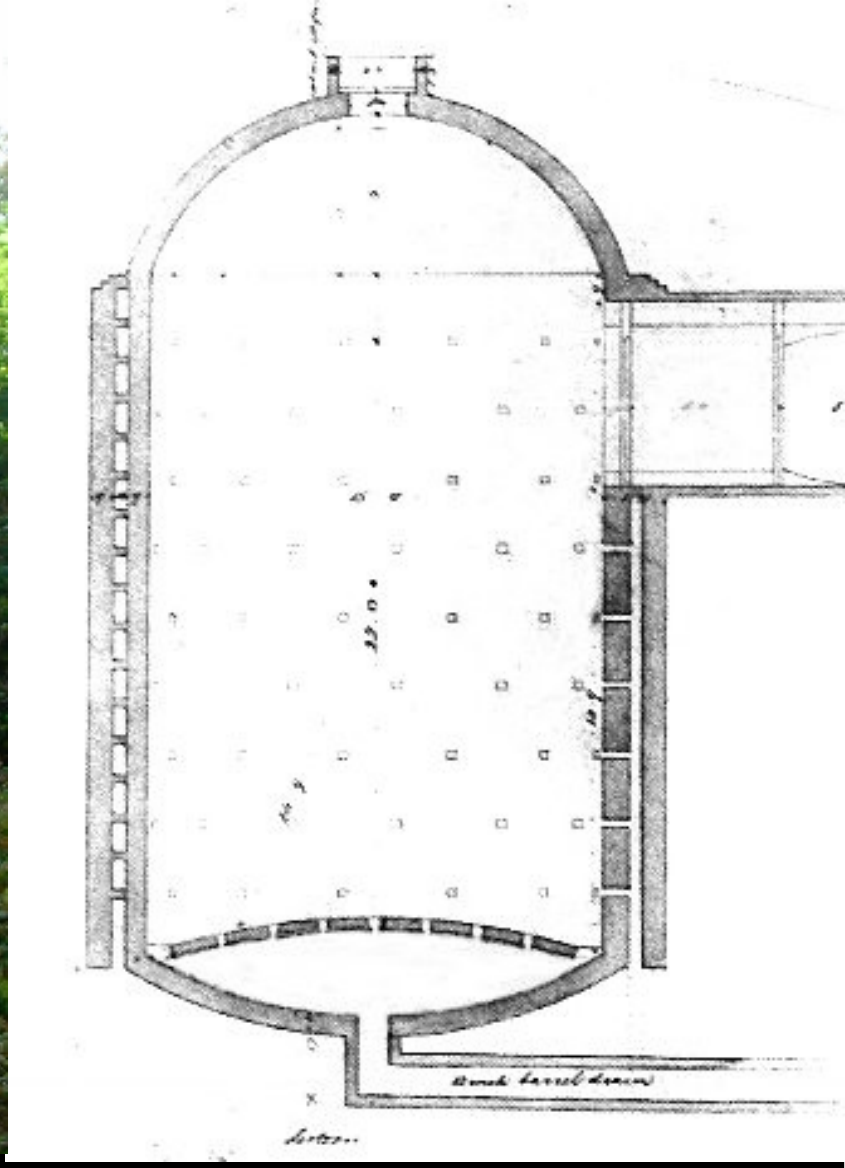
