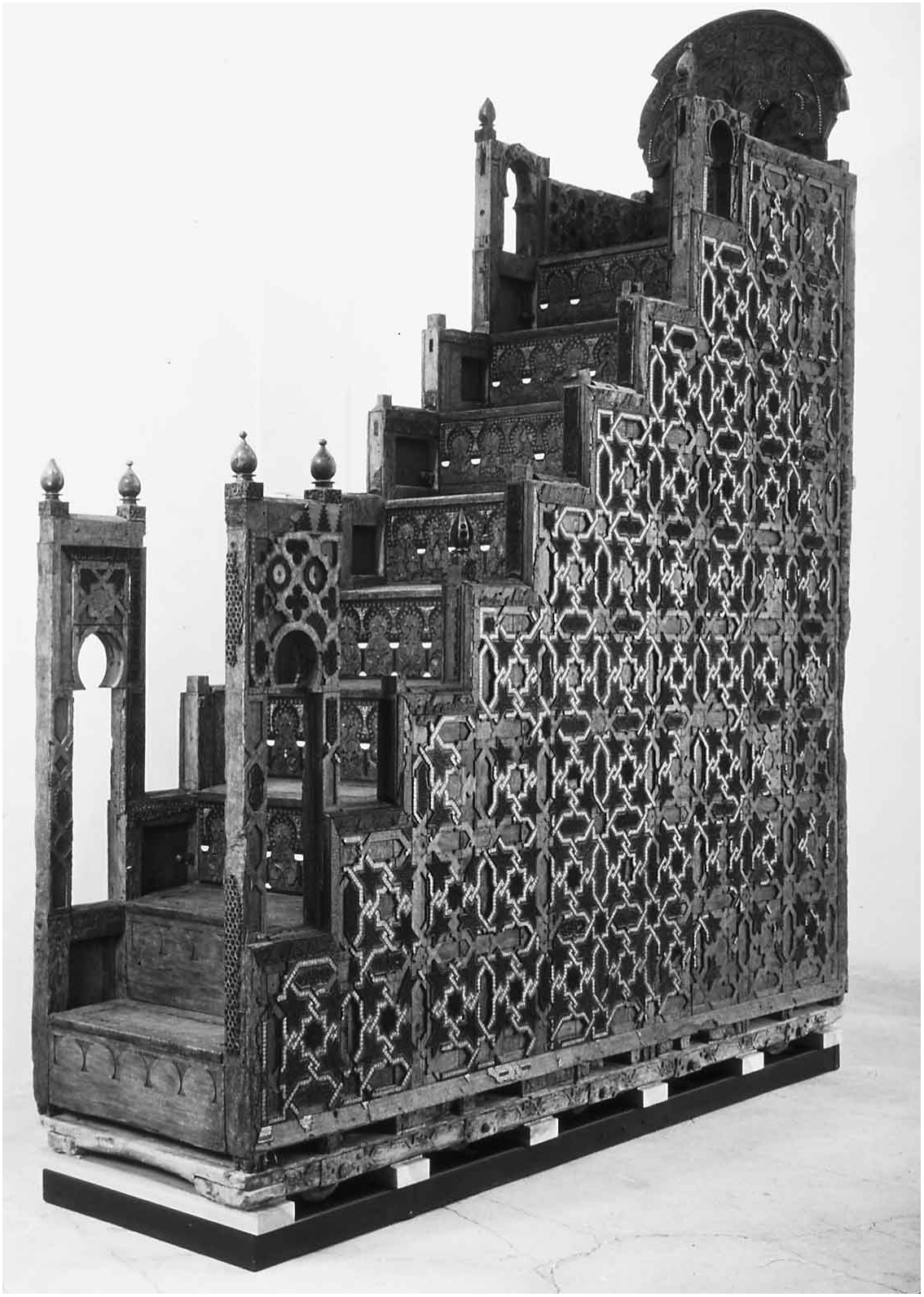

***Figure 2: The minbar prior to conservation.***

# Conservation of the Koutoubia *Minbar*: A short story of an epic in Marrakech or, a travelogue disguised as a treatment paper

