By the mid-1800s, Bohemia was outpacing the powerful centuries-old bead industry of Venice/ Murano. This was the result of a continuous search for new ideas and methods. A decisive invention, dating to the second half of the 18th century, was the molding tong. It was used to mold-press pendants, buttons, beads and imitation gem stones from heated canes into all kinds of shapes. The process was fast and economical. At first the molds were crude and the articles had to undergo additional cutting and polishing. But by the middle of the 19th century, the tool was perfected to the extent that the pressed items looked as if they had been cut or engraved. Jargstorf disputes the frequently held notion that pressed glass is inferior to cut glass. She points out that molding opened new horizons for glass design. To her, the buttonmakers of the Victorian era were the real initiators of this revolutionary process and, therefore, the predecessors of the most famous molded glass artist, René Lalique.

By the end of the 18th century, the glass artisans of Bohemia were developing new ways to color glass. Prominent in this field was the Riedel family which also pioneered the use of uranium to achieve certain shades of yellow and green. The famous ruby, garnet and carnelian reds were elaborated by the Zenkner family. The technique to achieve iridescent glass was discovered in 1873. Gold-lined blown glass was introduced in 1898, and remained a monopoly until 1945, when the glassmakers of the area (known as the Sudetenland) that had been incorporated into Hitler's Germany in 1938, were expelled when World War II ended.

During the mid-1800s, the Bohemian glassmakers began adopting and adapting Venetian styles, as well as mosaic glass, and aventurine which they called *venetianer Fluss* (Venetian flux).

The only one of the Gablonz glassmakers to become known internationally was Daniel Swarovski. Jargstorf explains that he overcame the anonymity of his compatriots and colleagues because he dealt directly with his clients. Swarovski moved his enterprise to the Tyrol, Austria, in 1890.

Jablonec has become synonymous with glass. But the craftsmen of the area used many other materials natural and synthetic — in the production of adornments. *Baubles, Buttons and Beads* devotes a chapter to each of the two categories. Among the curious inventions of the early 1900s are "Ballottini" beads of lacquered wood which are given a satiny finish by coating them with tiny glass pellets. Such beads occasionally appear at flea markets without creating much of a stir. Now that we know their history, they might.

The glass beadmakers of Bohemia scattered an infinity of unique creations throughout the world. Jargstorf barely mentions the painstaking market research involved in this achievement.

It is also a pity that the author closes the chapter on Bohemian beads with the relocation of the Sudeten German craftsmen to New Gablonz and other parts of Germany. It would have been interesting to learn about the industry under more than three decades of Communist rule during which the production continued, shrouded in secrecy.

It is hoped that Sibylle Jargstorf will elaborate on these subjects in a future volume as enjoyable and well documented as her previous work.

> Anita von Kahler Gumpert 3752 McKinley Street, N.W. Washington, D.C. 20015

Beads of the Bison Robe Trade: The Fort Union Trading Post Collection.

Steven Leroy DeVore. Fort Union Monograph Series, Publication 1, Friends of Fort Union Trading Post, Buford Route, Williston, North Dakota 58801. 1992. i-ix, 136 pp., 11 color figs., 5 b&w figs., 20 tables, appendices. \$16.45 (paper).

DeVore's monograph summarizes the 38,578 trade beads of glass, bone and shell found during the 1968-1972 excavations at Fort Union Trading Post National Historic Site, North Dakota and Montana. A major trade outpost between 1829 and 1867 for the acquisition of bison robes from the Native Americans of the Northern Plains, Fort Union was built by the American Fur Company on the Missouri River across from the mouth of the Yellowstone River.

The National Park Service (NPS) conducted the 1968-1972 testing and excavations at Fort Union as part of an extensive reconstruction and interpretive program at the site (further investigations were also carried out during 1986-1988, but the analysis of this material has been delayed because of funding problems [see Hunt 1993]). Analyses of each of the various classes of cultural materials recovered in these excavations have only recently become available to historical archaeologists — most of these in limited numbers of paper or microfiche reports (Hunt 1986). Thus, the publication of this monograph on trade beads presents in an accessible format considerable historical, cultural and temporal information on the types of beads preferred for Native American trade on the Northern Plains in the middle to late 19th century.

The extensive NPS excavations at Fort Union recovered beads primarily in the Indians' and artisans' house, the dwelling range, the store range and in non-structural contexts between the Indians'-artisans' house, the south palisade and apparently the front gate; about 17% of the beads were from unknown provenience(s). Their recovery from both trading and domestic contexts at the fort suggests to DeVore (p. 62) that beads were important to both the Native American trading partners (principally the Assiniboin and Blackfoot), as well as the fort's inhabitants (post employees and their families). Perhaps the distributional data also indicate that the trade in bison robes was conducted by both commercial and entrepreneurial interests.

The heart of the monograph presents DeVore's descriptions of the recovered glass, bone and shell beads. The bone and shell beads (n=82) were classified according to the type of material they were made of and their modifications in shape. These bead types were commonly used by Native Americans as ornaments prior to European contact; in the case of the Fort Union assemblage, they appear to have been uniformly manufactured by American factories for the fur trade.

DeVore's classification of the glass beads follows the system designed by Lyle Stone (1974) for the Michilimackinac site beads. He defines five classes, differentiated by manufacturing technique: hollow-cane, wire-wound, mandrel-pressed, wire-wound molded and blown. In bead nomenclature, hollow-cane beads are what others have termed drawn beads, while wire or mandrel-wound beads have also been termed wound (Karklins 1985). Within each of the classes are series (based on bead structure), types (based on shape and surface characteristics), and varieties (based on differences in color, number of layers, color and form of glass appliqués and the degree of diaphaneity).

