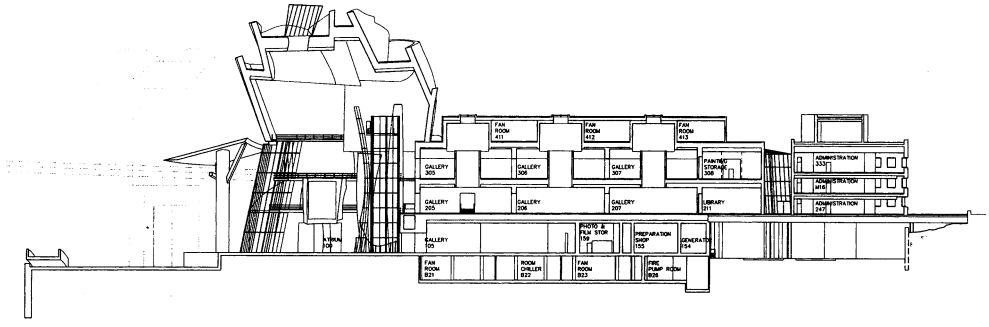
one curved shape at the top, another at the base with twisted surfaces in between. Jim Glymph, a principal in Frank O. Gehry & Associates, has said that 'Frank is a big fan of Baroque architecture' (Bruggen, 1997, p.138) but no Baroque architect could have drawn or built the shapes which exist in Bilbao. The galleries occur on three floors and have a variety of shapes. Art is placed in the most appropriate space rather than having universal display areas which are allegedly anonymous. Gehry had worked and been friends with too many artists not to be aware of that fallacy. The most spectacular gallery is a 130 m long space that dips under the bridge and which is top lit by sky lights set in a complex curved ceiling. The sinuous surfaces of the architecture are reinforced by equally sinuous surfaces of rusting steel which are the walk-through sculpture by Richard Serra, specifically created for this site.

The only galleries which do not conform to the general pattern of non-orthogonal spaces are two galleries on the west side and the six principal painting galleries. The latter are arranged as three galleries on each floor superimposed upon each other. Interestingly, and perhaps surprisingly, these exhibition spaces return to an earlier and much used typology and are a sequence of top-lit enfiladed rooms. The twist is in the section. The centre of the upper gallery is placed under a skylight. That centre is surrounded by a large box of display walls which do not touch the ceiling; it is a kind of room within a room. Seen from the gallery below, however, it turns out to be a light funnel which directs daylight into the lower gallery. It is a cunning and novel use of the section, extending the effect of a skylight to a lower floor.

All three buildings have made a strong impression on the public consciousness: Bilbao has become an international tourist attraction, the Getty has been visited by unprecedented numbers, the British Library has won high praise from its readers. Each is individual in its expression and in its architectural starting point. Yet each has been designed with some reliance



Above
Frank O. Gehry & Associates, Guggenheim Museum, Bilbao, Spain 1997; section through atrium and superimposed galleries with skylights

on pre-existing models. These are not necessarily within architecture; Wilson admired the painting of *St Jerome in his Study,* Gehry says he looked a lot at the cutouts of Matisse, 'at these big long shapes just casually cut . . . at the awkwardness of them' (Bruggen, 1997, p.116). Most often, however, it is the architecture of the past which provides the most relevant models and this is hardly surprising. Nor is it surprising that that architecture is very frequently the earlier work of the architect; we inevitable re-use the forms with which we are familiar, for which we have a preference. Which is why we can distinguish a Wren church from a Hawksmoor church.

Before we use models in the tentative solution, in the design stage, we are involved in problem selection. We cannot and do not solve all the problems which exist at that time in that project. This is primarily the case because a great number of problems are, as it were, self inflicted. There are the demands set by the brief which require resolution but in addition to that we ourselves see problems or have leanings to particular resolutions which makes for individual responses. Both P_1 and TS (see p. 34) are also, in historical terms, time dependent. Problem recognition and what is imaginable are conditioned by the world around us.

It is the severity and nature of the self-imposed problems which are the test of architectural greatness. To satisfy the architectural programme of spaces, adjacencies, circulation,