*Mark Minor, Conservator in Private Practice, Salida, Colorado*

MARRAKECH. CITY OF LEGEND, *(fig. 1)* of Arabs, of Berbers, of ancient gold caravans from the deep Sahara, of veiled women and crowded markets bristling with the scents of exotic spices. A city virtually medieval in its core, where a simple stroll could leave one hopelessly lost down an endless series of chaotic unmarked paths just over an outstretched arms' breadth wide. A center of power and learning and art for the Almoravid and Almohad dynasties some 850 years ago; it kept knowledge alive during the darkest periods of European history.

***Figure 3: The (now) exposed* mihrab *of the earliest Koutoubia Mosque. Rebuilt in the 12th century, the* mihrab*, once inside the great mosque, now forms one of the exterior walls.***

"So, what IS a *Minbar*?" was my first question, after being given the travel-brochure intro by my former employers at the Metropolitan Museum of Art. In typical museum fashion, there were two of them to every one of you. Jokes about the "mini-bar" were legion, as rumor slowly spread in the Met and former-Met communities about a nebulous covert conservation project in some faraway land. *(fig. 2)* I'm certain it was also the first question of my partner-to-be, Andrew Zawacki, who was subsequently enlisted to go over to Marrakech for the projected nine months.

***Figure 1: A market scene before the feast day of Ashora, in the Djemma al Fna, Marrakech.***

Answer to question #1: A Minbar is roughly the Islamic equivalent of a pulpit, the set of steps an Imam ascends during midday Friday prayers to recite from the Koran, interpret it, or otherwise sermonize. It follows the form of stairs used by Mohammed to address the faithful in Mecca, and has remained an essential part of mosque architecture, being housed in an alcove to the right of of the *mihrab*, and only pulled out on Friday. Figure 3 shows the remains of the earliest mihrab of the 12th Century Koutoubia mosque; the Minbar would be housed within the tall alcove when not in use.

What greeted us over in Morocco was undoubtedly one of the finest works of art in wood created by mankind *(fig.4)*. Executed in Cordoba in the year 1139, with over 1000 stunning carvings of mindboggling complexity, every one different, the Minbar