From these attributes, DeVore recognizes 85 hollow-cane varieties, 54 wire-wound varieties, 9 mandrel-pressed varieties, 6 wire-wound molded varieties and 6 blown varieties. The hollow-cane class represents about 96% of the Fort Union beads and these, in turn, are dominated by white and blue donut seed, pony, and necklace-sized examples. The wire-wound beads account for another 3.9% of the assemblage, principally round white, turquoise green and blue varieties. The wire-wound molded and blown bead classes are represented by 37, 7 and 20 examples, respectively.

Accompanying the variety descriptions are ten excellent color plates of the beads. However, none of the blown bead varieties are illustrated. An examination of the beads depicted in Figures 7 and 8 does suggest, however, that some of the beads identified as hollow-cane varieties are more likely of wound manufacture. Similarly, one very large yellow bead (Fig. 81, variety CI SA T2 Ve) appears to be an example of a mold-pressed bead (Karklins 1985:101), a type not identified by DeVore.

In conclusion, this monograph makes a significant contribution to the study of the glass, bone and shell beads used in the 19th-century bison robe trade on the Northern Plains. Its strength is its clear and straightforward presentation of the bead data from Fort Union NHS, which should be emulated by other bead researchers, and is a volume recommended for anyone with an interest in the study of beads and their uses.

REFERENCES CITED

Hunt, William J., Jr.

 1986 Fort Union Trading Post National Historic Site (32W1117) Material Culture Reports, Parts I-V. United States Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln, Nebraska.

1993 Ethnicity and Firearms in the Upper Missouri Bison-Robe Trade: An Examination of Weapon Preference and Utilization of Fort Union Trading Post N.H.S., North Dakota. *Historical Archaeo*logy 27(3): 74- 101.

Karklins, Karlis

1985 Glass Beads: The Levin Catalogue of Mid-19th Century Beads; A Sample Book of 19th Century Venetian Beads; Guide to the Description and Classification of Glass Beads. Parks Canada, Studies in Archaeology, Architecture and History, Ottawa.

Stone, Lyle M.

1974 Fort Michilimackinac, 1715-1781: An Archaeological Perspective on the Revolutionary Frontier. Publications of the Museum, Michigan State University Anthropology Series 2.

> Timothy K. Perttula Texas Historical Commission P.O. Box 12276 Austin, Texas 78711

Ezakwantu: Beadwork from the Eastern Cape.

Emma Bedford (ed.). Exhibition catalogue; South African National Gallery, P.O. Box 2420, Cape Town 8000, South Africa. 1993. 112 pp., 13 color plates, 61 b&w figs. Rand 50 + Rand 40 for postage (paper).

The ending of apartheid in South Africa has been accompanied by an upsurge of public awareness of, and interest in, aspects of indigenous African culture. Since 1990, the South African National Gallery (SANG) has expanded its collection's and exhibition's policy to include material culture, especially that of southern Africa. Ezakwantu, a Xhosa word meaning "the things of the [Bantu] people," is the first exhibition in a series planned to endorse this modification of policy. In fact, South African ethnographic work (including the study of beads and beadwork), did not really take off until the 1930s, and it was not till then that beadwork began to be collected formally by museums in South Africa (p. 39). Horace Beck of England and C. van Riet Lowe of South Africa both made reference collections of beads and bead sample cards.

The exhibition catalogue ought to be reviewed under two broad headings. It consists of twelve articles by different authors plus a Catalogue List of the actual exhibits. The first article, by Emma Bedford, defines *Ezakwantu*, and explains why there are so many contributors. It was deemed necessary, in a pioneering exhibition of this nature, to involve Africans from the East Cape area, whether through staff members of SANG or by interviews. The articles fall into two broad categories, one of which places beadwork into the context of South African society; the other one treats beads and beadwork as a subject of archaeological or historical research.

There is a discussion of traditional dress and its use, whether to affirm identity or to make a political statement. In curating the exhibition, and in producing the catalogue, black Africans were given control over the way they and their culture were represented; otherwise the colonial pattern of domination would have been seen to continue. Examples of this cultural domination are the 19th-century paintings and photographs of Africans wearing beadwork, quite often incorrectly, as expounded by Gary van Wyk in his discussion of the paintings of Thomas Baines and the photographs of W.F.H. Pocock. Lindsay Hooper, in the final section on "The Social Life of Beads" writes: "Beadwork encodes social information about the power, age, gender and ritual status of the wearer." Power is shown in the accumulation of beadwork which is also an accumulation of wealth. Beadwork also shows cross-cultural influences, such as in headgear and adaptations from Victorian beadwork. Color symbolism and other aspects of beadwork style may have a purely local validity. As women are the chief makers of beadwork within South Africa, a feminist-oriented interpretation of the production and consumption of beadwork is essential to understanding the position of women in Eastern Cape societies. Diviners use beadwork to affirm their ritual identity, modifying it according to their level of initiation. As well as a cultural identifier, beadwork can be used as a telling political statement, notably when Nelson Mandela elected to appear at his trial in Johannesburg in 1962 in full Thembu beaded costume.

After briefly reviewing the glass bead trade and glassmaking, Sharma Saitowitz, in "Towards a History of Glass Beads," discusses the impact of glass beads on trade, citing references dating from 1516 and from van Riebeeck's Journals (1652-1655) that concern trade in beads in East and South Africa. While documentation relating to Africa at such an early date is scanty, there is quite a body of information about bead manufacture in Venice and Bohemia. Venice, in

68