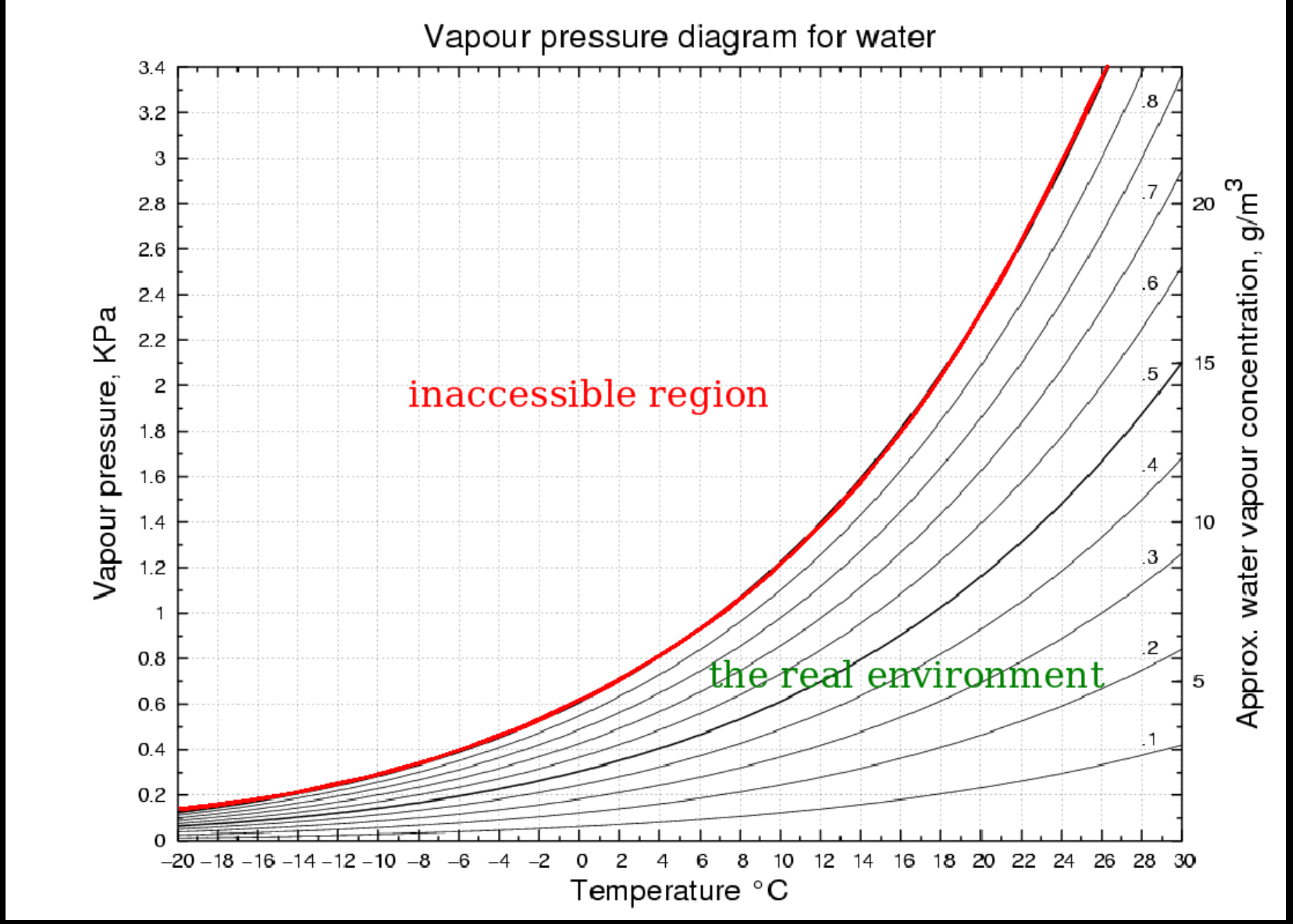
Preventive Conservation