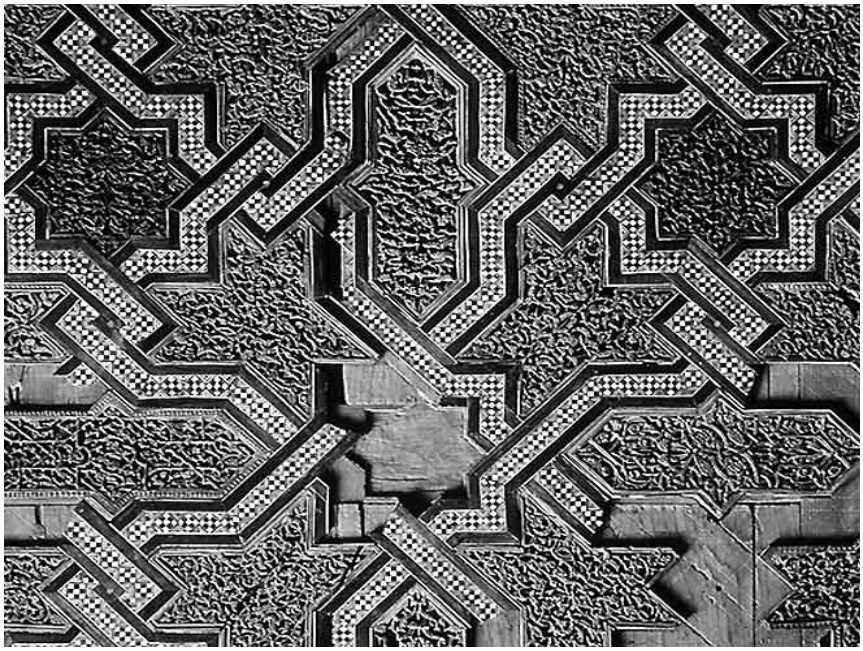

***Figure 4: A detail shot of carving and strapwork from the side of the minbar.***

was carried by camel to Marrakech in pieces. There it was assembled, saw service in three different mosques, and remained in continual use until 1962, when it went into storage at the Badia Palace, the 16th century ruins of a former dynastic palace, now a historic site. We grew to love the Minbar, to be continuously overwhelmed and awed by the mastery of design and execution, all the more impressive given the 12th century construction date.

Our mission was fairly simple: take this national cultural treasure that was ready to fall over *(fig. 5)*, filled with enough dust to make a rammed earth *kasbah*, and "restore it" as the Moroccans would say, to their approval, as well as that of the Metropolitan Museum. Why the Met? The Minbar was slated to be loaned to the Met for the 1993 exhibit *Al Andalus*, and indeed, to be a key element of that show. Subsequent review by conservators, brought to light the plain truth: the Minbar was too old, too rickety, and too big to go across the street, let alone across the pond. As the Met's interest piqued that of the Moroccans', their own, one should say, "well-intentioned" effort at "restoration" began to gel once the loan was abandoned. In light of the peril this artifact was facing, the Met offered jointly to conserve the Minbar with the Ministry of Cultural Affairs of Morocco. Supplies were ordered, bags were packed, arms were immunized, and we were off. Figure 6 is a shot of our assembled crew, conservators and craftsmen and architects, consuming just one of thousands of glasses of mint tea to come, and these greasy donut concoctions (*shfinge)* that they love over there. Never mind those greasy hands—there was the ubiquitous small box of "TEED," (that's "TIDE" laundry soap to us) in the bathroom, the universal cleaning agent of Marrakech.

The treatment of the Minbar was relatively straightforward, once examination and testing were completed. The exception was the rather complex structural additions we had to make to the listing Minbar. There was a ponderous hodge-podge of boards—some old—that were nailed in to support the two sides in a rather unsound and leaning fashion. These stretchers unfortunately locked the Minbar into its listing attitude, and spread it apart, typically on the order of 2–3 cm. We chose to remove them, after ascertaining that

***Figure 5: The pronounced list of the minbar. Note existing braces and interior structure.***

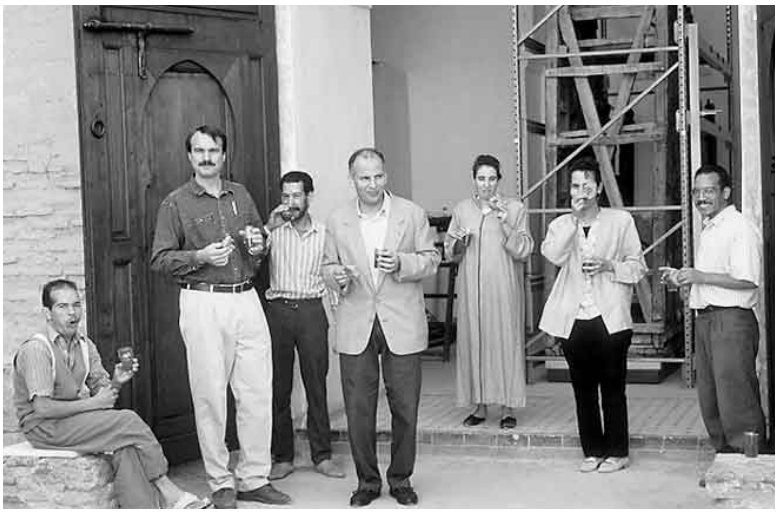

***Figure 6: Andrew and the Moroccan crew (minus myself, behind the camera). The minbar, in its shelving unit scaffolding, is in the background.***

only two could possibly have been early, but were certainly not in their original positions. After documentation, cleaning, and storing, we constructed ladder-shaped forms that would be attached via removable steel clamps, to secure the Minbar in its proper upright stance and proper width. Figure 7 shows the "ladders" in place, with their clamps.

