were valid for the shipyard workers, moreover, that population would be extinct by now, they argue.

If all the risks and exposure figures used by the government investigators are valid, the AIHC report argues, the cancer epidemic should have already begun. Using the government figures, and assuming that both the 1 million who have already died and the 4 million most heavily exposed were among the World War II shipyard workers (a rather dubious assumption), the AIHC investigators predict that there should be between 7,000 and 10,000 cases of mesothelioma (which is considered a marker for asbestos-induced cancers) occurring each year. In fact, data from the National Cancer Institute's Surveillance Epidemiology and End Results Program indicate that the incidence of mesothelioma has been rather stable at about 1000 cases per year. Even if the AIHC assumptions are completely wrong, the investigators say, there should be an upward trend in mesothelioma incidence if the government predictions are correct. There is clearly no such trend, AIHC argues, and therefore the government predictions must be much too high.

AIHC representatives criticized the original report on several other grounds including its hurried preparation, its lack of submission to peer review, and the absence of the authors' names on the original summary that was released (the names did appear on the complete paper). These criticisms lose some sting, however, in that the AIHC rebuttal was prepared in about 1 month, it was not subjected to peer review, and no authors are listed on it.

Nonetheless, the rebuttal points out some severe deficiencies of the original report and necessitates the conclusion that its predictions are invalid. A conclusion about whether the incidence of occupationally induced cancer is as low as AIHC says it is, however, will await a more thoroughly prepared report or the test of time.—THOMAS H. MAUGH II

Peabody Museum Contemplates Sales to Reserve Collections

The Peabody Museum of Harvard University, founded in 1866, is one of the world's first museums of anthropology and ethnology. It houses one of the country's half-dozen major anthropological collections.

Like all museums, it does not have enough money. It needs money so badly that it is thinking about selling, or "deaccessioning" some of its paintings. Deaccessioning is a very touchy matter. You never can be sure that you are selling the right thing or getting the right price for it. Every item in a museum has its own history and constituency, its lovers and scholars. There is bound to be a hue and cry from somewhere when people find out that a museum has sold something. Thus it can be seen why former Peabody director Stephen Williams said that "the curator who deaccessions is either a fool or a knave or probably both."

However, there may come a time when the well-being of an entire collection is in such jeopardy—through lack of proper maintenance, preservation, and safety measures—that it seems better to jettison some of the cargo before the vessel founders.

So thinks C. C. Lamberg-Karlovsky, the director of the Peabody, who ever since he took office in July 1977 has been trying to figure out how to get money to initiate a thorough program of preservation, conservation, and security. He wants to raise $3 million, half for the renovation and half to augment the museum's $4.5 million endowment.

The items earmarked for possible sale come from two collections. One is a group of 106 oil paintings by 19th-century portraitist Henry Inman. These are copies of a famous group of portraits of Indians by Charles Bird King that were destroyed by fire. The other is a group of 387 watercolors, oils, and drawings related to North American Indians, part of a collection donated by David I. Bushnell, Jr., who worked at the Peabody at the turn of the century. The total value of both collections has been estimated by New York dealers Hirschl and Adler at $7 million.

Lamberg-Karlovsky explains that the paintings are of minimal anthropological value and have not been used at all for research and teaching, which are the primary functions of the museum. He says they have been stashed away for 40 years where nobody looks at them. A few have been loaned out to art museums—including the most famous piece in the Bushnell collection, a painting by George Caleb Bingham valued at $1 million—but none has been analyzed for anthropological purposes.

The items proposed for sale, says Lamberg-Karlovsky, have been filtered through innumerable groups—the museum's governing board, its visiting committee, a committee from the Fogg art museum at Harvard, the department of anthropology, and finally the Harvard Corporation, which is the ultimate arbiter. The Fogg vetoed the idea of selling the Bingham and several other paintings, which were judged too valuable as art to be sold. Paintings in the Bushnell collection depicting Indian life were also eliminated from consideration, leaving mostly landscapes that do not contain Indians. What remains is a group of works ranging in estimated value from $1,000 to more than $300,000 apiece.

The Harvard Corporation has approved the sale pending the preparation of documents that spell out the legal status of the paintings, indicate the strictures on any transaction, specify the mode of sale and detail the reasons for it. Meanwhile, Harvard has been hearing from a small but vocal constituency, activated through the efforts of a Smithsonian Institution anthropologist, who emphatically disapprove of the proposed deaccessioning.