Air conditioning

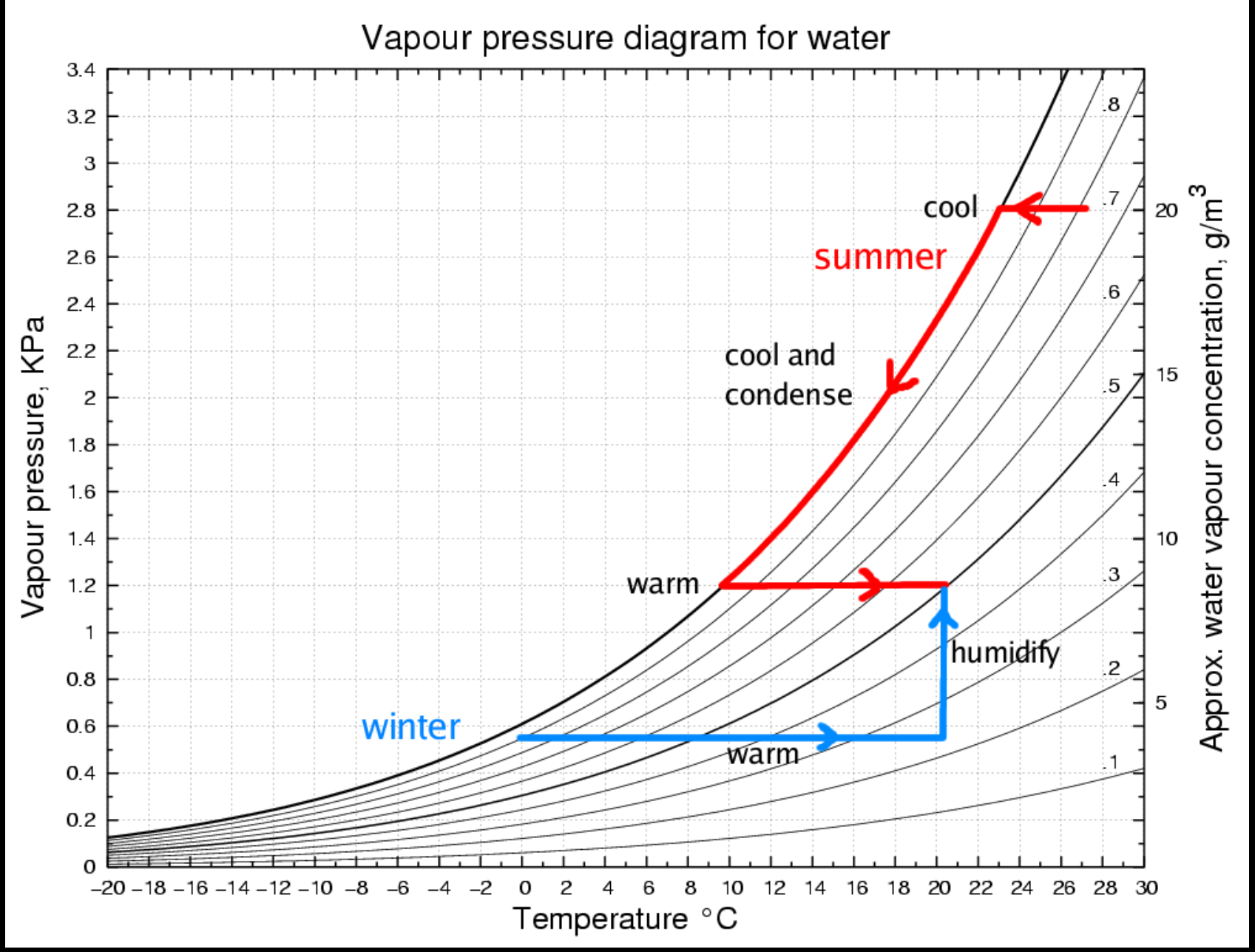


The ice house at Osborne house. (Isle of Wight, UK). Cooled by ice imported from the north east USA.

