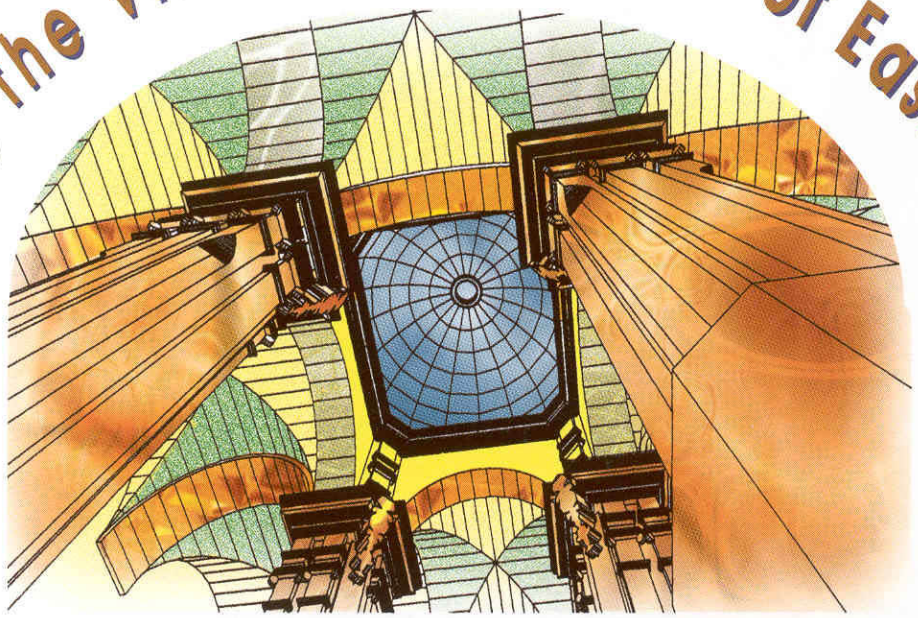
Touring the Virtual Synagogues of East Europe



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The Index of Jewish Art, a mammoth long-term undertaking of the Center for Jewish Art (Jerusalem), seeks to systematically document all extant Jewish art, preserving it for future analysis and research. While most small, readily described objects and manuscripts are safely preserved in the glass cases of museums and private collections, the same is not true of Jewish architectural monuments.

One obviously cannot preserve complete synagogues in rows of neatly labeled storage boxes, yet many of the beautiful old synagogues of the Ukraine, Poland, Belorussia and Turkey are threatened by political instability, development, exposure to the elements, neglect and general decay. Some are already severely damaged. Conventional conservation and restoration of these buildings is both prohibitively expensive and infeasible. How then can these glorious structures best be preserved for future generations? Traditional archival material (architectural plans, photographs, technical descriptions, etc.) can all help; but Dr. Aliza Cohen-Mushlin and her colleagues seek to do more, using advanced computer database and virtual-reality techniques.

Eventually, with the click of a button, researchers should be able to conjure up these fast-disappearing synagogues, study their position in the *shtetl* (town), view three-dimensional skeletal or solid models from any vantage point, view wall paintings or ritual objects *in situ* and even take virtual tours - all by computer. A database of many such virtual structures would also greatly facilitate scholarly comparisons between them, even by researchers unable to physically travel to the many relatively inaccessible sites involved.

Numerous photographs and other materials have already been scanned and entered into the Center's computer and Dr. Sergei Kravtsov has already created undecorated three-dimensional models of four "nine-bay synagogues" of the Ukraine. The synagogues of Brody, Velikiye Mosty and Shargorod (shown above) are still extant. The Brezhany synagogue, built circa 1639, collapsed in 1994 (yet another reminder of the tragic vulnerability of these monuments) and had to be reconstructed from archival material. Sample "walkthrough" animations were created, by combining 130 individual frames or by preprogramming a trip through the complete model.

In nine-bay synagogues, the supporting pillars and walls semidivide the interior space into nine connected sections (bays). Several factors have been cited for the popularity of this design: the ruling of R. Moshe Isserles (1520-72) placing the reader's desk (*bimah*) in the center of the synagogue, attempts to combine the architectural advantages of Polish single-nave and German double-nave synagogues, and the growing size and prosperity of the Jewish communities of East Europe in the 17th Century.