The Smithsonian curator is William C. Sturtevant, an ethnologist whose specialty is eastern North American Indians. When Sturtevant heard of the proposed sale, he sent letters to 150 anthropologists throughout the land and abroad warning that Harvard was in danger of precipitating "another famous deaccessioning scandal." Sturtevant claimed that Harvard did not have the benefit of expert knowledge on ethnographic illustration, and the fact that the paintings had not been used by scholars did not mean they would not be used in the future. He claimed that it would be impossible to make completely accurate reproductions of the paintings and that these in any case would not yield information on potentially important pictorial details or for "iconographic, stylistic, or physical-chemical research."

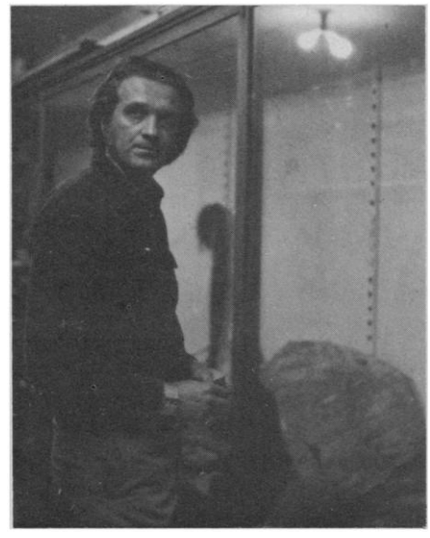
0036-8075/78/1110-0604$00.75/0

Lamberg-Karlovsky counters that for anthropological purposes a photograph of a painting "would serve precisely the same research ends. . . . A reprint of the Gutenberg Bible serves the same scholarly purpose as the Bible itself." The original is obviously essential for analyzing the painting from an artistic point of view, but the Peabody's central concern is not art but anthropology.

Sturtevant has also contended that the physical state of the Peabody's collections is hardly worse than that of comparable collections in other museums and proposes that it is "better to accept the gradual decay of the whole shooting match" than to sacrifice any part of the holdings.

Lamberg-Karlovsky disagrees. He thinks that the conditions are appalling and took *Science* on a tour to demonstrate. The Peabody has four floors and an attic, and the farther up you go, the worse the conditions get. Although much of the ground floor is in handsome condition—Peabody has a grant from the National Endowment for the Arts to fix part of it up for exhibition of its masterpieces—most of the display cases are ancient and the lighting is poor. Graduate students work huddled at tables that are jammed against display cases. Some cases are crammed with rolled-up rugs that should be on display. There is no temperature or humidity control, and no fire and smoke detectors except in the public galleries. The museum does not even have the money to buy window shades to prevent the sun from shining directly on Indian costumes. Many items are virtually inaccessible to students—some are packed in piles of cardboard boxes. The attic, which was never intended for storage of collections, is jammed with wood carvings, Eskimo coats, leather shields, Indian baskets, and pottery, which have to tolerate temperatures ranging from 40° to 110°F. The collections as a whole are particularly vulnerable since they are made of such perishable stuff as wood, fur, leather, and feathers.

Clearly registering frustration and impatience with the state of things, Lamberg-Karlovsky repeatedly emphasized that the museum, as a university institution, had as its prime responsibility "teaching and research. . . . If there are collections that don't directly respond to that they should be considered for deaccessioning (if there must be any deaccessioning). Anything not of use to our students and faculty is of secondary importance. . . . We are responsible to students and to collections—we can't let one go in the interests of the other." Yet at present, says Lamberg-Karlovsky,



Lamberg-Karlovsky broods by shabby display cabinet.

