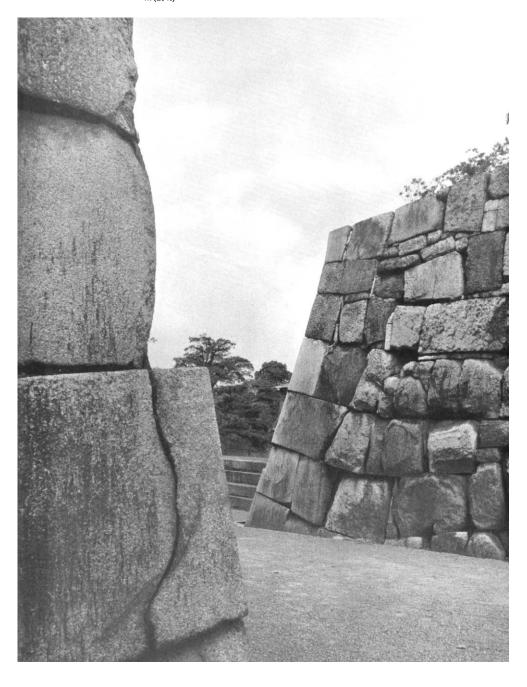
Below Nijo Castle, Japan; stone fortifications, the standard height of stone walls was 6 m (20 ft)



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stone and classical Greek building. Yet the roofs of Greek temples were a timber construction but have simply not survived. The most advanced Greek timber techniques were probably employed in shipbuilding; the trireme was a sophisticated wooden construction. The Greeks may have felt about timber as the Victorians thought of metal in religious buildings.

Clearly the Japanese have no such misgivings. The Ise Shrine, the most holy centre of the Shinto religion, is in timber and, what is more, is rebuilt on an adjoining site every twenty years. But on the same island in Japan, at Nijo Castle, there are huge stone walls, some up to 40 m (130 ft) in height, built out of large wedge-shaped stones with their smaller side turned outward. Their own weight locks them in place and makes the wall earthquake-resistant (Drexler, 1955, p.140). It would be easy to argue that of course the walls are in stone as the building is a castle designed to resist attack and the argument would not be wrong. What the stone walls, however, demonstrate is that there was a capacity to build impressive masonry walls but not the choice when it came to religious buildings.

Any discussion of materials must acknowledge the poetic attributes of many building materials and their strong association with the craft of making, both by hand and machine. Architects do not themselves now exercise a craft on the building site but still find pleasure in choosing materials where there is evidence of craftsmanly skills. It is assumed that this pleasure will be sensed and enjoyed by others throughout the existence of the building; possibly even when in a ruined state. Most of that pleasure is visual, occasionally tactile.

The discussion must also acknowledge the absolute necessity of materials. Without them we cannot achieve what Jean Nouvel called in his acceptance speech for the Royal Gold Medal of Architecture at the Royal Institute of Architecture in June 2001, 'the miracle of the result'.

It would be misleading to claim that the arrangement of materials within a building is solely due to non-verbal thinking.