

FIGURE 6.63 Patterns of separation of various layers applied as finishes on wood. Separation results from wood movement and distortion (Reprinted with permission from S. Rivers and N. Umney, *Conservation of Furniture*, London and New York: Butterworth and Heinemann, 2003; fig. 8.5, p. 334)

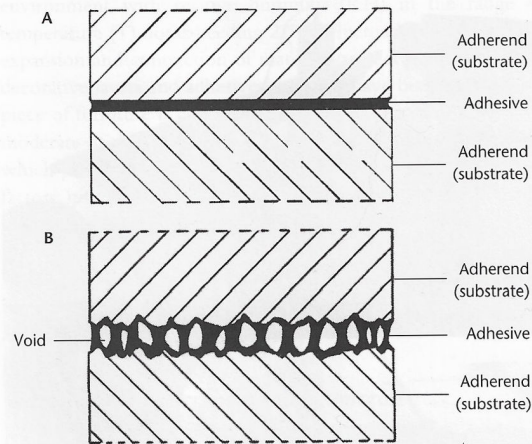


FIGURE 6.64 Adhesive systems, showing proper and faulty adhesion. Poor adhesion may be caused by incorrect preparation of the wood surface or the adhesive not setting properly, or a combination of both.

Finishes and coatings protect wood from the environment and from everyday usage while at the same time enhancing the aesthetic appearance of an artifact. The cultural and monetary value of furniture is often identified with a particular finish (CCI, 2002, 7.2). The finish can be solid (for example, wax or dry pigment), fluid (for example, oil, lacquer or varnish), an emulsion or a suspension, and pigmented or natural color.

Furniture finishes are technologically complex, and although they are beyond the scope of this book, one needs to be aware that the treatment of furniture surfaces or of any wooden artifact requires very careful assessment before engaging in any type of cleaning. It is important to identify the original coating, decide if it is stable, and determine if changes and modifications occurred over time.

Kayaks, umiaks and canoes are *watercraft* designed to withstand the compressive pressure of water. Once removed from water, their structure deforms as a result of differently distributed stress. Constructing an adequate support for these artifacts will be the main area of concern in handling, storing and display. Ideally, the support should imitate as closely as possible the natural environment of water (Figure 6.65; Plates 6.26–6.29).

Storage options for watercraft:

- Construct a ship's cradle.
- Layer a support to fit the watercraft's shape.
- Form a support from Styrofoam chips piled in a supportive shape or fitted container. Store the watercraft upside down.

Dugouts, which are made of one piece of wood, are less susceptible to structural deformations, although, as all wooden artifacts do, they respond to humidity changes in the environment by expanding when humidity levels are high and contracting when the environment is dry.

Umiaks and Native American canoes may also contain leather and parchment-like intestinal skins, and so are particularly sensitive to fluctuations of relative humidity, which may cause deformation, distortion and biological deterioration of parchment or leather – another reason to create a stable environment.

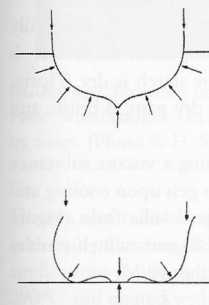


FIGURE 6.65 Watercraft are designed to respond to the pressure from water; once removed from water, the structure is deformed. Museum storage supports for watercraft should replicate as closely as possible the distribution of forces on the outer shell of the vessel. (Reproduced with the permission of the Canadian Conservation Institute of the Department of Canadian Heritage, 2011. CCI Notes, 6.3)