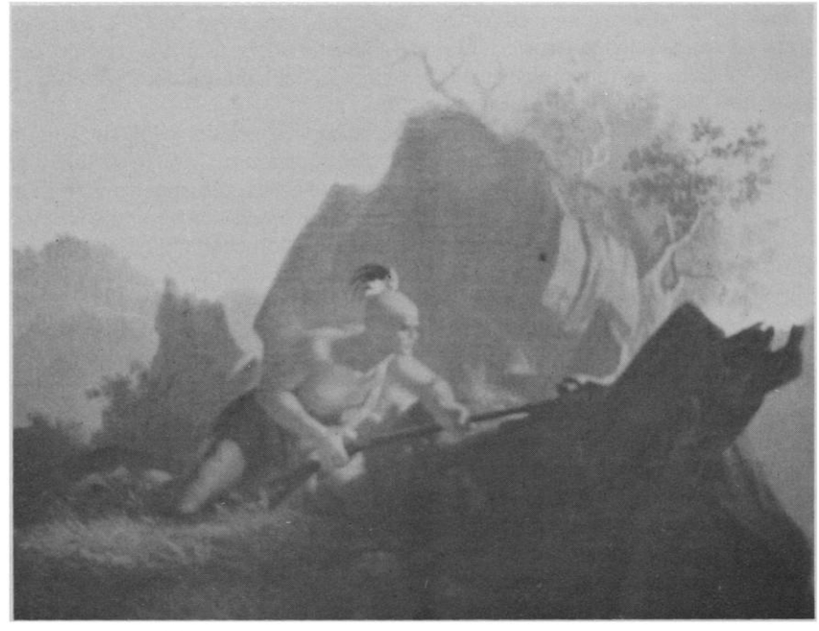
"We do not have a single adequate archeology lab in this building" (the building houses the anthropology department). "I want very much to sustain what has for damn near a century been one of the best departments in the country. There is something wrong with our inability" to provide accessible collections and decent conditions for students. "I think we should correct that even if it means we have to sell a couple of paintings."

How did the Peabody get into such straitened circumstances? It has a relatively small endowment—$4.5 million (the Fogg art museum, in contrast, has a $12 million endowment). In some ways, its priorities do not seem as urgent as those of art museums, which are more actively used for teaching purposes.

The scholarly value of the collections is not enhanced by the fact that the curators are professors in the anthropology department and not necessarily experts on the collections they oversee. Although the collections are regularly used by archeologists, social and cultural anthropology (ethnology) has developed beyond a descriptive approach and toward an emphasis on theory and the study of systems. Museum artifacts thus play a much smaller role in ethnology studies than they did 20 years ago. Sturtevant's objections to the proposed sale may be seen as part of his larger concern over the fact that in ethnology the study of "cultural materials lags very seriously behind the study of cultural behavior and belief, cognition, or perception."

Lamberg-Karlovsky says that another reason for Peabody's low fortunes is that the museum, in a sense, falls between the cracks. Although it receives quite a lot of money from government grants (chiefly from the National Science Foundation), federal agencies are inclined to assume that the museum is not all that needy because it is under the wing of the university. But Harvard has an old saying, "Every tub on its own bottom," which is often evoked to indicate that all its ancillary parts are to some degree autonomous and responsible for their respective financial states. The museum does get money from the university for building maintenance and for running its library, but half of its yearly operating budget must come from outside sources.

There are only three ways that the Peabody could acquire the big money it says it needs. One would be for the Har-



Detail from Bingham's The Hidden Enemy, *valued at $1 million.*

vard Corporation to cut it in on the results of the University's mammoth fund drive planned to begin next year, the first since 1969, in which it is seeking to raise a quarter of a billion dollars. Another way would be for the museum to launch its own fund drive. The museum is slated to get some of the money it needs from the fund drive, but the Harvard Corporation has not given it permission to launch its own. Every tub on its own bottom, but the tubs cannot all go around looking for new bottoms at once or the potential donors will become confused and frightened.

That leaves the third way, says Lamberg-Karlovsky, which is to "look at the function of the museum, see how individual collections enhance that function," and sell something.

It has been suggested that Lamberg-Karlovsky is trying to twist Harvard's arm by causing such a stir over the proposed deaccessioning that the university will feel compelled to ante up more money. But Sturtevant points out that if that were his motive he could choose something like Mimbres pots to sell. The Peabody has some 2000 of these pre-Columbian funerary pots from New Mexico, some of them poorly documented and therefore of modest anthropological value. But as fine art objects they would fetch a huge price. Such a sale would also cause a far greater uproar among anthropologists than would the sale of Indian paintings by non-Indians.

Deliberations are moving with exceeding caution. Before anything is put up for sale, the museum will have to determine the legal status of the items and all the conditions, explicit or implied, that attended their joining the collections. The mode of sale—whether by auction or through an agent—must be determined. It has already been agreed that if the Inmans are sold they will have to stay together and that all the items must go to collections that are open to the public.

