items, his provocative suggestions are worthy of debate rather than dismissal. I am not convinced by his rationale, but I agree with him that the topic should not be ignored today simply because it was taboo in the past.

The books perforce often deal in generalities: "museums want this..."; "curators believe this..."; the public needs this...." Such rhetoric disguises the huge variability in the museum world and is sometimes off the mark. And I found that the role of research in museums, especially university-based ones, is not stressed enough. Nevertheless, such shortcomings are offset by the importance of the issues the authors address, the illuminating examples they discuss, and the clarity of their arguments in these well-written books. Even when disagreeing with the points raised, as I often do, one must still be impressed by the authors' dedication, concern, knowledge, and understanding of modern museums.

All three writers passionately hold the belief, succinctly stated by Weil, that museums today can and should "make a positive difference in the quality of people's lives." Despite differing views as to how such a result can be achieved, they each argue convincingly that museums must make much stronger efforts to reach this goal if they are not only to survive but thrive in the 21st century. Only by transforming their inward habits of the past, which usually emphasized collections and collecting, to productive outward engagements with their multiple audiences will most museums have the bright futures they and society deserve.

A DAY OUT: NATURAL HISTORY

New Life for Dead Things (in Jars)

L. Sian Gramates

The vast majority of the collection of any natural history museum is stored behind the scenes, tucked away from the view of the general public. The museum's staff, its curators, taxonomists, and researchers, are similarly sequestered in hidden back rooms. With the bold new Darwin Centre, London's Natural History Museum attempts to break down the separation of museum visitor from the living museum. The staff and their work are now part of the exhibit.

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The Natural History Museum
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www.nhm.ac.uk/darwincentre/

The Darwin Centre was conceived to serve two distinct roles: to provide a desperately needed state-of-the-art facility for the storage and study of the museum's "spirit collection" of biological specimens and to make the holdings accessible to museum visitors. The Centre is being developed in two phases. The first, now complete, replaced the old Spirit House, described by director Sir Neil Chalmers as "the ugliest building in London," which housed 450,000 jars of zoology specimens preserved in alcohol.

The new building includes seven stories of storage facilities and laboratories wrapped around a central atrium. The ground floor of the softly lit hall is devoted to public interaction. Multilingual "InSite" touch screens are scattered throughout the public area. Using this easy-to-navigate interface (also available through the Darwin Centre's Web site), visitors can choose aspects of the museum about which they would like more information. On one side of the atrium, large glass panels allow people to peer into a storage room. Between the panels, artistically illuminated cases display a sample of the holdings that includes specimens collected by Darwin, still in the actual jars he had labeled.

Specimens in spirits. These lizards, *Liolaemus chilensis* and *L. darwini*, were discovered by Darwin.

On the opposite side of the atrium is Darwin Centre Live. This cozy multimedia center includes video feeds from trolley-mounted remote cameras that make accessible even the areas of the building most hostile to camera crews. Talks and demonstrations by working scientists are presented twice daily, and these events are broadcast to a far wider audience through the Natural History Museum's Web site. The talk I caught on the day of my visit was about the first barracuda found in British waters. The presentation, like many events at the Darwin Centre, had an environmental bent; it emphasized global changes that would allow a tropical fish to range so far north of its usual habitat.

The centerpiece of the Darwin Centre is its anti-showcase: the working heart of the museum. As the visitor's center brings the collection to the public, frequent tours of the storerooms and laboratories bring the public to the collection. My tour group, led by a pair from the scientific staff, was taken to the top floor in a transparent elevator, which gave us a vertiginous view of the atrium. My immediate reaction upon entering the dimly lit sixth floor storeroom was of feeling uncomfortably cool; the specimens are kept at a temperature below the flash point of ethanol, a chilly 13°C. Our guides briskly led us through an enormous room filled with endless rows of metal cabinets, which make the extent of the collection far more concrete than can the bland phrase "22 million specimens." As we walked, the more talkative guide offered a continuous stream of historical and technical tidbits: Among the thousands of jars are numerous specimens from the *Endeavour* and *Beagle* expeditions of the 18th and 19th centuries. Even today, new specimens are preserved in the same type of glass jars using fitted ground glass stoppers sealed with vacuum grease, because no more recent technology has surpassed that method.

Gleaming new laboratories, located around the periphery of the building, were our next destination. The labs all have glass walls on the sides facing the corridors, providing tour groups with a voyeuristic entry to the workday of the museum researchers.

Our final stop was the ground floor, where oversized specimens are kept in the Tank Room. The room's walls are lined with enormous jars, some of which could accommodate the smaller members of the tour group. Even bigger specimens can be housed in the stainless steel tanks that give the room its name; the largest is three meters long and contains some 1500 liters of alcohol. The room also contains the necropsy table from which the barracuda presentation had been broadcast earlier in the day.

This ongoing project—Phase Two, which will house botany and entomology collections, is scheduled for completion in 2007—is an audacious effort in the continuing struggle to communicate the excitement and relevance of science to a public that lacks scientific training. The Darwin Centre has brought the Natural History Museum's collection and its mission out of the dusty cupboard and into the light.

CREDIT: THE NATURAL HISTORY MUSEUM, LONDON