The remainder of the treatment was a rather typical bout of consolidating loose elements with animal glues (albeit with complex and improvised clamping methods), structural integration of the frame in a minimally interventive way, and lots and lots and lots of cleaning, followed by toning. The Minbar was placed on a steel frame with insertable wheels, allowing the entire structure to be "jacked up" and rolled as needed *(fig. 8)*. Also, a portable steel shelving unit was assembled around the Minbar to serve as both a protective scaffolding and clamping apparatus. The bulk of cleaning was carried out by Andrew, using compressed air, dental tools, brushes, mild solvents, and many, many Walkman batteries. His was a Herculean task, which he performed day after day with nary a gripe. The goal of treatment, from an aesthetic point of view was to make the Minbar a harmonious whole, and not to attempt replacement of missing items, which would be far too difficult to render at the level of quality of the Minbar. It was felt that what remained on the Minbar read quite well, and allowed an excellent interpretation of the object, its losses only serving to testify to its great age. We did choose to replace three sections of missing inscription on the proper right side, as they are *surah* from the Koran, and it is known exactly what was missing. We drew out the missing letters, and incised them into cedar, and toned to match. The same technique was used to replace the two lowest risers, which were missing. Figure 9 shows the Minbar, post-treatment, on its base. I refer interested readers to the excellent book, *The Minbar from the Koutoubia Mosque,* just published by the Metropolitan Museum, which contains essays on the history, cultural position, and conservation of the Minbar.

What seems more interesting to me, and hopefully you, in the midst of endless talks on the nuts and bolts of zillions of treatments, are anecdotes on the experience of completing a major treatment overseas. And in that spirit, I would like to share a few of the experiences of our team on this project.

When you grow to feel that doing ANYTHING can't be harder ANYWHERE than in New York, there's a rude shock when you set down to work in Marrakech. Nowhere, nowhere does the term "Express" exist, giving pause to understanding how that song we grew up with ever got its name. For example:

Little did we know we would be doing archaeology in a coal mine. We removed literally KILOS of ancient dust and dirt, some sections hardened in crevices like adobe blocks, from the inside of the Minbar. There was no alternative to just "getting into your job," literally, and going home, covered head to toe in 800-year-old dust. As our workers spoke only Arabic, no French, and we had only halting French anyway, we tended to form strange "pigeon" Arab-Anglo terms for things and to describe different jobs for giving direction. Going inside the Minbar became "go to hebs," an Anglofying of the Moroccan Arabic word for jail, and given the complex nature of the Minbar's interior you can see why. But, as a plus, we were able to sift through the rubble, and locate dozens of loose pieces that had fallen into the Minbar.

***Figure 7: The added interior supports, with their clamps.***

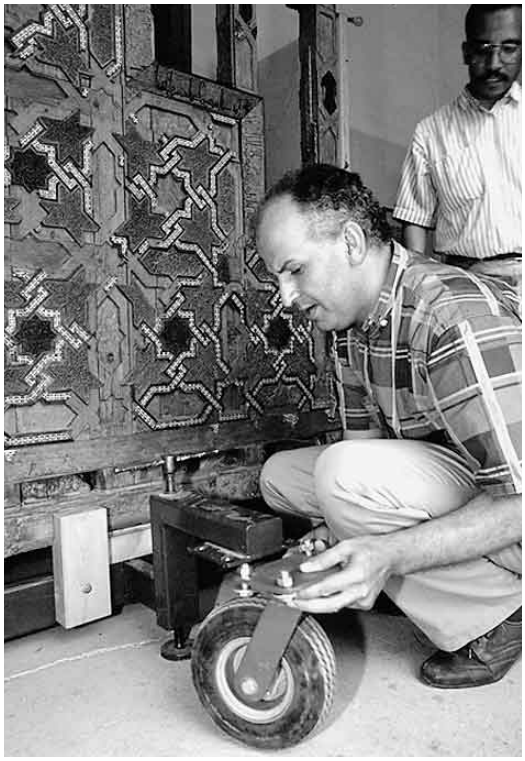

***Figure 8: Wheels being inserted into the raised frame. Once attached, the frame could be lowered onto the wheels, and the whole minbar moved about.***