Although the issues may appear straightforward enough, the matter of deaccessioning is very sensitive. Indeed, one of the members of the Harvard Corporation hung up on *Science* once he heard the topic of inquiry. A critic of the proposed sale explains that it is easy to see any sale as "a moral betrayal of trust" toward the donor—"How much are you going to create the feeling that if you give something to Harvard, when is it going to turn up on the art market or the antiquities market?" Lamberg-Kar-

Briefing

Clock Runs Out on Department of Education

President Carter's proposal to create a separate Department of Education was caught in the legislative logjam of mid-October when Congress adjourned to go campaigning. A major balk to the bill was the opposition of a small group of House members who are convinced that establishment of a new department would increase federal intrusion into local education matters. This group threatened to delay action on other priority measures if the reorganization was pressed.

At least deferred was the question of the transfer of the science directorate of the National Science Foundation to the putative new department. The Senate had passed a bill that included the directorate in the new department. A reorganization measure, which had been reported to the House but was not acted on before time ran out, did not make the transfer.

Supporters and opponents of the department expect the Administration to renew efforts to win approval for the change in the next Congress. Vice President Mondale, in fact, reportedly has pledged that the bill will be enacted by the end of the 96th Congress which begins in January.

Carter committed himself to creating a separate education department during his campaign for the presidency. He put the reorganization on his legislative shopping list and kept it there during the latter weeks of the session, even sending out a letter urging adoption in the last days before adjournment. However, the reorganization measure never rated a priority comparable to that assigned to the energy bill and other major legislation. And when time became a crucial factor and House leadership faced the threat of obstruction on the issue, the measure was sidetracked.

Opposition came from a relatively small bipartisan group of House members. Most objected on dual grounds—arguing that it would increase costs and expand the bureaucracy unnecessarily as well as pose the likelihood of greater federal intervention. Conspicuous among the opponents were John N. Erlenborn (R–Ill.), David R. Obey (D–Wis.), Leo J. Ryan (D–Cal.), and Robert S. Walker (R–Pa.).

The federal control issue became the dominant one in the House so that there was no effective test of sentiment on the question of incorporation of the NSF science education component in a new department. An attempt was made on the floor of the Senate by Senator Harrison H. Schmitt (R–N.M.) to block the transfer, but it was roundly defeated and it is generally agreed that the effort was poorly engineered. Observers now seem to agree that it is simply not clear whether the transfer would have emerged intact from a House-Senate conference to reconcile differences in the two versions.

The opponents, however, do agree that if it had been brought to a vote in October, the bill creating a Department of Education would have passed the House. The outcome next time would appear to depend on where on its priority list the Administration puts the measure, and also on whether, as some opponents believe, opposition is building up. And they like to think another Fabian victory is possible, perhaps again won by parliamentary delay and the clock.

Resources for the Future Eschews Brookings Merger

Resources for the Future has backed away from a mooted merger with the Brookings Institution. The RFF board voted on 21 October "to do everything possible" to maintain the Washington-based resource and environmental research organization as an independent entity.

RFF will be able to go it alone if it succeeds in raising about $7 million in endowment and general support funds. The Ford Foundation, which established RFF a quarter century ago and has been its principal source of support since then, is expected to match these funds for a total $14 million. Ford had been a party to the discussions of an RFF-Brookings merger (*Science*, 7 July), and it can be assumed that the recent RFF board decision had Ford backing. RFF has set a deadline of next March in its fund raising. Pledges for about half the needed $7 million are apparently in hand and RFF officials and staff are optimistic that the balance will

0036-8075/78/1110-0606$00.50/0

lovsky hinted darkly that the question of selling paintings was only the "tip of the iceberg." He added that it would have been possible to conduct negotiations secretly, as is usually done, and said, "I'm not sure whether I made a mistake" in letting it be public—"the more the fuss, the cloudier the issues get." He said Sturtevant's criticisms were misinformed, but also volunteered that Sturtevant had done the museum a service because his agitations had helped the sorry plight of the museum to become known at the highest levels of the university administration.

If the paintings are sold, says Lamberg-Karlovsky, "whether the decision is right or wrong we'll only know years from now." The prices, too, would be a gamble. Prices for archeological items have been skyrocketing as they have entered the fine arts market. A carved wooden mask, for instance, that would have sold for a few hundred dollars in the 1950's, is now worth $50,000. Prices for paintings by American artists have also been spiraling now that works by the old European masters have become literally priceless. A few months ago an art dealer paid $980,000 for a Bingham painting, *The Jolly Flatboatman*. If the Peabody waited a couple of years, the estimated value of the paintings in question might soar.