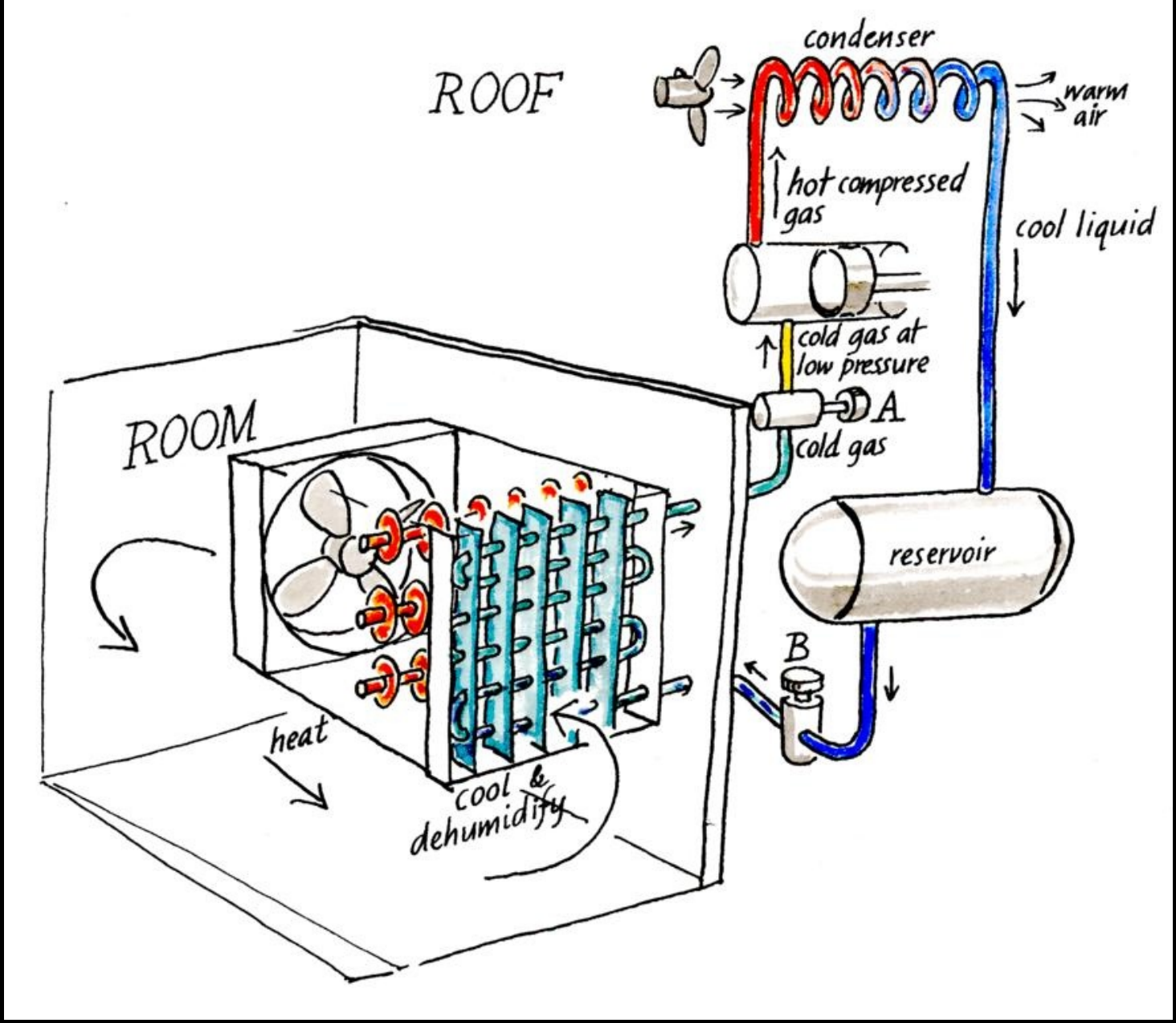
Cooling by convective movement through chimneys and by wind pressure (Arts and Industries Museum, Washington D.C. & a building in Damascus)



The vapour pressure chart is easier to understand than the similar psychrometric chart

