (slices of mosaic canes) onto the core of millefiori beads.

There is also an important third way to make mosaic elements, a technique I have called the "hot strip method." It consists of laying strips of hot glass upon a gather of hot glass, color by color, building up a pattern. This is how Indian millefiories are made, and is the most likely method used to make most mosaic elements in ancient times.

Finally, the value of this series would be much enhanced if the beads were placed in some sort of logical order. Simply putting them on pages helter-skelter gives us the beads, but much more information would be conveyed if there were some sort of meaningful sequence. For example, the Picards are in an excellent position to record the people and places where particular beads are used. West Africa is a huge geographical area, and it is well known that some people and/or nations favor certain beads over others, or at least were the recipients of them. One can distinguish some communities by their beads. If beads used by one group of people were put together and so labeled (exceptions being noted as well), this would add to the utility and contribution of the series.

In the millefiori volume, there was a very important chance to significantly add to our understanding of these beads by ordering them logically. Pages 70 through 87 are beads found on the cards of the J.F. Sick & Co. in the Royal Tropical Institute of Amsterdam. The Picards have been studying these sample cards for some time and have advanced what appears to be a correct interpretation of their chronological order. Why were the beads not shown in this order? It they had been, would any meaningful pattern have arisen from this simple and rational arrangement? The answer is an emphatic Yes! On the pages indicated are 350 millefiori/mosaic beads dating from before World War I, and 298 from the period 1920 to 1931. Of the 350 pre-World War I beads, no less than 88.9% have composite (I much prefer the term "bundled" because of the many meanings of "composite") murrine, made by bundling together monochrome glass canes to build up the design; only 6.6% have molded ones at this time. After the war, only 9.7% of the beads have composite (bundled) designs, while 68.1% are molded and 22.1% are cased (layered). Moreover, two thirds of the later composite/bundled chips are on beads made from 1920 to 1925, and six of the remaining ten are used very sparingly on beads in 1927, with none used after 1929.

Assuming the dating is correct, and there seems no reason not to, and keeping in mind the hazards of using sample cards (though these are from a well-dated and carefully curated set), this means that the composite/bundled mosaic chips on millefioris are virtually all from the early decades of this century, while molded ones do not come into their own until after the Great War.

This strikes me as very important. The dating of beads is a crucial fact about them. The figures are so overwhelmingly lopsided that unless a serious attempt were made to skew the data presented in this book (and there is no reason to think that this was done), the pattern is quite clear. This, then, solves the mystery which has existed for many years as to why there is a difference between these two methods for making mosaic canes: the difference is chronological.

Are there other chronological differences between these beads? For one, there is a clear ascendancy of simple cased *murrine* over time: only one is recorded before World War I, 15 in the next six years, and then 50 in the last six years. What about added stripes, the laying of canes lengthwise, and so on? There may also be patterns here, but the hodgepodge method of arranging the beads has prevented me from pursuing them.

The point is this: the Picard's volumes, in particular the one on millefiori beads, contain a great deal of data, enough apparently to clear up what has long been a major problem in the understanding of these beads. But this ought to be the task of the authors to elucidate, not a reviewer, who spent nearly a day flipping back and forth through the unorganized presentation. Had the beads been put in simple chronological order, this distinction and any other possible ones would have jumped off the page and been immediately clear to everyone.

In sum, these are wonderful books and are recommended to anyone with a serious interest in beads or to those who just like to look at them. There is room for improvement, but the improvements that have already been made in the series lend strength to the belief that we will see future volumes being even more valuable than those published thus far.

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Glass in Jewelry: Hidden Artistry in Glass.

Sibylle Jargstorf. Schiffer Publishing Ltd., West Chester, Pennsylvania, 1991. 176 pp., 284 color figs., 35 b&w figs., index. \$29.95/£24.95 (paper).

The book list of Schiffer Publishing comprises a wide range of subjects, almost all on "collectibles" and, as such, they are well illustrated and include value guides. They are aimed at the intelligent collector, rather than the academic reader. This book, written by a trained chemist from Braunschweig, Germany, is more scholarly than many books published by Schiffer, although, from the student's viewpoint, it is marred by the nearly total lack of sources for the archival illustrations used and the lack