and could not be thought of as art. So it is with all art forms, not least music and architecture.

It is, however, much easier to understand redundancy in serial art forms such as literature and music than in the spatial experience of architecture. The poet and the composer decide the sequence of events for us, but the architect cannot do this. For this reason, much more work has been done to analyse music and literature than architecture in this way. These sorts of studies have generated ways of encoding artistic style. Each composer and writer has his or her own more popular words and phrases, and by such means it is possible to analyse a newly found sonata or sonnet to help decide if it really was by Bach or Shakespeare. The reduction of great art to such crude statistics seems rather an insult, but it does reveal the underlying structures that we experience and feel. How else can we recognize style ourselves other than through some form of analysis, albeit unselfconscious? In fact, research has shown that our response to a whole series of situations is closely correlated with these mathematical measures of structure and redundancy. Garner reports experiments showing that our short-term memory capacity depends quite directly on the level of information or redundancy in the objects being remembered (Garner 1962). Similarly, our ability to recognize a range of symbols and discriminate between them works in this way. Our ability to recognize patterns and understand their rules so we can predict their extensions offers yet another example, and our ability to learn languages and develop concepts can be seen to be heavily influenced by the levels of structure, order and predictability in the material under consideration.

Returning to Vanbrugh's architecture, we now see much redundancy. This of course comes from the basic underlying classical language upon which he bases his work. Certain features and shapes are common, whilst others may simply not be used at all – there are no pointed arches for Vanbrugh, whereas Pugin was later to extol their virtue and even claim they were somehow right and truly Christian! But again there is more to it than that. The classical language repeats not only shapes and forms and elements; it also repeats relationships. In particular it relies upon a sophisticated array of proportions, including the fundamental so-called 'golden section'. Centuries later Le Corbusier was to advance a whole theory of architecture based upon the use of a similar proportioning system, 'Le modulor'. Corbusier rather broke free of the repetition of elements and relied for his redundancy much more on proportion (Le Corbusier 1951; Fig. 4.4).

The good and the bad side of being redundant!

We have seen then that this kind of redundancy can be a virtue, in contrast to the expectation set up by the more common meaning of the word! In this context, redundancy simply means that every event