Museums try to maintain a low profile in their trading activities, but occasionally scandal erupts. The director of the Heye Foundation, owner of New York's Museum of the American Indian, was sacked a few years ago for some highly irregular deaccessioning. The Brooklyn Museum is currently under investigation by the state district attorney for sales of archeological items at paltry sums to friends of the museum. And the Metropolitan Museum of Art's former director Thomas Hoving created a major scandal some years ago by selling a collection of French Impressionist paintings—against the advice of his curators—to pay for $5 million Velasquez. Thus, as Williams says, the general issue of deaccessioning "is *not* an academic question."

It may not seem so important to the rest of the world, but at Harvard the situation is pressing and the decisions agonizing. With the big fund drive coming up, it is imperative to avoid the slightest appearance of cavalier actions. And the university's reputation as a whole is involved. As Sturtevant says, "If you can't trust Harvard, who can you trust?"—CONSTANCE HOLDEN

Briefing

be obtained by the March deadline.

After the board meeting, RFF president Charles Hitch said that, although a decision had been made not to merge with Brookings, the board was encouraging closer RFF collaboration with the economic and social policy research organization. The board also named a successor to Hitch, who has announced he will retire next summer. The successor is Emery N. Castle, now RFF vice president and senior fellow.

RFF is currently in the process of cutting back its research staff because of financial pressures. The staff had approximately doubled to about 120 in the past 3 years and the aim is to return to the 1975 level. According to RFF officials the retrenchment would have occurred whichever way the merger decision went.

Chinese Scientists Seem Actuated by New Pragmatism

China watchers detect a change in attitude or at least in tactics affecting participation in international scientific activities by China and Taiwan. Both sides have followed a policy of boycotting scientific meetings and organizations in which the other is involved. The conflict is generated by the claim of each to represent all of China (*Science*, 5 November 1976).

An apparent break with this practice occurred when scientists from both countries attended the International Conference on High Energy Physics held in Tokyo from 24 to 30 August. The initiative appeared to lie with scientists from the Peoples Republic of China (PRC), who had earlier avoided such meetings. Chinese scientists apparently attended a meeting on sensors in Manila under similar conditions some months earlier. Subsequent to the Tokyo meeting, confirmation that Peking had dropped its boycott was reported, coming from a New China News Agency official in Hong Kong.

Sinologists in this country see the development as consistent with China's ambitious campaign to modernize its science and technology. American scientists who have encountered scientists from the PRC at international meetings say that in recent months the Chinese have appeared more "relaxed" than at earlier meetings and have seemed anxious to discuss scientific work in which they are interested and to inquire about acquiring American scientific instruments. On the question of Taiwan, the impression is that the Chinese have decided to adopt a more "pragmatic" approach.

Evidence of this new pragmatism may be found in the Chinese decision to join the International Union of Crystallography (IUCr) at the union's meeting in Warsaw in August. Because no Taiwanese scientists held official membership in the union the issue of exclusive membership did not arise for the Chinese. However, it was regarded as significant that, in joining the union, the Chinese agreed to adhere to the "principle of the Universality of Science" espoused by the International Council of Scientific Unions (ICSU) to which ICUr belongs. The import of the principle is that no community of scientists will be excluded from membership and adherence presumably means that China is willing to tolerate members from Taiwan should they join.

An element of tea-leaf reading remains in any interpretation or prediction of Chinese actions, but enough signs are around for even the more cautious China watchers to be saying that they would not be surprised by change. U.S. government officials in the delegation to China headed by presidential science adviser Frank Press, in July, for example, noted that virtually nothing was said by their hosts about the Taiwanese when previously the Chinese have been vocal on the issue. The change was viewed as significant even if it was dog-that-did-not-bark-in-the-night sort of evidence.

A test of attitudes should occur when students sent by Peking begin to enroll in American universities where there are also students from Taiwan. The Nationalist government in Taiwan so far has made no comment on the matter, but President Chiang Ching-kuo pledged when he was inaugurated that his government would follow a policy of no contact with Peking. Rigorous adherence to that policy could mean a virtual withdrawal from international scientific and educational involvement. As for China, U.S. observers feel that there may be some terminological disputes over characterization of the students' countries but that China is unlikely to make a major issue of the matter.

—John Walsh