so that (either consciously or unconsciously) we learn to make judgements about a building's dimensions by constant reference to familiar elements and artefacts of known size.

These familiar elements fall into two categories. First there are general environmental elements which form the physical context for buildings, like trees and planting, vehicles, street furniture and even the occupants and users of the building (**Figure 5.32**); these are familiar objects and as environmental scale clues allow us by comparison to make some assessment of size. Second, there are familiar building elements like storey heights, masonry courses, windows, doors, and staircases which further add to our perception of a building's size (**Figure 5.33**); these are building scale



Figure 5.32 Scale: Environmental clues.



*Figure 5.33* Scale: building clues. Architects' Copartnership, Dunelm House, Durham University, 1964.

clues and are used by the designer to determine the scale of a building. Therefore, if these clues mislead, then we assess size incorrectly (Raskin).

Traditionally, designers working within a classical architectural language could call upon a series of familiar devices like podium, entablature, columns, and pilasters, all ordered within a strict proportioning system. But the rejection of such an architectural vocabulary by modernists during this century has been problematic as far as scale clues are concerned; an architecture embracing new structural forms with large spans and large monolithic expanses of unrelieved surfaces potentially did not offer traditional scale clues (Figure 5.34), and as we have already seen, architects were drawn to exposing structural and constructional elements to break down the building into a series of visually discrete components. In this sense, modernists have variously manipulated a tectonic display of familiar building elements to reinterpret traditional scale clues (Figure 5.35).

Not surprisingly, architectural scale and its potential to deceive can be a powerful tool in an architect's armoury. Therefore, architects serving totalitarian regimes have routinely harnessed monumental scale in buildings whose purpose is to symbolise temporal power (Figure 5.36); conversely building types such as primary schools and old people's homes consciously have been imbued with a sub-domestic scale to impart a sense of intimacy, security and wellbeing.



Figure 5.35 David Thurlow, Bishop Bateman Court, Cambridge, 1985.



**Figure 5.34** Kenzo Tange, Olympic Sports Hall, Tokyo, 1964. From Visual History of Twentieth Century Architecture, Sharp, D., Heinemann, p. 261.



**Figure 5.36** Albert Speer, Great Hall, Berlin, 1941 (project).