When a hastily ordered kit of pH testing strips was expected the following day through UPS world-wide service, and hadn't arrived after the second week, we undertook to find a supplier in the Marrakech area (our first cursory search struck out—remember, they still pick up the trash with donkey carts). Our trusty translator, Hamza Bouzouzou was enlisted for the task. Hamza, after a long foray admitted defeat, telling us in no uncertain terms that nobody in Marrakech was selling "PhD papers." Oh well, just another day in Morocco, and anyway, our parcel did show up two months later, conveyed by moped and a clerk who informed us of the storage charges we owed. Fortunately the aforementioned PhD papers were conveyed by a Metropolitan employee a few weeks earlier, and we told the poor fellow where he could store these test strips, and that he need not bother to match colors for the results.

Our work progressed through the winter in North Africa, which coming from high altitude Colorado, I expected to be dry, pleasant, and utterly without skiing. Wrong on all counts, as we worked in an unheated 16th century rammed earth building, lived in an unheated 19th century building, and generally wore ski hats and pile jackets all day long throughout a dank and rainy winter. Dripping, soggy rains would last for days on end, rendering the narrow streets of the *medina* (the old city) into labyrinthian land-mined paths, forcing us to choose routes that would spray the least amount of donkey effluent from our bicycles' tires onto our persons. Mean-colored stripes up the back became the norm.

After repeated complaints and entreaties, our contacts in the Ministry of Culture assured us that we would get *chauffage* (heat), just as soon as the wiring was upgraded. Our electrical service was something on par with a Wal-Mart lamp extension cord run some 500 feet. Needless to say, the heat became functional some eight or nine months after we left Morocco, or should I say the wiring, as the useless electric heaters had long since "migrated" to some official's house.

