The conservation of technical fixtures in historic buildings

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In a conservation project of historical buildings, technical fixtures are often neglected, forgotten or substituted with new items. This poster will show how it is possible to reuse, preserve and update electrical switches, stoves, ventilation and warming conduits. In order to bring these elements to the attention of architects, engineers, art historians and highlight the need for inclusion within a conservation project, a different approach is needed.

The first issue is to recognize their existence and their historical importance; it is a flawed supposition to presume that technical fittings did not exist in an architectural setting in the past. Architects or engineers often “don’t see” these fittings because they are considered of no use, of no value or obsolete in a “modern” setting, but architectural history can be enriched by the study of how water, light and heat conduits were introduced into a building.

The second issue is mapping these elements inside an existing building; very often the original technical fittings are severely degraded and have not survived in a good state of repair. The third and last issue is to understand how it is both aesthetically and technically possible to reuse existing fixtures and fittings and how they can be integrated with new needs. Can these elements guarantee a good level of comfort? What is a good level of comfort nowadays? How does the level of comfort change between public and private buildings?

This private palace in the countryside near Cremona (Italy), built around 1820, has its antique technical fittings still in place. The heating conduits and apparatus - a warm air system - are part of the original construction. The owner was a sophisticated silk producer who introduced into his house all of the most avantgarde innovations that he developed for his factory. The electrical switches belong to the 20th century. The current owner did not want to change these elements just to obey to the new building regulations which imposed a complete update of the system. The architects were charged to respect all safety requirements, while keeping the original fittings in place and reusing them as much as possible, although some new elements were designed, if needed, which could discreetly be part of the internal decoration.


The antique stove in the cellar was replaced with a gas one; the ducts were cleaned and a thermostat introduced in many rooms. The old ceramic tumbler switches and push-buttons could still function at a low voltage; the main cables used are now thin mineral insulated cables with a copper sheathing or pvc twisted cables covered with a silk similar to the original wiring; the sockets were specially designed to fit in with the character of the internal spaces.