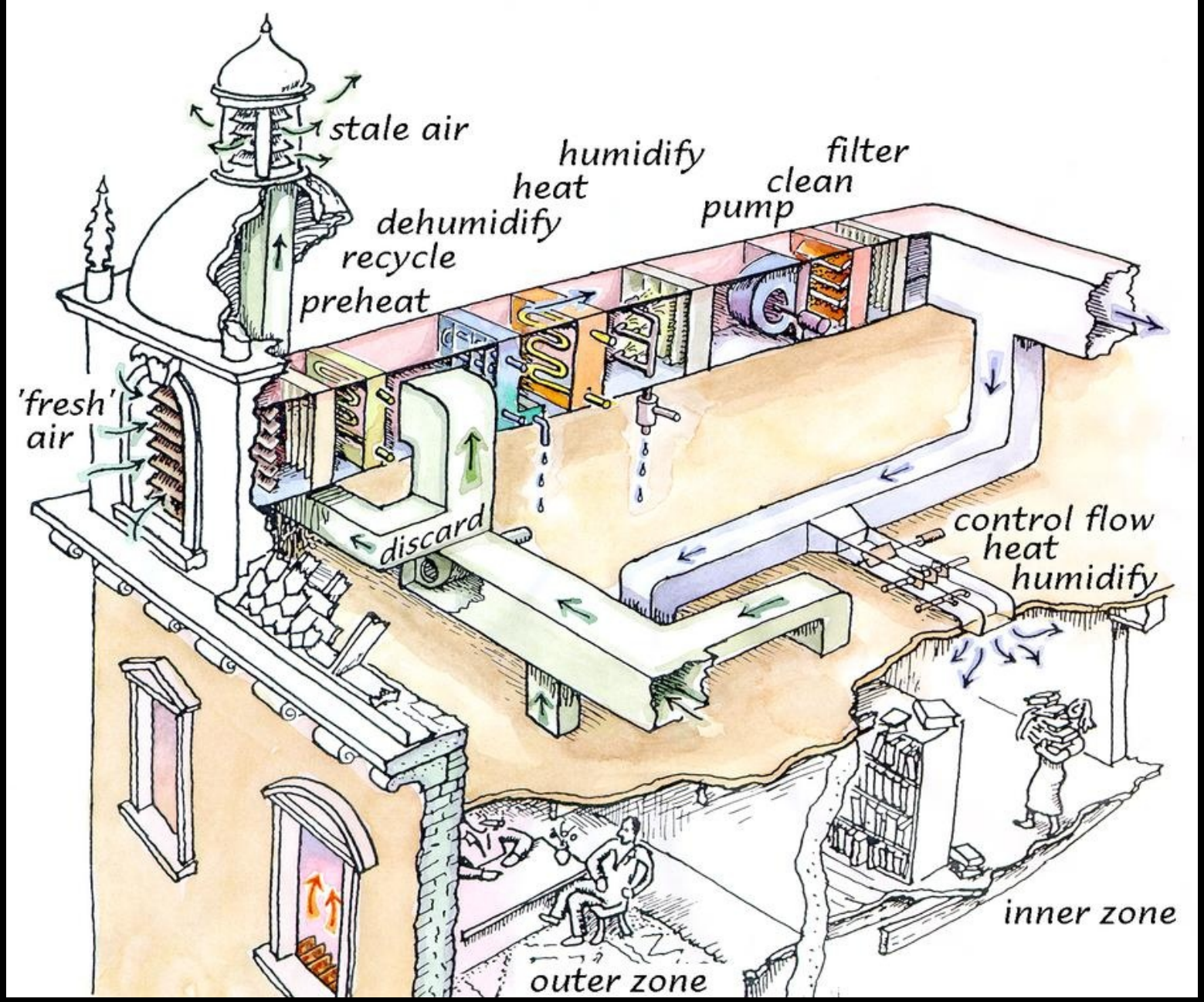


Winter warming makes humidification necessary.
Summer cooling makes dehumidication necessary.
Both these processes force the use of pumped air.