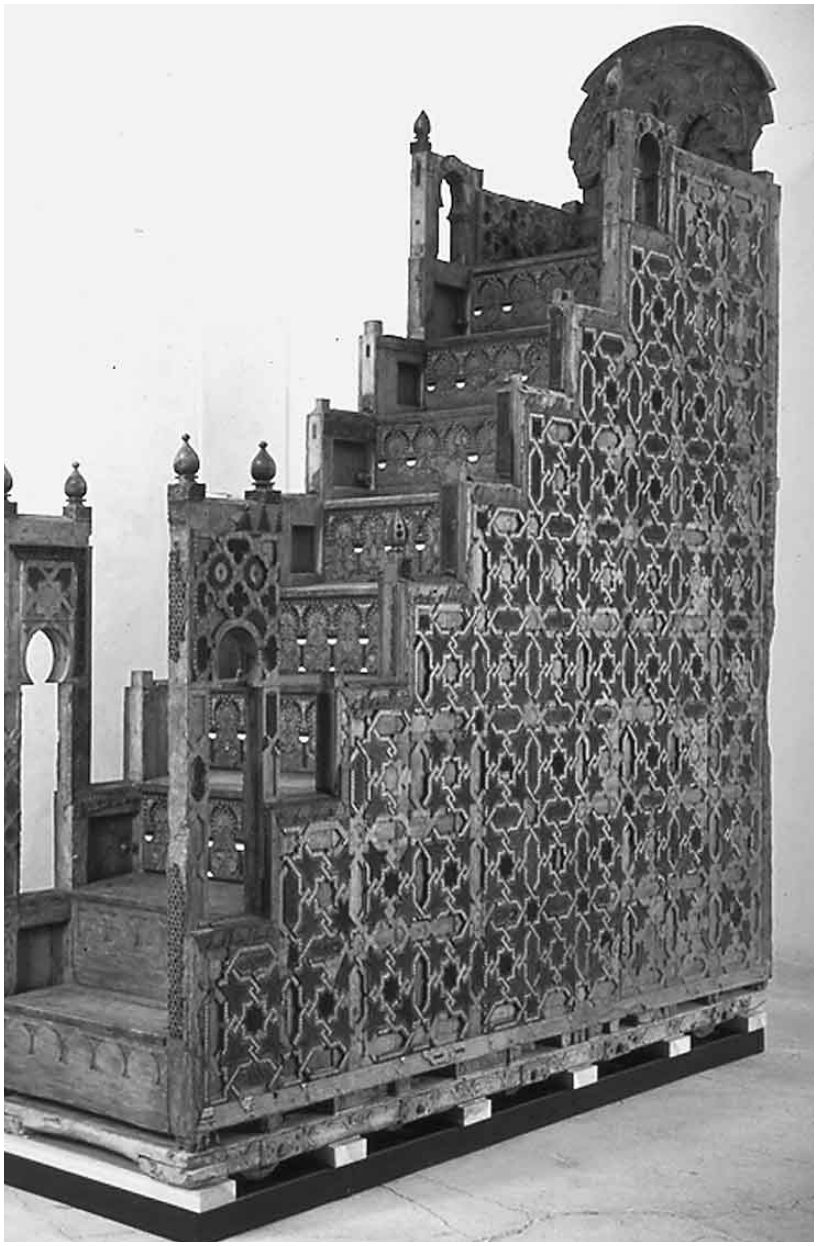

***Figure 9: The minbar, after conservation work.***

And on the skiing question, Morocco is certainly the only place on earth where the ski lift operators wear Jellabas (Arab pointy-hooded robes) with Vuarnets, and come to work with prayer rugs. Excepting the crappy gear, which might not even grace a church rummage sale in Kansas or Nebraska, the ski mountain outside of Marrakech, 10,000 feet up in the High Atlas, was almost impressive in steepness and amount of snow, but certainly impressive in the quantity of exposed rock, none of which you'd ever want to hit, since the best doctor in Morocco is the first flight to Spain.

My wife was whisked away at one point in her visit by Marrakshi friends, to be given a traditional henna marriage "tattoo," which is composed of a paste of ground henna with lemon, garlic, oil and God knows what else, administered to the surface of the skin with ground-off hypodermics. As the paste, in elaborate patterns, deftly rendered, needed to remain on the skin several hours until fully dry, I was forced to carry her, like some foot-binding victim, and cotton-wrapped like the English patient, out to cars, into houses, etc., as traditionally the henna is done on both the hands and the feet, including the bottoms of the feet! On returning home she finds out that this is now a cool thing to do, Madonna even being photographed with henna on some CD or video or whatever it is she does for money.

Research into other Minbars was difficult, as mosques are strictly off limits to non-Muslims. But connections can open almost all doors, and after visiting the neighboring Kasbah Mosque and its beautiful late 12th century Minbar (still in use, but graced with a newly-installed microphone cable stapled up the carvings on the side), I gave the guardian a gratuity, 100 *dirham*, which I found out later was outlandishly high ($11 or so). He said something to our translator which came out as: "Your friend is very kind, and he is welcome back anytime," and I thought: "even if he is a Christian infidel." It seems there are definitely certain commonalities in all religions.