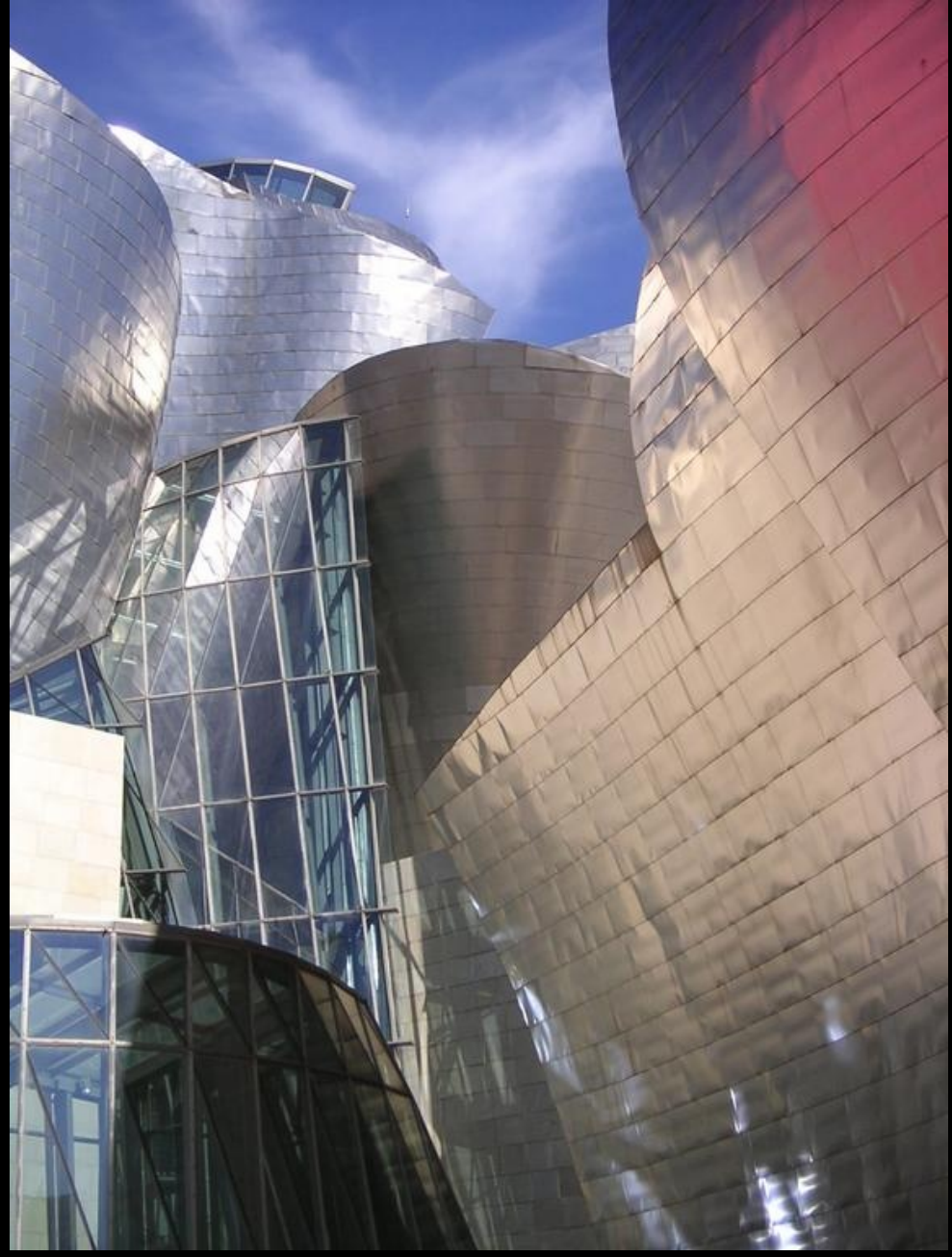


A volatile liquid evaporates in the cooling coil. The gas is pumped to high pressure, which warms it. It is then cooled so it condenses and returns to the reservoir.

The cooling and condensing of the hot gas is the bit that is usually visible on the roof or in the garden. Note the token solar voltaic panel.
(Grand Harbour, Malta)



The entire circulation system, with fresh air intake balanced against re-circulation and with local polishing of the air injected into each room.



Buildings designed as sculptures rather than as shelters force the installation of air conditioning.
(Bibliothèque nationale de France & Guggenheim Bilbao)