Conservation ideals versus real-world realities became very apparent when we set up our hygrometer/thermometer in the studio/gallery space, where the bulk of our usable lighting came from a pair of fifteen foot high doors that remained open all day, every day, except when it rained. But the first five feet of the entrance alcove was a danger zone since there was a two- inch space

between the walls and the doors, and rain fell freely through it with the right wind conditions. The four foot thick walls lent a degree of stability to the environment, which would remain delightfully cool on the warmest day, and miserable on the dank ones. We made great use of a small air compressor, use of which with a brush was found to be the best means to remove the centuries of accumulated dust from the carvings. Originally we decided the best cleaning would be achieved using VERY small swabs (some of the gaps are about 1.5 mm) and spit; trial cleanings gave an estimated completion of the remaining 600-odd carvings as something like a year later, and this is less the structural and toning portions of the treatment. The compressed air idea was gratefully accepted, and went almost flawlessly, except for the fact that in order to run said compressor we had to unplug EVERYTHING in the studio, lights included, and charge it up, only to plug the lights back in in order to see what was going to be cleaned. This was due to the pitifully low current in the studio, the reason that we also could not use the heaters supplied by the Ministry. Our American concerns for steady environmental conditions, for suitable light levels, for purity of water sources truly began to seem like Peter Pan saying, "Just close your eyes, believe, and then you will fly!" Not to be argumentative, but it became apparent that conservation standards truly are relative and not absolute; that working to the spirit of them, if not the letter, is what is closer to reality for that big chunk of the world that doesn't enjoy the material levels the industrial world lives at. In our case, it meant accepting quite a few compromises.

Restoration in that part of the world tends to be quite "formulaic"—the most oft heard question by visitors and other interested parties was, "What 'produit' (product) were we using?" Implying that a single, bottled nostrum is what one reaches for to carry out such work, and further, that one can, and ought, to be prescribed. Our attempts to convey that we indeed were using NO certain "produit," but experimenting, improvising to deal with differing surfaces, exposure histories, etc. fell on deaf ears. Further, our Moroccan hosts were loathe to let us work alone, even employing a secretary whose only function was to record what we did, every day, and what "produit" we used. Fair enough, as part of the exchange was to educate to some degree.

But when the Moroccans struggled through the fasting of Ramadan, and will typically only work a short day (or should I say "nod" or "sleep" a short day, having been up much of the previous night, and being utterly without food or liquid the whole day); well, when we Yanks wanted to put in a whole day, they insisted on drawing straws for who would stay and observe while the rest went home, certain that we would pull out the Mother of All Produit the minute they left us to our own devices. We of course were not fasting, which at first made us feel uncomfortable, but later was of little consequence, as we learned that they would never expect us to share in the practice, and almost as a rule felt that "we were far too weak" to endure the month of Ramadan. We, on the other hand, chose to rename it the month of "Nothing-Done." But, all prevailed, it was finished, and the Minbar now enjoys a newly-dedicated gallery space in the Badia Palace.

## Acknowledgements

I would like to thank, and to give credit to, Jack Soultanian and Antoine Wilmering of the Metropolitan Museum, who oversaw the whole project; Andrew Zawacki, without whose assistance the treatment would not have happened, and whose focused work ethic is nothing short of amazing; and finally to my wife Deb, who had to put up with the whole thing second hand, certainly much harder than first hand.

## Answers to discussion questions:

*1. What wood did you find in the Koutoubia Minbar?*

The framework of the Minbar is Atlas Cedar (*Cedrus atlantica* [Endl.] *Carriere*). Replacement treads were of walnut (*Juglans* spp.). The dark wood of the lettering, banding, and strapwork was African blackwood (*Dalbergia* spp.); the light wood of the overlaid design was Boxwood (*Buxus* spp.). The reddish woods of the overlays were of two woods—either Jujube (*Zizyphus* spp.) or African padouk (*Pterocarpus* spp.). All wood identifications were made by Antoine Wilmering at the Metropolitan Museum of Art.

*2. What was the finish on the Minbar?*

Cross sections revealed that there actually was no

finish on the Minbar, that areas appearing to have a glossy buildup were actually just a combination of burnishing and grime layers.

*3. What did you need pH papers for?*

When experimenting to find an appropriate cleaning solution, we wanted to be able to adjust the pH. We hoped to try a deoxycholic acid solution to help cut some very intractable grime, and needed them to fine tune our solution. We needed the PhD papers to bolster our demands for more pay.